

# WERKERS' COMPENSATION LAW

Summer 2015

Section Newsletter



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# From the Chair

By John D. Christy

he Executive Committee of the Workers'
Compensation Section of the State Bar of Georgia
Members for 2014/2015 are: John D. Christy, Jim
Long, Kelly Benedict, Gregg Porter, Elizabeth Costner,
Kevin Gaulke and Lee Bennett. Jim Long was appointed
to and graciously accepted the assistant chair slot after we
sadly lost Jo Stegall to illness last year. We all miss Jo and
his involvement with and contributions to the Section and
the Bar. I wish to thank all of the officers of the Executive
Committee for their dedicated support this year.

Last October's Workers' Compensation Law Institute at St. Simons was attended by overflow of members from our Section. The topics were interesting and the presenters informative. Please join me in thanking the Honorable Melodie Belcher, Julie John and Paul Knott as well as the presenters for producing such a successful event for the Section. Our incoming Chair, Jim Long, and the co-chairs for the 2015 Institute, Honorable Johnnie Mason, Stephen Hasner and Fred Green, have promised to bring us another successful program when we meet again at St. Simons on October 22nd, 23rd and 24th for this year's program. As some of you may know, the conference center at Sea Palms has recently undergone a major renovation. This includes a complete upgrade and renovation of the conference center, restaurant and bar and remodeling of the Sea Palms condominiums. Sea Palms is completing improvements to the pool and surrounding pool area and adding a new fitness center that is adjacent to the conference center. Please mark your calendar for this year's seminar, Kid's Chance dinner and Kid's Chance golf and tennis tournaments.

Let me take a minute to thank Chairman McKay, the members of the Appellate Division, the Administrative Law Judges, members of the Managed Care Rehabilitation Section and the ADR Section, as well as all of the attorneys and the employees of the State Board of Workers' Compensation and the Chairman's Advisory Counsel for their tireless effort on behalf of the Section. A tremendous amount of work goes on behind the scenes to assure that our system remains one of the best in the country. I encourage all of our members to participate in the many rewarding activities of our Section.

As my term on this committee expires, I want to repeat what has been said in the past by other members of our committee and section. We are privileged to be members of one of the best sections of the Bar. Our members are collegial and work together in a professional manner to further the best interest of their clients, both on the claimants and defense side of the Bar.

I hope that all of you enjoy this year's newsletter. The authors of the articles and the members of the committee who have worked to put together the newsletter for the Section this year deserve a lot of credit for publishing an informative and reliable source of information.

I have been fortunate to have practiced in our area of the law for 30 years on the defense and claimants side of the Bar and as a mediator. I can truthfully say that it has been a pleasure to do so. Let me close by expressing my gratitude for the honor of serving on the Executive Committee for the past eight years and as your Chair this year. I look forward to seeing many of you at Section functions and through our respective practices in the coming years.

Best regards, John

# 2014-15 Workers' Compensation Law Executive Committee:

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# Chairman's Corner

By Hon. Frank R. McKay

ouse Bill 412 (HB 412) passed through both the House and the Senate during the 2015 legislative session and is on the Governor's desk for signing. HB 412 reiterates the exclusive remedy doctrine and clarifies that contract provisions do not nullify the exclusive remedy unless the parties specifically contract to do so. HB 412 also increases the maximum weekly income TTD benefit from \$525 to \$550 and the maximum TPD rate from \$350 to \$367 and it increases the sole dependent survivor death benefit for the first time in over ten years, from \$150,000 to \$220,000. In addition, the bill moves the sunset date for the Subsequent Injury Trust Fund (SITF) from 2020 to 2023, and transfers oversight at that time from the SBWC to the Department of Insurance and it allows the SITF to continue assessments at the current rate to avoid a shortfall in reserves prior to the sunset date.

It is an exceptionally busy year at the Board. A new website is currently being designed for the SBWC and will replace the old one in a few weeks and will have all the latest news. The website is being updated and designed to be more user friendly and informative. It will also have links to other relevant websites. The State Board published a new Medical Fee Schedule effective April 1, 2015, through FairHealth and it is available for purchase through the Board's website.

ICMS II is moving quickly towards completion and will replace the existing ten year old initial version of ICMS by the end of the year. ICMS II will be a quicker, more robust, and more user friendly system and will accommodate more users of the system. In conjunction with the rollout of ICMS II the State Board will conduct training sessions in Atlanta and various locations around the state. The EDI filing aspect of ICMS II will also be greatly improved for filing time and readability of the filed forms. At the Board we are very excited about ICMS II and can hardly wait for it to get here. The much anticipated rollout is finally in sight.

The State Board is excited about its inclusion in the Workers' Compensation Research Institute's (WCRI) CompScope bench marking studies along with 16 other large workers' compensation states. WCRI is an independent, not-for-profit research organization that studies workers' compensation benefit systems nationwide.

The 17 states included in the WCRI CompScope studies represent over 70 percent of the workers' compensation medical and indemnity benefits paid in the United States plus the District of Columbia. WCRI has finalized its indemnity bench mark study for Georgia and is working on its medical bench mark study to be released this summer. WCRI is also conducting a worker outcome survey measuring injured workers' recovery of physical health and function, return to work and sustainability of return to work, and access to and satisfaction with healthcare. The WCRI study is focused on 36 months of claim payment data from 2011 - 2014. The data helps public officials and representatives of stake holder groups focus on public policy issues regarding workers' compensation. On March 1, 2015, the National Council on Compensation Insurance (NCCI) filed a recommendation for a 3.3 percent workers' compensation premium decrease with the Department of Insurance. This reflects the continued stability and balance of the Georgia workers' compensation system.

The Public Education Committee of The Advisory Council completed an outstanding series of Regional Educational Seminars on April 15 in Augusta. The theme this year was "Building A Workers' Compensation Program From The Ground Up" and it received excellent reviews from audiences in Macon, Albany, Savannah, and Kennesaw in addition to Augusta. Over 600 people attended the regional seminars and found them to be highly educational and entertaining and filled with audience participation. On behalf of the Board we cannot thank the sponsors and vendors and the volunteer participants in the program and the Public Education Committee members enough for their hard work and volunteered time in the planning, preparation, and execution of the highly successful multi-city seminars.

The Steering Committee is hard at work planning the Board's Annual Conference for August 31 through September 2nd at the Atlanta Downtown Hyatt Regency Hotel. There will be exceptional speakers and very exciting sessions during the three day conference. The downtown Atlanta location is quickly becoming a conference destination of choice with all the restaurants, attractions, and activities located nearby. We hope to see you at the Annual Conference.

The Workers' Compensation Law Section Newsletter is looking for authors of new content for publication.

If you would like to contribute an article or have an idea for content, please contact L. Lee Bennett Jr. at lee@bennettlawgroup.com

# Jurisdiction: What Does It Mean in Workers' Compensation?

By Jerry Stenger, Administrative Law Judge, State Board of Workers' Compensation

n everyone's busy practice, the word "jurisdiction" is one that we might usually take for granted. This is understandable, and so maybe it might be a bit much to discuss--and this is mangling an old phrase--how many jurisdictions can "dance on the point of a pin." But let's do it anyway, if only because as has also been said, we should "define [our] terms...or we shall never understand one another." So, how might our case law help us?

We all know, for example, that the burden is upon the worker to establish every fact necessary to uphold an award of compensation, including, in the absence of a stipulation, the jurisdiction of the Board. *Hopkins v. Martin*,

185 Ga. App. 752, 365 S.E.2d 544 (1988); Riley v. Taylor Orchards, 226 Ga. App. 394, 486 S.E.2d 617 (1997). Also, the case of Argonaut Ins. Co. v. King, 127 Ga. App. 566, 194 S.E.2d 282 (1972) held that the Board "has no authority to dismiss a claim except for want of jurisdiction or the claimant's failure to prosecute his cause." (Emphasis added.) See also Morris v. Atlantic Co., 71, Ga. App. 760, 32 S.E.2d 116 (1944), where the main holding disapproved of the Board's dismissal of a claim when there was a full "all issues" compensability question, when it should have merely

denied benefits. The Board in its ruling had said "the claim for additional compensation is denied and the case is hereby dismissed...." *Travelers Insurance Company et al. v. Hall,* 128 Ga. App. 71, 195 S.E.2d 679 (1973) and *United States Cas. Co. v. Smith,* 162 Ga. 130, 133 S.E. 851 (1926) have been cited for supporting the proposition that the Board has no jurisdiction to entertain a claim unless there has been a timely filing of the claim. *Dugger v. North Bros. Co.,* 172 Ga. App. 622, 323 S.E.2d 907 (1984) has been cited for the proposition that the failure of a claimant to file a claim within the claim limitation periods is "jurisdictional" so that the failure to timely file "deprives the Board of jurisdiction to hear the case."

This is all well and good, but, if we take a little time to think about it, what does "jurisdiction" really mean? On reading *Hall*, and on considering how differently the word "jurisdiction" is used in the law, perhaps judges and attorneys seize too much meaning from the word. Stepping back, so as to get a better view of the picture, consider how "jurisdiction" is used to mean physical jurisdiction, in the sense of a territorial boundary—such as the sheriff to his deputies in some old movie: "My jurisdiction ends here." Or, to give further illustration, it can also mean the location of the parties or the accident. See O.C.G.A. § 34-9-242. More

generally speaking, consider further that in all workers' compensation cases, even ones in which there is a valid statute defense, the Board undoubtedly has what is known as "subject matter jurisdiction," or, simply put, jurisdiction to hear the matter and decide the issues. It is quite obvious, for example, that the Board can hear a statute defense and decide the matter. It could hardly be said that the Board has no jurisdiction over the subject matter to hear such cases; at the very least, it must hear the case in order to decide if it has jurisdiction. Just the same, it would be obvious that the Board has no subject matter jurisdiction over, say, real estate disputes, contracts, or family law. Accepting the narrow

definition of the word, however, leads to the conclusion that the Board would in essence deprive itself of jurisdiction if it then ruled that the statute bars the claim, which at first glance sounds like a paradox. Looking even more plainly, subject matter jurisdiction—the plain authority to even hear and decide the matter—should be a "given" in that this is a proceeding to hear workers' compensation issues and not, to give a few more obvious examples, a civil action at law, a criminal case, a driver's license revocation, and so on.

jurisdiction [joo r-is-dik-shuh n] noun

1.

the right, power, or authority to administer justice by hearing and determining controversies.

But looking closely at the cases mentioned previously, it is not clear that they stand for the proposition impliedly stated: that the Board is deprived of "jurisdiction" to entertain a claim if it is not timely filed. First off, the case says:

This appeal by an employer and its insurance carrier in a workmen's compensation case contends the employee failed to meet the jurisdictional requirement of filing his claim within one year after the accident.

Right here, we can see that the "jurisdictional requirement" seems to have nothing to do with plain "subject matter jurisdiction." It seems instead to establish "jurisdiction" to mean that a claim must be timely filed. Yet the Court goes on to say:

"The right to compensation under this Title shall be forever barred unless a claim is filed with the State Board of Workmen's Compensation within one year after the accident, . . ." Code § 114-305. "The board has no jurisdiction of the matter until the claim is filed, and no compensation can be granted on a claim filed after expiration of the year. [Cits.]" Hartford Accident & Co. v. Snyder, 126 Ga. App. 31, 36 (189 S.E.2d 919).

We can see that "the Board has no jurisdiction of the matter until the claim is filed" is quite different from

saying that it is well-established that, absent timely filing, the Board has no jurisdiction to entertain a claim or, for that matter, to say that the failure of a claimant to file a claim within the claim limitation periods is jurisdictional so that the failure to timely file deprives the Board of jurisdiction to hear the case. The first sentence is quoted from Snyder, and, simply considered, stands for the obvious proposition that the Board does not have any authority or control or power over a case that has not yet been filed. The clause from Snyder that immediately follows--"and no compensation can be granted on a claim filed after expiration of the year"--simply states another obvious proposition: that a claim not timely filed is barred. The reader of the Snyder case is cautioned not to jumble the meanings of the two clauses into something altogether different--that the Board is deprived of "jurisdiction" if a claim is not timely filed. This would result, again, in that paradox of the Board not being allowed to hear a statute defense case, if we are to consider the plain meaning of "jurisdiction" to include "subject matter jurisdiction"-meaning, the plain authority to hear and decide workers' compensation cases.

The earlier case, the Smith case, is arguably closer to saying the Board has no jurisdiction to hear untimely filed cases. It holds:

The filing of the claim for compensation with the Industrial Commission within the time prescribed is jurisdictional; and unless this is done, the commission is without authority to grant the injured employee compensation.

Again, though, it is not certain what is meant by "jurisdictional," considering what subject matter jurisdiction means and considering the obvious point that the Board must hear a case to decide it. But even taking this bit at face value, it does not support any contention saying that the failure of a claimant to file a claim within the claim limitation periods is jurisdictional so that the failure to timely file deprives the Board of jurisdiction to hear the case. Rather, it simply states another obvious point: that failure to timely file a claim deprives the Board of authority "to grant...compensation."

The Dugger case is a notice defense case and not a statute case. The Court had this to say:

He bases this conclusion on an opinion in which this court stated that "it is completely unnecessary to remand the case . . . because the board has determined it has no jurisdiction to consider the case under [O.C.G.A. § 34-9-80], as notice was not given within 30 days." *Liberty Mut. Ins. Co. v. Carnley*, 135 Ga. App. 599 (4) (218 SE2d 307) (1975). However, failure to prove notice does not result in a lack of jurisdiction of the matter; instead it results in a denial of the claim for compensation. O.C.G.A. § 34-9-80; *Schwartz v. Greenbaum*, 138 Ga. App. 695, supra. The Carnley court's reinforcement of the board's poor choice of words is hereby disapproved and henceforth will not be followed.

"Poor choice of words," indeed. Your author here can find some comfort that at least one appeals decision found

too loose of a use of the word "jurisdiction."

The Hopkins case, at the top, presents an interesting turn. It is not strictly a plain "jurisdiction" case. At the risk of repeating again, this to mean old fashioned subject matter jurisdiction, or whether the Board simply has the authority to decide a case involving the area of workers' compensation law, as opposed to some other subject matter, such as contracts, divorce, real estate, and so on. Rather, in holding that a worker must prove that his employer is subject to the Act under O.C.G.A. § 34-9-2(a), the Court held that

Appellant had stipulated that the issue of whether appellee's employer "came under the [A]ct" was also to be resolved and appellant had contested the applicability of the Act pursuant to the provisions of O.C.G.A. § 34-9-2 (a). In the absence of a stipulation, "[t]he burden is upon the claimant to establish every fact necessary to uphold an award of compensation, including the jurisdiction of the board."

As can be seen, and never minding that we make these as two separate issues in compensation practice, the Court bootstrapped the issue of subject to the Act into the issue of "jurisdiction," by which we can only assume they meant both issues were the same thing: that if an employer is not subject to the Act, then the Board has "no jurisdiction." Putting aside this conundrum, this case does not support the proposition that a Board has no subject matter jurisdiction—no power to hear and decide the issues.

These subject to the Act decisions bring forth the next part of this discussion, which is whether, as with the statute of limitations concept, failure to prove this "deprives the Board of jurisdiction." Unlike the statute of limitations puzzle, none of the cases--Riley, Hopkins, and the cases they cite--put forth "deprivation of jurisdiction to hear the case" language on which confusion could arise. Rather, the cases--well, some of them anyway--simply state that a worker must prove jurisdiction. The problem comes, as always, with the use of the word "jurisdiction." Here, the cases blend the issue of subject to the Act with the issue of jurisdiction. Saying that, it is a more understandable argument to say that if the Board does not find an employer subject to the Act, then it has no jurisdiction. Again, this does not take into account the "subject matter jurisdiction" meaning of jurisdiction. But more to the point, none of these subject matter cases go so far as to say that failure to find an employer subject to the Act deprives the Board of jurisdiction to hear the case. By its own language-specifically, "This chapter shall not apply..." -- O.C.G.A. §34-9-2(a) lends more support to the "deprivation" argument. After all, if the chapter "does not apply," then does it not follow that the Board is "deprived of authority"? Could be. But it does not change the fact that it is the Board that must decide whether "the Chapter applies" or not, and so we are brought right back around to an inescapable point: that the Board still has jurisdiction over the subject matter--workers' compensation--and that is not deprived of authority to decide the issue of subject to the Act, to "hear the case," so to speak.

# **Functional Capacity Evaluations:**

# The Good, the Bad and the Ugly

By Luke E. Closson Jr., Closson, Bass & Tomberlin

hy do we both love and hate Functional Capacity Evaluations (FCE)? Because, often, they seem to make or destroy our case.

So why are FCEs so unpredictable and frequently so confusing? My study causes me to believe that the problem with FCEs is lawyers (all lawyers no matter what role they have in the system!). Why are "we" the problem? We insist, demand, and require that medical providers (Doctors, Physical Therapists and Occupational Therapists) answer questions with an objective answer which does not exist. This cannot be done any more than we can require an answer to questions such as what is beautiful to look at or what makes a piece of music sound good to us. Physicians are not trained to answer those questions. Think about when you go to see your physician- you hear things like - "take it easy for a few days", or "listen to your body and stop when it tells you to", or "just do light things". I seriously doubt anyone gets told to only lift 20 pounds for 10 minutes not more than twice an hour. This type of response is what physicians typically can provide and sadly we lawyers do not seem satisfied with that response because we want to pigeon-hole that individual into some

Department of Labor definition of Light or Medium work.

Certainly, it is perfectly possible to measure what an individual can do physically– that is can they lift 20 pounds 10 times in 2 minutes. Can a person go up a set of 12 stairs three times in 2 minutes, or the like? Those things are very capable of accurate measurement. Rather, it is the extrapolation that because a person can lift 20 pounds 10 times in 2 minutes that they are therefore capable of lifting 20 pounds occasionally (up to one-third of an eight hour day) or frequently (up to two-thirds of an eight hour day) or perhaps, continuously, that is the problem.

There are no peer-reviewed studies which state that there exists a reliable and valid protocol for making that assertion. When one starts looking at the peer-review literature and discussing the various protocols, the next huge problem appears. Almost all of the protocols which have had any sort of determination of either reliability or validity (reliability refers to the ability of a device to consistently obtain the same results when given the same information; while validity focuses on whether the test actually measures accurately what it purports to measure). Thus, a protocol can be valid and not reliable or reliable and not valid. For example, a stopped clock is perfectly reliable yet it is only valid twice in 24 hours.

Another concept that occurs in the literature and which requires some degree of understanding are the paired terms: specificity and sensitivity. Sensitivity can be thought of as the true positive test – for example the percentage of sick people who are correctly identified as having a particular condition. Specificity is the true negative test– what percentage of healthy persons are correctly identified as not having a particular condition. We ideally want tests which are high in both. However, it turns out that most are very sensitive for some areas while including many false positives–or people identified as having a condition when, in fact, they do NOT have the condition. Sadly, this is all too common of an occurrence when we attempt to measure things which are difficult, if not incapable, of measurement.

We can certainly say that a person did or did not perform a particular task. However, when we then begin to say that they did not perform the task because they are malingering or did not exert a "sincere" effort we run amok of fact—we can guess, suspect and imagine the determining reason but it is just that—there are many legitimate reasons individuals do not perform a particular task—certainly malingering or attempts to manipulate the results can be one, fear of re-injury, pain, and even lack of understanding are all other reasons and deciding of which one is the result of a subjective determination. There is

nothing wrong with subjective opinion unless it is wrapped in the cloak of being part of an "objective" test – then we are doing with one hand what we are forbidden to do with the other.

For example, the well-known Waddell signs are another example of some guides being often misapplied. First, Dr. Waddell himself has clearly stated that the so called "Waddell tests" were never designed or intended to identify malingering- rather they can be used in LOW BACK conditions ONLY to indicate that there may be non-organic conditions impacting the patient. There is no study peer-reviewed or otherwise to support that Waddell testing diagnoses malingering and Dr. Waddell himself has written that he would rather they were a screening test only. He published the original article in 1980 and has since attempted to clarify the limitations of his oft-abused tests by articles in 1984, 1992, 1997, 1998 and 2004! If you see a discussion of Waddell signs for any condition other than a low back condition it would be like checking the oil level to see if you have enough gas in your vehicle for your planned trip - you are looking at the wrong thing and the results are meaningless for your intended purposes. (list of those articles appear at the end)

Despite the desire for a bright-line test to establish malingering, the best that can be done is "occasionally" suggesting self-limiting of effort. Self-limiting of effort is a long ways from malingering- patients self-limit (in fact almost all of us do at times) FOR MANY REASONS-including pain, fear of re-injury, misunderstanding of instructions to name a few. When we look at a 100 pound bag of concrete and ask someone else to load it for us we are engaging in self-limiting – for reasons which we, at least, believe to be valid!

Likewise, we often see FCEs reporting that an individual has a Sedentary to Light work level. A careful review of the report almost always shows that the person was able to occasionally lift 20 pounds. The ability to lift 20 pounds occasionally (up to one third of an eight hour day) is indeed one portion of the definition by the United States department of Labor (DOL) of Light Work. All too often you will see that the same individual could only stand and/or walk for a very brief period while the DOL clearly states that Light work requires an individual to stand/walk frequently (up to two-thirds of an eight hour day). If the Dictionary of Occupational Titles (DOT) is examined, there are NO jobs identified which had crossover levels of work such as Sed-Light, Light-Medium, etc. This "opinion"

in not based on anything but a subjective view and has no place in what purports to be an objective testing protocol.

Many of the protocols utilize a computer to draw graphs or otherwise spit out some canned text. We all are familiar with the phrase– garbage in- garbage out– the computer only performs its program and while it can do it rapidly and reliably there is no indicia of accuracy (validity) attached because a computer is involved.

Another oft performed test is the Rapid Exchange Grip test. This test is frequently used to support a conclusion that a person is attempting to manipulate the test results by inconsistently performing that test. This theory is flawed for multiple reasons which are discussed in the papers listed at the end of this article. In most cases the grip strength of the person is not at issue for job performance purposes.

There is no substitute for a careful examination of the FCE report. One must be sure they examine the "full" report as opposed to a 2-4 page "Summary" report. For example there may be efforts to show sub-maximal effort based on heart rate data. It is not uncommon to find that there was no heart rate monitoring. Obviously, if the heart rate is not measured, any conclusions based on non-existent data are worthless.

If observations by the individual administering the test are used to support conclusions as to effort and the like, they may or may not be accurate. However, they have no place because they are by their very nature subjective in what is being "claimed " to be an OBJECTIVE testing protocol. No matter how well trained and experienced the person maybe this introduces a subjective factor.

#### RESOURCES

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The opinions expressed within the newsletter are those of the authors and do not necessarily reflect the opinions of the State Bar of Georgia, the Workers' Compensation Law Section or the Section's executive committee

# Georgia Case Law Update

By Jeff K. Stinson, Goodman, McGuffey, Lindsey & Johnson

# Ingress/Egress

Bonner-Hill v. Southland Waste Sys., Inc., 330 Ga. App. 151, 767 S.E.2d 803 (2014).

The claimant was killed in an accident when his vehicle was struck by a train while on his way to work. The employer's place of business was apparently located in a relatively remote part of the State, and the business was only accessible by a short, paved road which crossed over a railroad track. The employee parking area is past the tracks, in between the employer's building and other structures.

The employer leased the property from another company. The lease included the entire property as well as access to it by way of the entrance road, which was for "ingress and egress including use by [Southland's] vehicles and vehicles of its employees, and business invitees."

The employer denied the claimant's claims on the grounds that his injuries were not in the course of his employment. The Administrative Law Judge (ALJ) found the claim compensable, relying on the fact that the claimant had no other way in or out of work, that the entrance road was part of the business premises over which the employer had control and that the injury occurred within a reasonable time before the claimant was to begin work.

The employer appealed to the State Board of Workers' Compensation (SBWC), which reversed. In so ruling, the SBWC found that the claim was not compensable because the claimant had not yet arrived at work and that the premises were not exclusively owned, maintained and controlled by the employer.

The claimant appealed to the superior court, but the court did not rule and therefore the decision of the SBWC was affirmed by operation of law. The claimant then filed an application for discretionary appeal with the court of appeals.

The court of appeals reversed the SBWC and awarded benefits. The court of appeals reasoned that the claimant had arrived at the employer's premises at the time of the accident since: (a) the lease specifically included access to the entrance road; and (b) that the entrance road was essentially a driveway.

Judge Dillard concurred in the judgment only. Therefore, pursuant to court of appeals Rule 33(a) this decision may not be cited as binding precedent.

# Attorney's Fees

Heritage Healthcare of Toccoa v. Ayers, 323 Ga. App. 172 (2013).

The claimant was injured in an accident on Oct. 26, 2010, which she immediately reported to her employer. She was fired the next day. Initially no benefits were paid,

but the claim was also never formally controverted. The claimant requested a hearing seeking payment of income and medical benefits, late payment penalties and assessed attorney's fees. Several months after the hearing was requested, the employer and insurer accepted the claim as compensable, paid a lump sum for 20 weeks of past due income benefits and commenced weekly benefits. Six months later, and two days before the hearing, the employer and insurer paid claimant another lump sum to cover the late penalties. The parties proceeded to a hearing on the claimant's request for payment of attorney's fees and such request was denied by the ALJ.

The Appellate Division found that the tardy commencement of income benefits and the late payment of penalties were without reasonable grounds. The claimant's attorney was therefore entitled to attorney's fees in the amount of \$2,714.88, plus litigation expenses of \$407.74 under both O.C.G.A. § 34-9-108(b)(1) and (b)(2). The SBWC noted, however, that the fee was subject to the limitation of O.C.G.A. § 34-9-108(a) which provides that an attorney's fee cannot be more than 25-percent of the benefits paid to the claimant. It appears as if the SBWC did not award (or at least did not specify whether it awarded) continuing fees to the claimant's attorney, however. The claimant appealed to the superior court, arguing she should be entitled to continuing add-on fees, as well as fees based on the late payment penalty. The superior court agreed with the claimant and therefore ordered additional fees to be paid.

The employer and insurer appealed and the court of appeals affirmed the superior court in a 4-3 decision. The court found that the SBWC failed to award attorney's fees in compliance with O.C.G.A. § 34-9-108(b)(1) and SBWC Rule 108 because they limited the attorney's fee to the 48 weeks of benefits paid/due at the time of the hearing, while not taking into consideration that the attorney's contract called for payment of up to 400 weeks unless the benefits were terminated sooner. The court also found that the claimant's attorney was entitled to 25-percent of the late payment penalty because that was a penalty imposed for the employer and insurer's violation of O.C.G.A. §34-9-221.

*Waters v. PCC Airfoils, LLC, et al.,* 328 Ga. App. 557 (2014).

The claimant was employed performing "touch up" work, which required repetitive use of an air gun, for the employer for 20 years. She reported problems with her upper extremities and was eventually diagnosed with severe bilateral median nerve entrapment in the carpal tunnel, with the right being worse than the left. Treatment was authorized with a panel provider, Dr. David Banks.

On Nov. 17, 2009, nearly one month after the injury date, Dr. Banks noted that "no significant repetitive duties are required from the left hand." However, on Nov. 23,

2009, he recommended surgery on both wrists. On Dec. 16, 2009, the claimant had carpal tunnel release surgery on her right wrist. She then went back to Dr. Banks for a follow up visit on Jan. 26, 2010. During that visit, Dr. Banks once again diagnosed carpal tunnel syndrome in the left wrist and recommended limited use of both arms. The claimant continued working until Nov. 4, 2010. She had carpal tunnel release surgery on her left hand on Dec. 22, 2010.

The medical records were apparently confusing and somewhat inconsistent, but in June of 2011, Dr. Banks stated he did "not believe that [the claimant's] condition with respect to her left upper extremity, legs, or shoulder was related to her work activities. Only her right wrist injury is a work-related injury, and her other problems are not related to the right wrist injury. [The claimant's] continued inability to work is due to problems other than her right wrist." Apparently, the employer and insurer then did not authorize, although they did not formally controvert, benefits relative to anything other than the right upper extremity.

The claimant requested a hearing seeking benefits related to her left upper extremity injuries. The ALJ awarded benefits and also found that the employer had defended the claim unreasonably, thereby assessing attorney's fees against them.

The employer appealed. The SBWC upheld the decision, but the superior court reversed the award of attorney fees. The claimant then appealed the denial of fees.

The court of appeals reversed the superior court, thereby affirming the SBWC's decision. They found that the record showed that the ALJ clearly weighed the conflicting medical evidence and made a credibility determination about them, which was within the ALJ's discretion. Since there was some evidence to support the ALJ's determination that the employer's defense was unreasonable, the court upheld the award of attorney's fees.

*Monk v. Parker*, No. A14A1603, 2015 WL 1432545 (Ga. Ct. App. March 30, 2015).

Attorney Tom Monk (Former Counsel) represented a claimant whose injury was eventually designated catastrophic in 2009. That claimant terminated Former Counsel's representation in February 2012, and Former Counsel filed a Form WC-108b "Attorney Withdrawal/ Lien" via the Board's electronic filing system. However, Former Counsel did not serve copies of the form on the other attorneys involved in the claim. The claimant's new attorneys, Lynda Parker and Larry Hanna (Current Counsel), went on to negotiate a Stipulation and Agreement that was approved by the Board in August 2012. That agreement resolved indemnity issues but left medical open. The Board order also directed Current Counsel to hold in escrow \$77,385.74 in attorney fees and expenses pending "resolution of all attorney lien disputes." Former and Current Counsels then proceeded to attempt to mediate the attorney fee dispute issue, but mediation never actually occurred.

Current Counsel ultimately filed a motion to dismiss Former Counsel's lien for failing to serve a copy on all counsel, as required by Board Rule 108(e). Current Counsel also sought permission to disburse the funds held in escrow. The ALJ's response found that Former Counsel committed a technical violation of Board Rule 108(e) in that he "did not deny that he failed to properly serve a copy of the Form 108b on all [un]represented parties [and counsel]," but held that the unserved parties were not harmed because they had actual notice of the filing through the Board's electronic filing system. The ALJ also found that Current Counsel demonstrated "a certain lack of diligence" in failing to move for the lien's dismissal until more than a year after it was filed. Current Counsel appealed.

The appellate division first noted that the state legislature granted the Board authority to adopt rules or procedure governing the exercise of its functions. It then cited Board Rules 108(e), which allows a former attorney to recover a fee if he/she perfects a fee lien. The Rule goes on to say the former attorney "shall" serve a copy of the WC-108b on "all unrepresented parties and counsel," and failure to attach supporting documentation will result in the lien being denied. It further adds "failure to perfect a lien in this manner will be considered a waiver of further attorney fees." Strictly construing the governing language, the appellate division held that notice from the Board's electronic filing system was not a substitution for the service requirement in Rule 108(e). Since Former Counsel presented no evidence disputing the insufficiency of service, the division found a lack of proper service resulting in an unperfected lien. It, thus, reversed the ALI and granted Current Counsel's motion to dismiss the lien. Former Counsel appealed, and the superior court affirmed the appellate division based on the any evidence rule.

Former Counsel then appealed again to the Court of Appeals, arguing the appellate division erred in its "legal interpretation" of Board Rule 108(e) by failing to uphold the ALJ's determination that Current Counsel had waived the service requirement. The Court of Appeals held that Former Counsel did not serve a copy of Form WC-108b on Current Counsel as required by the Board's rules, so his lien was not perfected. Further, the Court said there was no evidence that Current Counsel ever received actual notice of the filing through the Board's electronic filing system, implying that there could not have been any waiver. The Court, therefore, deferred to the Board's promulgation and enforcement its rules, and found no error in the superior court's decision to affirm the Appellate Division.

#### Standard of Review

Royal v. Pulaski State Prison, 324 Ga. App. 275 (2013).

The claimant sustained injuries to her lungs on March 18, 2008, which occurred when she inhaled bleach fumes at the prison, aggravating her preexisting asthma. She was treated and released from the emergency room and missed five days of work. She was then released to regular duty and actually returned to work. On April

18, 2008, her personal physician admitted her to the hospital with pneumonia. He subsequently released her to return to work on May 12, 2008, with a restriction that she avoid strong chemical fumes. The employer could not accommodate the restriction, but denied workers' compensation benefits on the ground that her restrictions and treatment were not related to the work injury.

The claimant requested a hearing seeking continued medical treatment and TTD benefits. The employer and insurer contended that any aggravation of her preexisting conditions had resolved and any subsequent disability and need for treatment were due to preexisting conditions that were not work-related.

The ALJ, Appellate Division and superior court all found in favor of the employer and insurer, denying the claimant's request for ongoing income and medical benefits.

The claimant appealed to the court of appeals arguing that since she did not have restrictions before the work injury, the SBWC should have found that her work injury caused her subsequent disability. The court of appeals found that while there was evidence that could have supported another decision, since there was evidence in the record to support the ALJ's finding, including the fact she was released to regular duty on March 24, 2008, and did perform her duties until April 17, 2008, when she was hospitalized with pneumonia, it was required to uphold the SBWC's decision.

# Standard of Review/Average Weekly Wage

*Cho Carwash Property, LLC v. Everett,* 326 Ga. App. 6 (2014).

The claimant was employed as a lube technician for employer and was injured while in training, after only three days on the job. The employer commenced TTD at a rate of \$131.19, which was based on what they contended to be his average weekly wage, \$196.79.

The employer eventually requested a hearing seeking a credit for overpaid TTD benefits. The claimant disagreed that he was overpaid and contended he actually was entitled to a higher average weekly wage than what the employer had paid.

At the hearing the claimant and employer presented drastically different testimony regarding the claimant's wages. The dispute centered on the hours that the claimant expected to work for the employer. He contended that he expected to work full-time, while the employer contended he was only to become a part-time employee once he completed his training. The ALJ found the first two methods for determining average weekly wage under O.C.G.A. § 34-9-260 (13-week wages of the employee or a similarly situated employee) did not apply and that the average weekly wage should be based on the employer was entitled to a credit, but agreed with the claimant and found that his correct average

weekly wage should have been \$323.00, which would result in a compensation rate of \$213.18.

The employer appealed the award, arguing that the ALJ miscalculated Everett's average weekly wage. Both the Appellate Division and superior court affirmed. The court of appeals held that because there was some evidence to support the award, namely the claimant's testimony regarding his expected work hours, it must be affirmed.

#### Standard of Review/Strokes

*Save-A-Lot Food Stores v. Amos*, No. A14A1633, 2015 WL 1315606 (Ga. Ct. App. Mar. 25, 2015).

The claimant was working at the employer supermarket when he became dizzy and flushed while unloading pallets. He took a short break and then continued working, but found himself miscounting items, losing his balance and becoming confused. He also had a severe headache, water was dripping from his right eye, and the left side of his body felt weak. He was driven to the hospital, where he was admitted for three days.

The claimant filed a workers' compensation claim, alleging the condition resulted from a work-related stroke. The employer and insurer controverted the claim. During a hearing, evidence was presented showing that the claimant's family doctor opined that the claimant had a stroke and that work-related stress was a contributing factor, along with the claimant's tobacco use, uncontrolled diabetes, hypoadenia, inactivity and family history. However, a neurologist specializing in strokes testified that the claimant's MRI testing and other medical records showed no evidence of a stroke. The neurologist also testified that it is not clear whether stress is a real factor for stroke and that the claimant had most of the other known significant risk factors for stroke. Another neurologist who had treated the claimant similarly found no objective evidence of a stroke and questioned whether the incident had been initiated by a "vascular or hypoglycemic event."

Following the hearing, the ALJ denied the claimant's request for workers' compensation benefits, finding that the claimant had not shown that he suffered a stroke, and that even if he had, the stroke was not caused by work stress. The ALJ noted that:

Employee has the burden of proof and must show that he sustained an injury which arose out of and in the course of his employment and that disability resulted from the injury. The standard of proof on all factual questions is by a preponderance of the credible evidence. Employee is required to meet a higher standard of proof to establish that his alleged stroke is compensable. That proof must also be supported by medical evidence.

The claimant appealed, arguing that the ALJ had unfairly held him to a heightened standard of proof. The Board's appellate division affirmed the ALJ's decision, holding that the preponderance of competent and credible evidence showed that the claimant had not suffered a compensable injury. The Board said any requirement of a

higher standard was error and stricken. The claimant then appealed again to the superior court. That court said the ALJ's "higher standard of proof" language was erroneous, the appellate division recognized the error but failed to correct it, and, therefore, reversed the appellate division and remanded the case with instructions to conduct a new hearing. The employer then appealed.

The Court of Appeals noted that OCGA § 34-9-1(4) says a compensable injury does not include stroke "unless it is shown by a preponderance of competent and credible evidence, which shall include medical evidence, that any of such conditions were attributable to the performance of the usual work of employment." The Court said it is clear for the context of the ALJ's "higher standard of proof" language that the ALJ was "merely referring to the statutory requirement that [Claimant] support his stroke claim with medical evidence." The Court further said that even the Court of Appeals, like the ALJ, had previously referred to the statutory requirement of additional medical evidence in certain workers' compensation claims, such as heart attack and stroke, as being a "higher standard of proof." According to the Court, such use of "higher standard of proof" language was not a reference to a standard of proof higher than preponderance of the evidence, but was merely a way of expressing the additional evidentiary requirement of medical evidence in such cases. Further the Court noted that both the ALJ and the appellate division had expressly said multiple times that their findings were based on "a preponderance of the competent and credible evidence." The Court, therefore, reversed the superior court.

# Notice/Gradual Onset Injury

McAdoo v. Metropolitan Atlanta Regional Transit Authority, 326 Ga. App. 788 (2014).

The claimant worked as a MARTA bus driver for more than 22 years. He missed work multiple times each year due to diabetes, and had standing Family Medical Leave Act (FMLA) approval for sick leave associated with it. In May of 2010, he began to suffer pain from his lower back to his right hip and thigh that worsened when he worked. The pain caused the claimant to begin using his left foot to operate the brakes when driving. His supervisor told him it was unsafe to be "switching feet" and said he needed to "get taken care of" because he could not drive that way.

In October 2010, the claimant began seeing a neurologist who diagnosed lumbar radiculopathy, but indicated the pain was most likely caused by diabetes rather than the radiculopathy. The neurologist recommended against the claimant continuing to drive; noting that it was unsafe for him to do so. He signed a disability form that stated the disability was not work-related. The claimant stopped working on Oct. 17, 2010, and submitted FMLA forms to MARTA for his absence.

Six months later, on April 18, 2011, the claimant went to a new doctor for treatment of his lower back. The new doctor wrote a letter indicating that the pain was likely caused by "repetitive and redundant vibrations and injury due to his [job as a bus driver]." The next day, the claimant requested a hearing seeking income and medical benefits.

Following a hearing, the ALJ found that the claimant suffered a gradual onset injury due to his driving, and awarded income and medical benefits. The State SBWC agreed, finding that the claimant provided satisfactory notice to MARTA under O.C.G.A. § 34-9-80. It reasoned that MARTA clearly knew about the injury because his supervisor admonished him for improper operation of the brakes and told him to resolve his physical impairment. The SBWC said such notice was sufficient because notice of an injury is sufficient if it allows the employer to investigate the injury. However, even if the claimant did not provide sufficient notice in October of 2010, the SBWC said the claimant gave a reasonable excuse for not doing so since the pain was not diagnosed as work-related until April of 2011 and MARTA was not prejudiced by the delay.

On appeal, the superior court agreed that the claimant's injury arose out of his employment, but reversed the SBWC by finding the claimant did not give proper notice of his injury. The superior court said the claimant's notice to MARTA stated he was leaving for diabetes-related reasons, and his prior history of diabetes-related absences would prevent MARTA from considering any other possible reason for his leaving. Because the notice would not trigger an investigation by MARTA, it was not sufficient to satisfy O.C.G.A. § 34-9-80. The court did not address whether the claimant had a reasonable excuse for not providing timely notice.

The claimant appealed to the court of appeals, which affirmed the SBWC's decision. The court did not discuss whether or not the claimant gave sufficient notice, but rather held that even if proper notice was not given, the claimant showed a reasonable excuse for not giving timely notice and MARTA was not prejudiced by the failure.

# 240 Job Offer/Waiver of Suitability Defense

*Technical College System of Georgia v. McGruder, 326 Ga.* App. 469 (2014).

The claimant injured her lower back while working as a custodian at Augusta Technical College (ATC). The claim was accepted as compensable and the claimant was initially provided with both income and medical benefits. Three months after the accident the claimant returned to work in a light-duty position offered by the employer under O.C.G.A. § 34-9-240. The claimant attempted the job for just over one week, but stopped work after her primary care physician recommended against her working due to her work injury, as well as other serious medical problems. The employer did not resume paying her TTD benefits and the claimant requested a hearing to seek recommencement of her benefits.

The ALJ initially denied the claimant's request for benefits, finding that the claimant stopped working for reasons unrelated to her work injury. The ALJ excused the employer's failure to immediately recommence benefits as required by SBWC Rule 240(c)(i) by finding that the Rule exceeded the SBWC's rule-making authority because it affected the employer's substantive rights.

The SBWC vacated the ALJ's award, finding that the Rule did not exceed the SBWC's authority. The case was remanded back to the ALJ, who ultimately found that the claimant was entitled to past-due TTD benefits in light of the employer's failure to comply with SBWC Rule 240(c)(i). The SBWC and the superior court both affirmed.

The court of appeals also affirmed. The court reasoned that O.C.G.A. § 34-9-240(b)(1) requires the immediate reinstatement of benefits under such circumstances and does not include any exceptions. Furthermore, pursuant to SBWC Rule 240(c)(i), the employer's failure to comply with the statute resulted in a waiver of its defense that the employment was suitable and the claimant's refusal to continue working was unjustified.

The court also rejected the argument that Rule 240 exceeded the SBWC's rule-making authority. According to the court, Rule 240's waiver of the suitable employment defense applies only to an employer's statutory obligation to reinstate TTD benefits for a compensable injury that the employer was already required to pay prior to offering light-duty work. The employer, by refusing to recommence benefits, was essentially back in the same position they were in prior to offering the claimant work and therefore required to continue payment of benefits until proper suspension is authorized under the law.

# WC-104/Statutory Change in Condition

*Metropolitan Atlanta Regional Transit Authority v. Thompson,* 326 Ga. App. 631 (2014).

The claimant was injured on Dec. 16, 2009. The employer and insurer accepted the injury as compensable and began paying TTD benefits. On April 7, 2010, the authorized treating physician released the claimant to light duty work. The employer then served a WC-104 notifying the claimant her benefits would be converted to TPD benefits on April 7, 2011, unless she returned to work before that time.

On June 24, 2010, the claimant returned to work in a light duty position and continued in such capacity for one year. At that time the employer could no longer accommodate her restrictions, therefore sending her home and recommencing TTD benefits. On Oct. 30, 2011, the employer converted the claimant's TTD benefits to TPD benefits since she had been capable of light duty work for 52 consecutive weeks. The claimant filed a hearing request seeking the recommencement of TTD benefits.

Following a hearing, the ALJ found that the employer could not include the time the claimant had actually worked in counting the weeks before converting her benefits, and ordered them to pay the difference between what it had paid and what was owed, a penalty for late payment, as well as assessed attorney's fees. The SBWC and the superior court both affirmed.

The employer appealed to the court of appeals, which also affirmed. In so holding, the court ruled that the purpose of O.C.G.A. § 34-9-104(a)(2) is to permit an employer to convert an employee to TPD benefits if the employee has been released to return to work with restrictions, *but has not done so* in order to provide an incentive to return to work. The employer is not permitted to count time while the employee is actually working, as counting that time would not fulfill the statutory purpose of giving the employee an incentive to return to work.

The court of appeals also upheld the assessment of attorney's fees, finding that the statute was "straightforward and unambiguous," and therefore, MARTA acted without reasonable grounds.

Lane v. Williams Plant Services, 330 Ga. App. 416 (2014).

The claimant was injured in an accident in 2008. The claim was accepted as compensable and both income and medical benefits were paid. In March 2010 the claimant's income benefits were suspended, although the reason for the suspension is unclear from the decision. Benefits were paid through March 10, 2010, and the last payment was mailed prior to March 9, 2010.

The claimant filed a motion for an interlocutory order recommencing his benefits on March 9, 2010. The ALJ denied the request in part because there was not sufficient evidence to support the request, but also in part due to the fact that the issues would be best addressed at a hearing.

The claimant took the ALJ's suggestion, but waited until March 13, 2012, to request a hearing. The ALJ ultimately ruled that the claim for additional benefits was barred by the statute of limitations provisions of O.C.G.A. § 34-9-104. The Appellate Division affirmed. (Note: there was a separate medical issue in the case which is not of any significant consequence and therefore will not be addressed here.) The superior court also affirmed.

The court of appeals also affirmed. The claimant argued on appeal that the statute of limitations should begin to run upon receipt of income benefits, not when the benefits were paid. The court of appeals disagreed, citing O.C.G.A. § 34-9-221(b), as well as the SBWC's position in the appellate decision that payment is deemed to be made when the checks are mailed, not upon receipt. Since the claimant's claim for additional benefits was made more than two years after the last payment of income benefits his claim was time barred.

# Selection of Physician/Refusal of Light Duty Employment

Brasher v. US Xpress Enterprises, Inc., 328 Ga. App. 20 (2014).

On March 18, 2012, the claimant, a long-haul trucker, lost control of a steel crank, which struck him in the chest, back, neck, and head while working in Rome, Georgia. The claimant lived in Opelika, Ala. Following the injury the claimant sought treatment at the emergency room, where he was examined and released to return to work with directions to see a doctor within 24 hours. The next morning, he complained of numbness in his arms and face and asked his employer for medical treatment. The company representative said that she could not authorize additional treatment.

Two days later, the claimant sought treatment at an urgent care clinic and was diagnosed with a cervical strain; contusions of the thorax, face, scalp, and chest wall; and neuropathy in the face and upper arm. The doctor prescribed pain medication and placed the claimant on work restrictions. On March 23, 2012, he was referred to an orthopedic surgeon. He was given additional work restrictions on March 27, 2012.

The claimant subsequently returned home to Alabama. The employer offered him a light duty position working in a guard shack and checking to make sure the drivers were wearing seatbelts. The job was at a terminal located several hours from his home, but the employer provided the claimant with a hotel room and a bus ticket to and from the work location. On April 5, 2012, the claimant asked for a \$25 advance to purchase food so he could take his medications, but his requests were refused. After approximately five hours of work, the claimant told the site manager that he was not going to stay on the job and "starve to death." He then signed a form declining the job due to financial reasons and left.

The claimant subsequently filed a request for hearing seeking TTD benefits and authorization for medical treatment. After requesting the hearing the claimant continued to seek treatment. The urgent care doctor requested approval for an MRI, but the request was denied. He also treated with Drs. Empting and Dorchak, who recommended further tests and a return to sedentary work.

After a hearing the ALJ found that the claimant was entitled to receive income benefits from March 21, 2012, through April 5, 2012, but was not entitled to further income benefits because he wrongfully refused a suitable light duty job assignment that remained available to him. The ALJ also appointed Dr. Dorchak to be the authorized treating physician and ordered the employer to provide the claimant with ongoing medical treatment.

The claimant appealed the ALJ's decision to the SBWC, which affirmed. The claimant then appealed to the superior court, which conducted a hearing but failed to issue an opinion within 20 days, thereby affirming the SBWC's decision by operation of law under O.C.G.A. § 34-9-105(b).

The claimant then appealed to the court of appeals which affirmed in part, and reversed in part.

The court overturned the decision to appoint Dr. Dorchak as the ATP, since the employer did not comply

with O.C.G.A. § 34-9-201(c). There was no evidence that the employer posted a panel of physicians, provided the claimant with appropriate assistance in contacting a physician on the panel, or informed him of his right to select a panel physician. As such the claimant was entitled to choose his own ATP.

The court upheld the finding that the light-duty job offered to the claimant was appropriate and the claimant was not justified in refusing the position. The court disagreed with the claimant's claim that he would "starve to death" if he did not quit the light duty position since the employer provided him with a hotel room that included breakfast and his supervisor offered to buy him lunch for four days. The court also disagreed with the claimant's contention that the job would disrupt his life because it was a 15 hour bus ride to/from his home as he was accustomed to long periods away from home since he previously worked as a long-haul truck driver.

# Idiopathic Injuries

*Chambers v. Monroe County Board of Commissioners*, 328 Ga. App. 403 (2014).

The claimant worked as a firefighter/EMT for Monroe County. After returning to the station from a call, she sat down at a desk to complete some paperwork and then remained at the desk watching television. Her supervisor asked her to get up from the desk so he could use it. When the claimant rose from the chair, she felt and heard a "pop" in her left knee. She continued to work, but she eventually went to the emergency room after the pain increased. She had to have knee surgery and will probably need to have a knee replacement.

The ALJ found the injury compensable on the basis that the claimant was required to be in the location where she was injured and was following her supervisor's orders. The employer appealed, and the SBWC vacated the ALJ's award, finding "no evidence that the Employee slipped, tripped, or fell or came in contact with any object or hazard that increased her risk of injury" but, rather, simply rose from a seated position. The SBWC, therefore, concluded the claimant failed to show a causal connection between her employment and her injury or that her injury arose out of her employment. The superior court affirmed, noting it was required to uphold the findings of the SBWC if there was any evidence to support its decision and that there was some evidence in the record to support its finding of noncompensability. The claimant then appealed.

In a split decision, a majority of the court of appeals held that the SBWC's finding that the claimant's injury was not compensable because it was "idiopathic" – that is, not "arising out of" her employment – must be affirmed because the finding was supported by some evidence. Although the claimant argued the SBWC's finding was a mixed question of both fact and law, which could be reviewed de novo by the court of appeals, the majority concluded that prior cases on the issue consistently held that whether an injury arose out and in the course of the

employment is purely a question of fact and the superior courts and the court of appeals may not substitute their judgment for that of the SBWC. The majority, therefore, held that the SBWC's finding was supported by some evidence because it would have occurred regardless of where the employee was required to be located and resulted from a risk to which the employee would have been equally exposed apart from any condition of her employment.

# Authorization of Medical Treatment

Ward v. Pre-Engineer Systems, 328 Ga. App. 308 (2014).

The claimant was injured in 1973 when he fell approximately 40 feet while working on a construction site. The employer paid workers' compensation benefits following the injury. The claimant received nurse case management services from 1999 to 2009, when the services were suspended. He then requested to have the services reinstated. The request was denied in an administrative order, and the claimant appealed, seeking a hearing before an ALJ.

The ALJ determined that the claimant required a nurse case manager to assist him with his medical treatment, rejecting the employer's argument that he was not entitled to such services because the services of a nurse case manager were not granted as a workers' compensation benefit in 1973. The employer appealed the decision to the SBWC, which affirmed. The employer then appealed to the superior court, which reversed the SBWC's decision finding that the law in place at the time of the claimant's accident did not require such treatment be provided.

The court of appeals reversed the superior court's decision. In so ruling, the court reasoned that once an injury was determined to be compensable an employer's obligation to provide medical treatment may continue for decades and therefore injured employees would be prejudiced if their medical benefits were limited to those available at the time of injury.

The court cautioned that the decision only applied to medical treatment and that rules that render compensable an otherwise non-compensable injury will not be applied retroactively.

# Entitlement to Income Benefits Post-Termination

Burns v. State Dep't of Admin. Servs., No. A14A1801, 2015 WL 922079 (Ga. Ct. App. Mar. 5, 2015).

The claimant worked as a receptionist for the State of Georgia Department of Administrative Services. In December 2009, she sustained a compensable injury when her office chair collapsed while she was sitting in it. She received workers' compensation benefits, made a full recovery, and returned to work until Oct. 30, 2012, when her employment was terminated. The claimant then sought TTD benefits, which were controverted based on the

claimant's failure to conduct a diligent job search and on the employer's contention that the claimant was terminated for reasons unrelated to her December 2009 work injury.

After an evidentiary hearing, the ALJ awarded TTD benefits to the claimant, specifically finding that the reasons given by the employer to justify the claimant's termination were pretextual and that the claimant was terminated because of her work injury and workers' compensation claim. The employer appealed, but the Board upheld the ALJ's decision. The employer then appealed to the superior court, which held that to obtain TTD benefits, the claimant had to prove either that she searched for another position or that she had been working in a restricted capacity when her employment was terminated. The superior court found the claimant failed to make either showing and set aside the award of TTD benefits. The claimant then filed a pro se appeal to the Georgia Court of Appeals.

The Court of Appeals overturned the superior court, holding that the law does not require the claimant to show either that she had searched for another position or that she had been working in a restricted capacity when her employment was terminated. The Court acknowledged that the superior court's mistaken interpretation of law was based on the Georgia Supreme Court's decisions in Maloney v. Gordon County Farms and Padgett v. Waffle House. The Court noted that the Maloney decision was based on the idea that requiring the showing of a diligent but unsuccessful job search represented a way of proving the necessary element of causation in this type of workers' compensation claim. Because Maloney involved a claimant who was terminated for reasons unrelated to her injury, that claimant needed some way of showing that his economic change for the worse was proximately caused by the work-injury. Therefore, the Supreme Court held that proof of a diligent job search could satisfy that necessary causal connection. In *Padgett*, the Supreme Court similarly held that "[a] finding that the reasons for the termination were a pretext to avoid continued payment of benefits would [also] satisfy the proximate cause requirement."

The Court of Appeals reasoned that although *Padgett* discussed its holding in the context of an employee working a light duty position with restrictions, there is "no reason why the *Padgett* rule should not also apply to employees who can perform their job duties without modification if [...] the employer refuses to provide [...] work due to the claimant's work related injury." The Court of Appeals, therefore, concluded that "the dispositive issue is not whether [Claimant] sought new employment or whether she was working under restrictions when the employer terminated her employment, but whether she demonstrated the necessary causal link between her workrelated injury and her worsened economic condition." The Court found that such a link was established by the Board's finding that the employer gave pretextual reasons for terminating the claimant's employment and that her termination was actually due to the claimant's workrelated injury.

# Same-Sex Marriage And The Future Of Death Benefits Under O.C.G.A. §34-9-265

By Christopher A. Bennett, Drew, Eckl & Farnham, LLP

he definitions of "marriage", "spouse" and "dependents" have been increasingly challenged recently and this has created a significant impact regarding the eligibility for a wide array of benefits, including workers' compensation death benefits, previously reserved for traditional married, opposite-sex spouses. Recent and still pending legal decisions may have a significant impact regarding the determination of who is entitled to death benefits under the Georgia Workers' Compensation Act in the future, in particular.

Specifically, the Supreme Court of the United States is currently considering cases that deal with two key issues. Simply put, these issues are: 1) whether states must recognize, but not necessarily license, same-sex marriages

from other states; and, 2) whether states must grant marriage licenses for same-sex marriages. Clearly, the Supreme Court's decision may have a dramatic effect on a samesex partner's entitlement to benefits under O.G.G.A.

§ 34-9-265. However, independent of the pending decision of the Supreme Court, a recent legal decision from the Alaska Supreme Court may also have implications regarding future eligibility for death benefits in Georgia.

Like Georgia, Alaska neither recognizes nor licenses same-sex

marriages and it has a similar statute to that of Georgia governing workers' compensation death benefits. In light of this, it should be noted the Alaska Supreme Court recently overturned a decision denying a claim for death benefits brought by a same-sex partner by the Alaska Workers' Compensation Board (which had ruled that Alaska's constitution, which prohibits same-sex marriage, barred a same-sex partner from entitlement to death benefits). Harris v. Millennium Hotel, 330 P3d 330 (Alaska 2014).

In Harris, a workers' same-sex partner sought death benefits under the Alaska Workers' Compensation Act due to her partner's work-related death. Specifically, Deborah Harris filed a claim for death benefits under Alaska's Workers' Compensation Act on the basis that she was the decedent's "dependent/spouse". Id. at 331. However, as written, Alaska Statute § 23.30.215 only allows benefits to a deceased worker's "widow or widower".

The employer controverted the claim on the basis that Ms. Harris was not a legal dependent, as defined under the workers' compensation statute, as "wife" or "husband". In turn, Alaska's Workers' Compensation Board agreed and denied the claim. In doing so, the Board cited Alaska's constitutional amendment defining marriage as "only between one man and one woman" and concluded that Harris could not be considered the decedent's widow under the law and, therefore, did not qualify for death benefits. Id. A constitutional challenge to the workers' compensation statute was brought by Harris on the basis that Alaska's Workers' Compensation Act unfairly limited eligibility for death benefits. Id. at 332.

In its ruling, the Alaska Supreme Court did not address the constitutionality of the state's prohibition against samesex marriage but, instead, ruled on the constitutionality

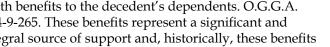
> and application of the workers' compensation statute. It ultimately held that that a domestic partner is not barred from receiving death benefits under its workers' compensation act, despite Alaska's prohibition against same-sex marriage.

In arriving at its decision, the Alaska Supreme Court considered that Harris and the decedent had been in an exclusive, committed and financially interdependent relationship for over 10 years and had even raised children together. *Id.* at 332. The Court concluded that

Alaska's workers' compensation statute already required its Board to make individualized inquiries regarding actual dependency of widows and widowers and that not using the same analysis for same-sex couples due solely to marriage status violated Harris' right to equal protection. Id. at 337.

Following this rationale, the Alaska Supreme Court found that Harris had proven an ongoing and dependent relationship with the deceased and held that she was entitled to death benefits despite the fact that she did not have the legal status of spouse. In arriving at this conclusion, the Court further held that there was no compelling reason to treat same-sex partners who were dependent upon each other differently than it treated legally married spouses who were dependent upon each other when analyzing eligibility for death benefits. Id. at 338.

Turning to Georgia, if an employee's death is the result of a compensable accident, the employer is obligated to pay death benefits to the decedent's dependents. O.G.G.A. § 34-9-265. These benefits represent a significant and integral source of support and, historically, these benefits



have been provided primarily to the decedent's spouse and children. Specifically, O.C.G.A. § 34-9-265 provides that compensation (death benefits) "shall be payable only to dependents . . . ." However, this begs the question: "who is a legal dependent in Georgia for the purposes of O.C.G.A. § 34-9-265?"

The Georgia Workers' Compensation Act effectively provides a schedule of priority for death benefits, identifying "primary" dependents and "secondary" dependents. O'Steen v. Florida Insurance Exchange, 118 Ga. App. 562, 164 S.E.2d 334 (1968). Particularly, O.C.G.A. § 34-9-13(b) creates a legal presumption of dependency in that a "wife" or "husband" (and child) shall be "... conclusively presumed to be the next of kin wholly dependent for support upon the deceased employee . . . ." Secondary dependents are those who may be entitled to death benefits if there are no primary dependent and if they can prove actual dependency. Therefore, there is definite value in having the legal status of primary beneficiary.

However, O.C.G.A. § 34-9-265 and O.C.G.A. § 34-9-13 do not necessarily limit the status of a secondary "dependent" to a legal relative of the decedent. Therefore, there is potential under the law for secondary dependent who is not related to the decedent to also qualify for death benefits. *St. Paul-Mercury Indemnity Co. v. Robinson*, 88 Ga. App. 217, 76 S.E.2d 512 (1953). If a person is not a primary beneficiary, the question of dependency at that point is one of fact to be determined "according to facts and circumstances of each particular case", taking into consideration the claimant's needs, past support and employee's legal or moral obligations. *Insurance Co. of North America v. Cooley*, 118 Ga. App. 46, 162 S.E.2d 821 (1968).

In sum, under current Georgia law, same-sex dependents cannot be considered, by definition, as a primary dependent. As a result, they are not afforded the conclusive presumption of dependency and would have to prove actual dependency in any claim for death benefits. However, an argument can be made that they could still qualify for benefits as a secondary dependent based upon actual dependency.

If the Supreme Court of the United States rules that the all states must provide for and recognize same-sex marriages, the present language of Georgia Workers' Compensation Act will have to be addressed and amended to reflect this change. However, even if the Supreme Court rules that states may continue to ban same-sex unions and do not have to recognize same-sex relationships, such a decision would not necessarily mean same-sex partners would not have a potential argument for the expanded entitlement of death benefits in Georgia in light of the *Harris* ruling.

Although there are no pending cases involving a same-sex partner requesting death benefits in Georgia, it is interesting to consider how Georgia would approach and address a claim similar to *Harris*. To this point, the Supreme Court of Georgia and Georgia General Assembly previously addressed the issue of gender based discrimination and the wording of O.C.G.A. § 34-9-13.

Specifically, O.C.G.A. § 34-9-13 previously provided that a surviving wife was conclusively presumed to be wholly dependent upon her deceased husband, while the husband was required to prove his dependency upon a deceased wife. However, the Supreme Court of Georgia held that this language amounted to gender-based discrimination and was an unconstitutional violation of the equal protection clause of the Fourteenth Amendment of the U.S. Constitution. Insurance Co. of North America v. Russell, 246 Ga. 269, 271 S.E.2d 178 (1980). The applicable statute was later changed to provide that both a wife or a husband is presumed wholly dependent upon the deceased employee. O.C.G.A. § 34-9-13(b)(1). Although there are certainly differences in the issues posed in Harris and Russell, Russell serves as an illustration of how Georgia has previously addressed constitutional issues involving the terms contained in O.C.G.A. § 34-9-13.

Considering this, the language of O.C.G.A. § 34-9-13 and O.C.G.A. § 34-9-265 will need to be addressed if same-sex partners are granted increased access to death benefits in the future, whether that be through the United States Supreme Court's decision or pursuant to subsequent litigation at the state level. Either way, the terminology of O.C.G.A. § 34-9-13 will have to be amended to include same-sex dependents.

Specifically, O.C.G.A. § 34-9-13(e) currently provides that dependency of a "spouse" upon a deceased employee "... shall terminate with remarriage or cohabitation in a meretricious relationship; and for this purpose cohabitation in a meretricious relationship shall be a relationship in which persons of the opposite sex live together continuously and openly in a relationship similar or akin to marriage, which relationship includes either sexual intercourse or the sharing of living expenses." (Emphasis added) If same-sex partners are ultimately found to be entitled to death benefits, it would follow that the current reference to "persons of the opposite sex" would have to be modified in order to have the statue applied equally to all like beneficiaries, regardless of sexual orientation. In addition, the current definitions of "husband", "wife" and "spouse" under O.C.G.A. § 34-9-13 would need to account for samesex marriages as well.

In closing, although it can be argued that same-sex partners could be eligible for death benefits in Georgia under certain circumstances, they currently do not have the legal standing to make a claim for death benefits as a primary dependent. The Supreme Court could change this with its ruling on the same-sex marriage issue. Independent of the Supreme Court decision, however, the recent case in Alaska also demonstrates that there are other viable legal theories under which the current parameters of O.C.G.A. § 34-9-13 and O.C.G.A. § 34-9-265 could be challenged. Such challenges could lead to same-sex partners having the same status as a primary beneficiary that opposite-sex spouses currently have and could also affect their legal standing to pursue death benefits, in general.

# Medical Marijuana: What It May Mean To Georgia

By James G. Smith, Hall, Booth, Smith, P.C.

eorgia law is clear that in the event that an injury is deemed compensable, the employer must provide the injured worker with medical treatment which is prescribed by a licensed physician, and which "shall be reasonably required and appear likely to effect a cure, give relief, or restore the employee to suitable employment." Less clear, however, is how the law will be applied if--or perhaps more aptly, when--an authorized physician prescribes medical marijuana to an injured worker in a workers' compensation claim. With the Georgia Legislature's passage of a new bill on March 26, 2015, which allows for the use of cannabis oil for eight different medical conditions, the likelihood of this complex and controversial scenario became much closer on the horizon. Given the specific medical conditions which are delineated by the bill, this law will most likely not have an impact on workers' compensation claims for the time being. However, it undoubtedly paves the way for future laws which may have a wider scope.

In the context of workers' compensation, the legalization of medical marijuana will certainly create an array of legal questions, not the least of which include the cost of the drug, its viability, and how legalization may impact the "intoxication defense" or "drug-free workplace" programs in the state. In that regard, Georgia will be looking to other states which have already begun dealing with such issues. Undoubtedly, the time for Georgia to answer these questions is fast approaching, and it's high time that employers and insurers begin to prepare.

# Overview of Georgia's New Law

As mentioned above, the bill which was overwhelmingly approved by the Georgia Legislature allows for patients with eight specific medical conditions to be eligible for treatment with cannabis oil that has a minimal level (only 5 percent) of tetrahydrocannabinol, or THC, which is the chemical that elicits the "high" experienced by users of the drug. Originally, the House of Representatives sent a bill to the Senate with nine total medical conditions, but the Senate deleted one—fibromyalgia--from the list. The final version of the bill includes seizure disorders, sickle cell anemia, cancer, Crohn's disease, Lou Gehrig's disease, multiple sclerosis, mitochondrial disease and Parkinson's disease. Eligible patients will be allowed to obtain up to 20 ounces of the oil.

## The Federal Level

One of the most complicated factors stemming from the legalization of medical marijuana is its "Schedule 1" status on the federal level under the Controlled Substances Act, which is the classification given to the most dangerous drugs, including heroin and ecstasy. While preliminary

research and testing has demonstrated that marijuana does have various medical benefits, the Food and Drug Administration has yet to conduct enough clinical research to modify the classification of the drug. Accordingly, the interplay of conflicting state and federal laws have been a cause for concern in "legal" states. However, change would seem to be on the way in that respect, as Congress passed a spending measure in December of 2014 that effectively ended the federal government's prohibition on medical marijuana in states where it had been legalized. More specifically, the federal government is now forbidden from using any of its resources to impede state medical marijuana laws. Nevertheless, the classification of marijuana as one of the most dangerous controlled substances will continue to muddy up the waters regarding the efficacy of the drug from a medical perspective. Until science can come to a consensus in that regard, it will be exceedingly difficult to manage medical marijuana in the workers' compensation realm.

# Legal Issues in the Workers' Compensation Context

The prospect of medical marijuana being prescribed to an injured worker creates a host of questions. Is it really "reasonably required" and does it "appear likely to effect a cure, give relief, or restore the employee to suitable employment?" How much does it cost, given the fact that its Schedule 1 status means that it would be outside the parameters of the fee schedule? Can you terminate an injured worker with marijuana in her or her system, even if it's in their system because it was prescribed for a work injury? Will a physician be reluctant to allow an injured worker to report to work at all if a prescription for marijuana has been provided, so as to avoid the possibility of them working or driving under the influence? How will its use be monitored by a physician,



and will the intoxication defense for marijuana under O.C.G.A. 34-9-17(b) be rendered useless if a physician prescribes medical marijuana?

It is well understood that THC can remain in a user's system well after the "high" of the drug has worn off. Additionally, there are numerous strains and versions of marijuana which can been purchased (legally or illegally). In that regard, an injured worker with a prescription for medical marijuana could arguably use any kind of marijuana he or she desires, and there would be no way of knowing if the worker was using it in the medically prescribed manner. O.C.G.A. § 34-9-17(b) states: "No compensation shall be allowed for an injury or death due to intoxication by alcohol or being under the influence of marijuana or a controlled substance, except as may have been lawfully prescribed by a physician for such employee and taken in accordance with such prescription..." Suppose that an injured worker with a medical marijuana license has returned to work in a light duty capacity and sustains another work injury. The injured worker subsequently fails a post-accident drug test. Will the intoxication defense be available to the employer/insurer? The employer/insurer would certainly have a much steeper hill to climb to contest the compensability of the injury.

Irrespective of the complex legal ramifications of legalization, it should be noted that there may be somewhat of a silver lining, at least in terms of the ongoing cost of medical care. Proponents of medical marijuana argue that it is less expensive, less addictive, and significantly less lethal than narcotic/opioid pain medication. If these so-called advantages of the drug actually prove true over time, then the legalization of marijuana will likely be an easier pill to swallow for employers and insurers.

#### A Look at Other Jurisdictions

Fortunately for Georgia, courts in other jurisdictions have already begun to provide guidance to some of the questions outlined above. One case that should be closely watched comes from Colorado, Coats v. Dish Network, L.L.C., 303 P.3d 147 (2013). Coats, the plaintiff, was injured in a car accident and was rendered a quadriplegic as a teenager. Although he was a licensed medical marijuana patient under state law, he was fired by Dish Network, his employer, after he tested positive for THC in violation of their drug policy. There was no evidence that he was actually intoxicated at work, and Coats alleged that he only used the drug as prescribed and never reported to work under the influence. Nevertheless, the Colorado Court of Appeals upheld the termination as lawful on the grounds that Coats' "state-licensed medical marijuana use was, at the time of his termination, subject to and prohibited by federal law," and therefore, it was not protected as a "lawful activity" under Colorado law. The Colorado Supreme Court granted cert and heard oral arguments in September of 2014, but no decision has been reached at this time. Without a doubt, a continued affirmation of the decision of the Colorado Court of Appeals would spell a significant hindrance to state legislation legalizing medical

marijuana. Again, the Schedule 1 classification of the drug is a primary issue for proponents of legalization.

New Mexico is similarly paving the way for a better understanding of how medical marijuana will be navigated in the workplace. In that regard, two cases are of particular relevance from the past two years. In Vialpando v. Ben's Auto. Servs., 2014-NMCA-084, the Court of Appeals of New Mexico found in favor of the claimant (Vialpando) when deciding the issue of whether an employer/insurer must reimburse an injured worker for medical marijuana which was being used pursuant to state law. Vialpando had been certified for the state's medical marijuana program by two care providers based on chronic debilitating pain stemming from a compensable back injury. The Court of Appeals affirmed the lower court's determination that Vialpando's participation in the medical marijuana program was considered "reasonable and necessary medical care," and his employer was ordered to simply reimburse Vialpando for his purchase of the authorized medical marijuana (thereby obviating any need for a fee schedule). A writ of certiorari was subsequently denied by the New Mexico Supreme Court.

Even more recently in New Mexico, in Maez v. Riley *Indus.*, 2015 N.M. App. LEXIS 7, the Court of Appeals of New Mexico again found in favor of an injured worker on the issue of whether medical marijuana was "reasonable and necessary medical care" under that state's law. Maez, the claimant, sustained two compensable back injuries and was receiving pain management from his physician. The facts of that case revealed that after receiving pain management for over half of a year, Maez tested positive for marijuana during a required test for pain management patients (prior to it ever being prescribed). His physician informed Maez that if he was going to be using marijuana, he needed to have a license for it, so the physician ultimately recommended a one year trial of medical marijuana. The physician further noted, in support of his decision to authorize the medical marijuana trial, that Maez had "failed traditional pain management and is a candidate for the cannabis program." As is the case in claims debating the reasonableness and necessity of medical care in Georgia, the opinions of the various care providers will be a significant determining factor in deciding compensability.

# Final Thoughts

As stated above, the recent bill passed in Georgia, which is expected to be signed into law by Governor Deal at the end of the current legislative session on April 2, 2015, will likely have minimal impact on workers' compensation claims for the time-being, given the restrictions related to the requisite medical conditions for the drug. However, the writing is certainly on the wall, and the trend toward fewer restrictions and more widespread legalization is undeniable. When that day comes for Georgia, employers and insurers can expect a wave of litigation to deal with some of the questions discussed in this article. Whether the answers are ultimately good or bad for workers' compensation claims is something only time will tell.

# The "Almost" Impact of Reid v. MARTA on the Recovery of Late Penalties and the Statute of Limitations

By Carrie S. Annis, Carlock, Copeland & Stair LLP

s it is well known, when an Employee suffers a compensable injury and, as a result, experiences a loss in income, they may be entitled to receive compensation for time lost. Pursuant to O.C.G.A. § 34-9-221, indemnity benefits must be paid in a timely manner in order to avoid payment of late penalties. Nevertheless, if an injured party fails to seek payment of any late penalties owed, their opportunity to do so may be lost, as evidenced in the *Reid v. Marta*, which "almost" had the opposite impact on the time limit that a party may recover unpaid benefits.

This case, which was heard before the Supreme Court in 2014, addresses the two-year statute of limitations for income benefits under O.C.G.A. § 34-9-104, as well as the meaning of a "change in condition." A change in condition occurs when a claim has been accepted and an injured worker either receives payment of indemnity benefits or salary in lieu thereof. Pursuant to O.C.G.A § 34-9-104(b),

"...any party may apply under this Code section for another decision because of a change in condition ending, decreasing, increasing, or authorizing the recovery of income benefits awarded or ordered in the prior filed decision, provided that the prior decision of the board was not based on a settlement; and provided, further, that at the time of application not more than two years have elapsed since the date the last payment of income benefits pursuant to Code Section 34-9-261 or 34-9-262 was actually made under this chapter...."

In this case, the Claimant, Michael Reid, was injured at work in October of 1999. He received TTD benefits between October of 1999 and June of 2002; however, 12 of those payments were not issued in a timely manner, as required by O.C.G.A § 34-9-221. Nevertheless, Reid returned to work, thereafter, and TTD benefits were suspended accordingly. In May of 2010, over eight years later, Reid sought payment of late payment penalties due on 12 weeks of past TTD benefits that had been paid untimely. The residing administrative law judge found that the Claimant's

request for late penalties was classified as a "change in condition," under O.C.G.A. § 34-9-104, and thus found that the claim for the penalty barred by the two-year statute of limitations. The ALJ's ruling was upheld by the appellate division and the Superior Court, with both finding that the payment of workers' compensation benefits by an employer constituted a "condition," and that when the employee sought to recover benefits that were owed but never paid, the employee was seeking "additional" benefits as a result of a change in condition. Therefore, the two-year statute of limitations was found to be applicable, barring the Claimant from seeking payment of the late penalties after the tolling of the Statute.

Alternatively, the Court of Appeals of Georgia granted review and reversed the decision below, finding that the statutory penalties sought were not governed by any limitation period. The Court reasoned that the Claimant was not seeking to recover the statutory late-payment penalties because his physical or economic



condition had changed, but that the "late penalties" constituted benefits due him as a matter of law under O.C.G.A. § 34-9-221. This decision stood to have a major impact on Employer/Insurers, as a party could use this ruling to argue that the two-year statute of limitations shouldn't apply to a case where the Employer and Insurer had not paid all benefits that were "due" to an employee. This could include not only late penalties, but any missed indemnity payments or instances where there is a dispute over the amount of TTD benefits owed. This ruling could have provided a basis to argue that the change in condition statute of limitations is inapplicable to any case in which the Employer and Insurer had not paid all benefits due to an Employee.

Upon review by the Supreme Court of Georgia, that ruling was reversed. The question presented for the Supreme Court's review was "whether the Court of Appeals erred in holding that the proper statute of limitations for a claim of statutory penalties for late benefits payments in workers' compensation cases under O.C.G.A. § 34-9-221 was the general statute of limitations, O.C.G.A. § 34-9-82, rather than the change in condition statute of limitations, O.C.G.A. § 34-9-104 (b)." The Court answered that question in the affirmative, reasoning that when the Claimant returned to work, he experienced a "change in status" and therefore a "change in condition" as he was no longer receiving workers' compensation benefits. This change tolled the statute of limitations on his claim for late penalties for the previous payments. The Supreme Court made it clear that the Claimant's request for a "change in status," such as an entitlement to benefits and penalties, must be filed or brought within the two year statutory time period, or it is barred in its entirety.

#### The Supreme Court noted that,

in workers' compensation cases, as in every case, there must be closure and finality" and that "Statutes of limitation . . . are designed to promote justice by preventing surprises through the revival of claims that have been allowed to slumber until evidence has been lost, memories have faded, and witnesses have disappeared."

In sum, the Supreme Court's decision puts a stop to any party attempting to "bypass" the two-year statute of limitations for recovery of income benefits, by seeking payment of indemnity benefits or unpaid late penalties years after a claim has been resolved. This was a close call for Employer/Insurers, as the *Marta v. Reid* case "almost" had a major impact on Employer/Insurers' ability to bring closure to old claims with potential unresolved indemnity issues. The Supreme Court of Georgia has closed the door on the potential to revive old claims.

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# Medicare Set-Asides in 2015:

#### Current Trends

By Beverly Manley, Beverly Manley & Associates

edicare Secondary Payer compliance is sometimes more an art than a science. Changes in Medicare Set-Asides (MSAs) can be difficult to track, and the Centers for Medicare and Medicaid Services (CMS) reviews of MSAs involve an element of subjectivity. It is best to remain alert to published CMS changes as well as CMS practice changes apparent within the CMS review decisions you receive. The CMS website (<a href="https://www.cms.gov">www.cms.gov</a>) is a valuable resource. By clicking Medicare, and then, Workers Compensation Medicare Set Aside Arrangements, you can locate the link for subscription (under Related Links) to CMS alerts regarding published changes in this arena. We also provide copies of pertinent CMS policy

memos and resources at our own website, <u>www.bmanleymsa.com</u>, for your convenience.

A new version of the Self-Administration Toolkit for WCMSAs, dated Jan. 5, 2015, was published at the CMS website earlier this year. We recommend providing a copy of this resource at time of settlement to all claimants who will administer their own MSA. A significant change can be found in Section 5 of the updated Self-Administration Toolkit for WCMSAs. To understand this change, a comparison of the old and new versions is necessary. The previous version, dated March 21, 2014, directed claimants to inform their medical providers as to whether their WCMSA is based on full actual charges or fee scheduled prices "so they can bill you for your WC injury treatments using the

correct pricing method." This language has been deleted from the current publication.

A related change can be found in the CMS decision letters, issued upon completion of WCMSA reviews. Until January, 2015, CMS decision letters indicated whether fee schedule or full actual prices were used in the MSA. They went on to say the MSA should be spent *using the same pricing methodology*. CMS letters we received last year for MSAs based on fee schedule pricing specifically stated, "...the WCMSA is approved to pay providers, physicians and suppliers based on the workers' compensation fee schedule...." This language

has been deleted from CMS decision letters dated after Jan. 1, 2015.

The new WCMSA Reference Guide Version 2.3 includes another consistent change. (This new version of the Guide was also published at the CMS website and is dated January 5, 2015.) Section 17.3 of the previous version of the Guide stated, "If you set up your WCMSA based on a fee schedule, pay providers based on the fee schedule. If you set up your WCMSA based on full actual charges, pay based on full actual charges." This sentence has been deleted from the new Guide.

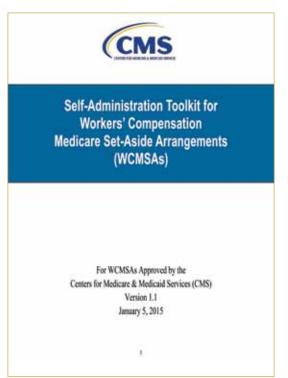
Unfortunately, CMS stopped short of issuing a new

Policy Memo to affirmatively state WCMSA spending is not required to conform to the pricing methodology used in the approved WCMSA. It should be noted the WCMSA Reference Guide states, "For comprehensive explanations, please refer to the WCMSA RO Memorandums." The October 15, 2004 CMS Policy Memo states the MSA administrator should make payments from the MSA on the same basis as the pricing methodology used in the approved WCMSA.

The conspicuous absence of a new Policy Memo leaves one to wonder if CMS wants to have its cake and eat it, too. Without rescinding the October 15, 2004 Policy Memo, CMS encourages MSA spending in a manner consistent with approved MSA pricing, but it is unlikely that CMS would be able to deny

future treatment to a beneficiary solely on the basis that spending was inconsistent. Once again, CMS leaves us to draw our own conclusions in the absence of clear guidance. The bottom line is that it remains best for claimants to spend MSA funds in the manner that will stretch the funds as far as possible to avoid premature MSA exhaustion. Even if CMS pays for injury related treatment after MSA exhaustion with no questions, the claimant will still have to absorb co-pays and other usual costs, once the MSA is depleted.

Another change can be found in Section 9.4.6.2 of the new WCMSA Reference Guide. It has been edited per the



October, 2014, reclassification of hydrocodone combination products from C-III to C-II controlled substances. This means prescriptions can be written for thirty days at a time, with up to three consecutive prescriptions being written in one doctor visit. This results in patients being able to obtain a maximum ninety day supply, prior to returning to the prescribing physician. Therefore, when a hydrocodone combination is prescribed, the WCMSA must now include costs for *at least* four physician visits per year, as this would be the minimum number of visits required in order to continue using a C-II drug.

Section 9.4.1 of the new Guide changes the deadline for response to CMS development letters from ten business days to twenty. Development letters are CMS requests for further documentation required before the Workers' Compensation Review Center (WCRC) will complete review of a proposed WCMSA amount. Previously, at the end of ten business days, the CMS review file would be closed and reopened upon receipt of the required documentation. Now, there is a more manageable time frame for response.

This change has more impact than you may be aware, because when a review is closed and reopened, the new reopen date is used to judge whether or not all documentation is current. All records must be dated up through six months prior to submission or the reopen date, whichever is later. For example, if a submission includes medical and pharmacy records dated up through five months prior to submission, but no claims payment history is provided, CMS issues a development letter, requesting the missing printout. Should it not be supplied, CMS closes the file. Should CMS receive the

payment history and reopen the file six weeks later, the medical and pharmacy records are no longer current since they are now dated more than six months prior to the reopen date. To save time, work, and frustration, it is important to provide CMS requested documentation within the allowed twenty days.

As of April 1, 2015, CMS began using the C.D.C. 2010 Life Table to determine the appropriate life expectancy to use when projecting lifetime costs in MSAs. You may find a user friendly version of the new life table at our website (<a href="www.bmanleymsa.com">www.bmanleymsa.com</a>). MSAs calculated previously for open claims may need to be updated using the current life expectancy per the 2010 life table.

Changes in the pharmaceutical market can have great impact on MSA bottom lines. The cost driver for many MSAs is found in the drug costs; sometimes, one or two drugs account for the lion's share of allocated MSA funds. Therefore, it is wise to listen for news of brand name drugs becoming available in generic forms. For example, esomeprazole, the generic for Nexium, has recently become available. Usually, when a generic becomes available, it will be cheaper than the brand name drug, and as time goes by and more manufacturers produce the generic, the cost will continue to decline.

Because MSAs are subject so many changes, it is imperative to be sure MSAs are current prior to settling claims. Treatment plan changes, CMS published changes, unwritten CMS practice changes, life table changes, and drug cost changes can all have dramatic results when applied to the MSA cost projections.

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# Workers' Compensation Issues Involving Professional Employment Organizations

By Cristine K. Huffine and Amanda M. Conley, Swift, Currie, McGhee & Hiers, LLP

he presence of PEOs is on the rise across all types of industries. With the recent passage of the Small Business Efficiency Act (SBEA), that presence will only continue to grow now that PEOs have received the Federal "stamp of approval" with respect to taxes. The presence of a PEO in the employment hierarchy presents special challenges in the context of workers' compensation claims and we have found that many employees, their counsel and their employers, are still "in the dark" about what role the PEO plays and how it interacts with their workers' compensation claim. Dispelling some of this confusion is critical in ensuring that workers' compensation claims are handled as efficiently as possible and at minimal cost to both the PEO and the client employer.

Time and again, we encounter injured workers who truly do not know who they work for. In a deposition context, the testimony usually goes a little something like this, "Well, I've worked for Mr. Smith's construction company for 5 years, so I guess that's who I work for." When asked about whether they are aware that they became an employee of a PEO 2 years ago when Mr. Smith outsourced his HR needs, the response is usually, "Well, I remember signing some paperwork a couple years back, but I've always worked for Mr. Smith." More often than not, their attorney is equally confused. This type of situation can be avoided on the front end by providing the client employer with a clear and concise explanation of what a PEO is and what it does for the client employer that the client can, in turn, pass along to the employees. In general, the average person does not know what a PEO is. We usually explain it as "outsourcing HR," which of course does not cover nearly half of the functions of a PEO, but is descriptive enough to give the lay person a general idea. You might be asking, why does it matter if the employees are a little confused about who cuts their paychecks? It might not matter at all, until one of those employees files a workers' compensation claim. In any lawsuit, naming the appropriate party is critical and an error at the outset could lead to a dismissal of the claim altogether, or months or years of litigation against the wrong defendant. Even where the mistake has been made by the employee asserting the claim, some states, like Georgia, require the employer/insurer to correct the employer name where there is a PEO involved because of the confusion that exists at all levels with respect to the PEO's place in the "employment chain."

A second common issue involving PEOs that arises in a workers' compensation context involves drug testing: when do we do it, how do we do it, and who is responsible for it? There is a simple answer to the first two questions: drug test immediately after every accident. However, the PEO is relying on the client employer to implement this policy since they are not usually physically present on

the jobsite when the accident occurs. Educating the client employer on how to properly handle workplace accidents and drug testing can lead to tremendous savings for the PEO on their workers' compensation claims. One of the key areas of emphasis should be reporting all accidents to the PEO in a timely fashion. You cannot help your client if you don't know that an accident occurred. Specifically with regard to drug testing, as soon as an employee reports an accident, the next step should be completing an incident report and then immediately taking the employee to a designated facility for a drug test. Do not count on the employee to go of their own volition; the excuses for why he or she could not take 5 minutes to go and have the drug test performed are many and varied and the clock is ticking with respect to a potential drug defense to a workers' compensation claim. For example, in Georgia, in order to take advantage of the rebuttable presumption that the accident was caused by the employee's impairment due to drugs or alcohol, a drug test must be performed within 3 hours of the accident for alcohol and 8 hours for drugs. O.C.G.A. § 34-9-17. Otherwise, even a positive test does not give rise to the presumption and it will be much more difficult to prove that the employee's impairment/ intoxication was responsible for the injury. There are also chain of custody issues that must be considered, which is why it is important for the employee to be tested at an appropriate facility. Providing better training to client employers on these issues will lead to consistency in the handling of work injuries, which will dramatically reduce associated costs and help client employers defend claims altogether where appropriate under the law.

Another typical issue encountered in workers' compensation claims is the question of whether the injured worker was working within the scope of his or her employment at the time of the accident. In the PEO context, this is often governed by the contract between the PEO and the client employer. For example, the PEO contract with the client employer may only cover work performed by the client in Georgia, Florida, and Alabama. On the date of the accident, the client took his crew to a job in South Carolina and one of the workers was injured. Was this injury within the scope of the injured worker's employment such that the PEO would be liable for workers' compensation benefits? While the answer would depend on the specific language within the contract, the PEO would have an argument that the client employer violated the contract by working in a state that was not designated by the contract, such that the client employer would be responsible for those benefits. Similar issues arise when dealing with independent contractor issues. Was the injured worker an employee of the PEO such that benefits are owed? The question of

whether an individual was an employee or independent contractor is complex and highly fact specific, but the PEO should require the client employer to submit all employee's names and information so that the PEO is aware of the correct employees. Doing so will help the PEO to avoid the following situation: client employer has an uptick in business and "casually hires" an extra worker, on the third day on the job the worker has a heart attack and dies. The client employer submitted the claim to the PEO, who had never heard of this individual and was not liable for the claim due to a specific provision in the contract stating that employees who were not reported to the PEO would not be covered under their workers' compensation insurance.

In the workers' compensation context, we are also frequently arguing over the employee's proper wage rate, which is made more complicated when a PEO has recently come on to the scene. In Georgia, an employee's "average weekly wage" is calculated using the 13 weeks of wages immediately preceding the date of accident. However, if the client employer recently signed on with a PEO, thereby making the injured worker an employee of the PEO, there may only be a handful of weeks of wages that were paid by the PEO. The average weekly wage can also be calculated using the wages of a "similarly situated employee," but that method will also fail in this context because all of the workers became employees of the PEO on the same date. Thus, we are left with the third and final method, the contract rate of hire, which usually multiplies the hourly rate by 40 hours per week. We prefer to avoid using the third method as it generally yields a higher average weekly wage that may not reflect the true average weekly wage. Also, claimants tend to assert they worked more hours or were hired to work more hours than what the true terms of the contract were. One solution may be to go back and utilize wages that were paid directly by the client employer before the PEO became involved. Although this is technically utilizing wages from two different employers, this method tends to yield a more accurate average weekly wage. We are usually able to come to an agreement with most claimant's attorneys to apply this method rather than have the administrative law judge render an average weekly wage he or she deems appropriate and no one is happy with.

As the presence of PEOs continues to grow across the country, we anticipate that there will be more and more questions about the role PEOs play in the workers' compensation context. Helping client employers understand the proper procedures to be followed in administration of workers' compensation claims will lead to increased savings and fewer claims, and a greater appreciation for the benefits to be had by streamlining HR needs through the use of a PEO. Providing guidance and support when handling workers' compensation claims figures to be yet another weapon in the marketing of PEOs as the industry continues to expand.

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# Accounting for Medicare's Other Interest: Conditional Payments

# What You Need To Know and Why You Need To Know It -

By Alex Ficker & Ann McElroy, Swift, Currie, McGhee & Hiers, LLP

#### Introduction

ike it or not, handling workers' compensation claims requires workers' compensation practitioners have a solid understanding of the federal laws impacting workers' compensation claims in Georgia. Indeed, dealing with the implications of Medicare, the Medicare Secondary Payer Act (MSP), the Medicare, Medicaid and SCHIP Extension Act, and the SMART Act, in addition to

having to consider the potential implications of more recent federal laws, such as the Affordable Care Act, has become unavoidable, as these statutes are inextricably intertwined with our daily handling of workers' compensation cases. Indeed, the terms "Medicare Set Aside" and "Conditional Payment" are now as firmly embedded in the workers' compensation lexicon as "Change of Condition" and "Fictional Accident," such that we have no choice but to make an effort to understand their meanings and impact on claims in order to

intelligently counsel our clients on how to handle workers' compensation claims. This is particularly true with regard to conditional payments. Although more narrow in their involvement in workers' compensation claims than their more studied, discussed and legally in vogue cousin, Medicare Set Asides, conditional payments are equally, if not more important to consider due to the problems encountered when they are ignored or handled improperly.

With an increasing number of individuals working past the age of 65 and/or securing Social Security Disability Income benefits prior to settling their workers' compensation claims, the understanding and addressing of conditional payments is becoming increasingly important. Considering the potential penalties for failing to properly address conditional payment issues, particularly prior to settlement, understanding how to best navigate the potential minefield of conditional payment compliance cannot be an afterthought or an issue relegated to a third party vendor. For practicing attorneys and insurance professionals, who are in the proverbial trenches dealing with conditional payment issues, understanding the rules and regulations in order to properly advise clients and make decisions regarding the handling of conditional payments is part of the very essence of what we do. Thus, the purpose of this

article is to expound on the topic of conditional payments and what we need to know and consider when counseling our clients, dealing with each other, and navigating the Medicare morass to effectively bring workers' compensation cases to full and complete closure.

# How Did We Get Here – Medicare History

Since the creation of Medicare 50 years ago, the scope of its coverage has significantly expanded, which, in turn, has led to a significant increase in medical costs covered and paid by Medicare.

To understand where we are now in the evolution of conditional payments, where we expect to and need to go, and the best way to get there, we must first have an understanding of where we started and the various players who are now involved in the process. Medicare was enacted in July 1965 to assist those over the age of 65 with securing medical care by covering certain services and supplies in hospitals, doctors' offices, and other health care providers. However, it is important to note since its

inception, Medicare has always been a *secondary* payer to workers' compensation. This means a Medicare beneficiary is required to first apply for all applicable workers' compensation benefits, if such benefits are available and appropriate. If so, medical providers, physicians, and other suppliers must bill workers' compensation first, before seeking payment from Medicare.

Since the creation of Medicare 50 years ago, the scope of its coverage has significantly expanded, which, in turn, has led to a significant increase in medical costs covered and paid by Medicare. For example, in 1972, Medicare was expanded to include individuals under the age of 65 who were receiving Social Security Disability payments, and, more recently, in 2003, the Medicare Modernization Act (MMA) added Part D to Medicare to assist beneficiaries with paying for prescription drug medications. Needless to say, with the expansion of the scope of both the individuals and types of services covered by Medicare, the medical costs paid by Medicare ballooned.

In an effort to control these costs, Congress passed the MSP program in 1980, which made Medicare a secondary payer to group health plans, as well as liability and nofault insurance. The underlying principle behind this legislation was to ensure Medicare would not pay for items

and services for which other private health insurance or coverage is primarily responsible for paying, such as in the realm of workers' compensation insurance. However, addressing the reality that a no-fault insurer, liability insurer, or workers' compensation plan may not pay promptly, the MSP allowed Medicare to make "conditional payments" for a beneficiary's health care costs. As the name implies, Medicare would make these payments on the condition it could recoup the payments from the beneficiary once payment in the form of a settlement, judgment, or Award was issued. A subsequent amendment to the MSP allowed CMS to obtain reimbursement from third parties for those same conditional payments. Although these repayment provisions of the MSP were in place, they were not fully enforced and were largely ignored by beneficiaries and primary payers until 2001, when CMS provided guidance on how it intended to handle the complexities of future Medicare-covered medical treatment for a workers' compensation injury.

To further shift the burden of MSP compliance onto primary payers, such as workers' compensation, Congress passed the Medicare, Medicaid, and SCHIP Extension Act (MMSEA) in 2007. Section 111 of the MMSEA requires any Responsible Reporting Entities (RRE), e.g. an employer/self-insurer or insurer in a workers' compensation case, to determine each claimant's Medicare eligibility status and monitor this status during the life of the claim. Even more onerous is the requirement to report information related to any ongoing payments for medical expenses and any total payment obligations paid towards a settlement or Award, regardless of whether there has been an admission of liability. To ensure compliance with these reporting requirements, the MMSEA imposed mandatory penalties of \$1,000 for *each day* of non-compliance on each claim.

Needless to say, this additional compliance requirement and the penalty provision of the MMSEA were not well received by the RRE/primary payers, or their lobbyists, such that the Strengthening Medicare & Repaying Taxpayers (SMART) Act was passed in 2013 in order to provide primary payers with more efficiency, certainty, and a potentially less expensive means in dealing with Medicare liens related to conditional payments. However, as with most legislative efforts to correct issues associated with prior legislation, it remains to be seen how effective these efforts are at correcting the problems.

# Conditional Payments: Satisfying Medicare's Coverage Of Costs Already Incurred

Although the MSA allocation process has received a great deal of attention in the workers' compensation industry, an equally significant concern when dealing with Medicare and claims involving its beneficiaries is conditional payments. Under the MSP, Medicare makes "conditional payments" for a beneficiary's medical expenses if a primary payer fails to issue a payment within 120 days. These are medical payments made by Medicare that allegedly should

have been made by a primary payer, and are paid on the condition the costs will be reimbursed when the beneficiary receives a workers' compensation settlement.

Once a conditional payment is made, Medicare's right of recovery is triggered, and the beneficiary, primary payer, or other party must reimburse Medicare. If CMS determines Medicare's interests were not protected, the claimant/beneficiary's Medicare benefits may be terminated, or CMS may seek recovery from the primary payer or other benefitting party through an independent cause of action. It is important to note the parties that can be subject to the recovery action include: insurance carriers, third party administrators, employers, the self-insured plan or the party responsible for primary payments, along with any entity or individual in receipt of a third party payment, such as the beneficiary, provider, physician, state agency, private insurer, or attorney. In other words, anyone involved in the payment and receipt of workers' compensation benefits.

As the chances of dealing with conditional payments in a workers' compensation claim are increasing due to the expansion of Medicare and those under its umbrella of coverage, it is important to engage the issue of conditional payments early in the claims process. This includes confirming whether a claimant is Medicare eligible at the outset of a claim, or, at the very least, once litigation has been initiated.

To assist in this recovery and facilitate the avoidance of post-settlement reimbursement entanglements, CMS developed a process by which parties can obtain information regarding conditional payments made and any liens asserted by CMS arising out of the subject claim prior to and after a resolution has been achieved. The process of identifying conditional payments in workers' compensation claims has traditionally been easier given ongoing reporting requirements throughout the life of the claim. Additionally, the Medicare Secondary Payer Recovery Portal (MSPRP) is now available online to allow entities to perform a number of tasks related to the conditional payment process. In order to access a claim, it must first be created through the Benefit Coordination and Recovery Center (BCRC) via notification by phone, fax, mail, or an electronically filed Section 111 report.

## The Process & The Penalties

Regardless, once Medicare eligibility is determined, Medicare should be immediately notified of the claim, either from a report by the RRE or notification by the beneficiary or his/her counsel to the BCRC. The BCRC is the organization responsible for recovering conditional payments in the event of a settlement, Award, judgment or other payment made. It is important to ascertain whether Medicare has made an "initial determination" of any amounts subject to a Medicare lien resulting from conditional payments for medical expenses allegedly related to the injuries associated with the underlying claim.

Once the claim is in the system, the BCRC will issue a

Rights and Responsibilities Letter to the beneficiary. This letter will explain what information needs to be provided and what can be expected from the BCRC. Sixty five days after the issuance of the Rights and Responsibilities Letter, a Conditional Payment Letter (CPL) is automatically sent. The CPL provides information regarding the items or services the BCRC has identified that Medicare paid conditionally.

Further, it is possible to check the status of payments through the online portal, and the parties can also request an "interim conditional payment" letter, which lists the payments made to date. However, the BCRC will not issue a formal demand recovery letter with a final conditional payment amount until a settlement, judgment or Award occurs.

If the parties notify the BCRC of an expected settlement amount up to 120 days prior to the expected settlement date, within that 120 day period, CMS will issue conditional payment information via an online portal with payment amounts posted within 15 days of the payment date. Within 65 days from the initial notice of settlement, a statement of the reimbursement amount for any conditional payment will be available to download, but the aforementioned figure will expire within three days. Upon expiration, it is no longer considered a "final demand" and a new statement must be downloaded.

Once the parties have reached a settlement, they must notify the BCRC by submitting the following information:

- 1. the date of settlement, Award, or judgment;
- 2. the amount of the settlement, Award, or judgment;
- 3. the amount of attorney's fees;
- 4. the beneficiary's other procurement costs; and
- **5.** a copy of the settlement documents.

Upon receipt of this information, the BCRC will then issue a formal demand letter detailing the history of any conditional payments made by Medicare for medical treatment related to the subject claim. Payment of the amount demanded then becomes due within 60 days.

If no payment is received within that time period, interest will be assessed beginning from the date of the demand letter. Moreover, if Medicare is not reimbursed within this 60 day period, the primary payer is required to reimburse Medicare, even if it has already reimbursed the beneficiary or other party and was aware, or should have been aware, that conditional payments were issued.

Consequently, in order to avoid having to potentially pay twice for conditional payments, it is critical the parties, particularly the Employer, Insurer and their counsel, take the appropriate steps to determine the amount, if any, of conditional payments, and resolve this issue prior to settlement.

If conditional payments are not made and/or future medical care is not addressed in the settlement, Medicare may take drastic measures against the claimant including terminating federal benefits, which can include a tax refund. Moreover, both the claimant and his/her counsel have possible exposure for double damages plus interest, pursuant to 42 U.S.C. 1395(b)(2)(B)(ii) and 42 CFR § 411.24(c)(2). Also, the failure to comply with the MSP likely violates the ABA Model Rules of Professional Responsibility and state ethics rules. So, even if you are not the subject of a lawsuit seeking monetary recompense, your failure to properly consider conditional payments can place your very ability to practice law in jeopardy.

Notably, under the current process, the parties may not receive the final conditional payment amount until after the claim has settled. Consequently, it is critical for the parties to make a concerted effort to investigate and resolve any conditional payment issues prior to finalizing and submitting the settlement to the State Board, as such issues are far easier to deal with prior to approval of the settlement and disbursement of the settlement funds.

If a settlement, judgment, Award or other payment has already occurred when the case is first reported, a Conditional Payment Notification (CPN) is issued. The CPN provides conditional payment information and advises what actions must be taken. A recipient has thirty (30) days to respond. If not previously submitted, the following must be sent: proof of representation; proof of any items and/or services not related to the case; all settlement documentation, if providing proof of any items and/or services are not related to the case; procurement costs and fees paid by the beneficiary; and documentation for any additional or pending settlement, judgments, Awards, or other payments related to the same incident. If no response is received in thirty (30) days, a demand will automatically be issued for repayment of all conditional payments made without any proportional reduction for fees or costs.

If a beneficiary believes any claims from the CPL or CPN should be removed as conditional payments, he/ she must send documentation supporting that position to the BCRC. The BCRC will adjust the conditional payment amount for any claims agreed to be unrelated. The BCRC will notify authorized parties of the dispute resolution.



A beneficiary then has the further right to appeal a demand from Medicare, but the appeal must be filed no later than 120 days from the date of the demand letter

By utilizing and enforcing these procedures, CMS and Medicare are now able to track conditional payments and review claim resolutions to confirm whether Medicare's interests were taken into account or if further steps must be taken to seek recovery for any past or future payments made on behalf of a beneficiary. Effective July 10, 2013, the SMART Act mandates CMS may not file an action or seek penalties more than three (3) years after it is given notice of a settlement, judgment, Award, or other payment. Thus, parties now have some certainty as to when CMS can recover conditional payments where CMS has been provided notification of the settlement, judgment, or Award. This timeline incentivizes parties to provide notice to CMS in order to "start the clock" on the statute of limitations.

## **Practical Considerations**

Every effort should be made to verify the existence of conditional payments made by Medicare in regards to the subject injury and resolving those payments at the time of settlement or judgment. In this regard, claimant's counsel should consider taking the following steps to decrease the chances of issues associated with conditional payments from arising in the claim. First, add identification of Medicare beneficiaries, or those with a reasonable expectation of becoming a Medicare beneficiary within thirty (30) months, to your case intake process. Obtain the client's Social Security Number and Health Insurance Claim Number (HICN), if applicable, to provide to the insurance adjuster or defense counsel and explain to the client why this information must be disclosed. Advise the client about the legal implications of the MSP. If then applicable, contact the BCRC to provide information on the claimant, the claim, and representation. Then, confirm receipt of the Rights and Responsibilities letter from the BCRC, as well as receipt of the initial CPL. If necessary, contact the BCRC to challenge inclusions of any item or service unrelated to the subject injury or injuries. At the time of settlement, ensure all of the necessary information is submitted to the BCRC.

Once a demand letter is issued, closely review it to determine whether to pursue an appeal or file a request for waiver. Lastly, submit payment as demanded by Medicare within sixty (60) days of receipt of the demand letter or final determination of appeal. As with everything, it is important to document your file to demonstrate and establish your diligence in complying with the appropriate guidelines. Inevitably, the question arises of what to do if a client refuses to report to Medicare or pay a portion of the settlement to Medicare. In such circumstances, all you can do is document your file regarding your efforts to educate the client and, if necessary, have the client sign a form acknowledging they understand the legal obligations associated with the MSP and possible penalties and fines for non-compliance, including losing their Medicare benefits.

From a defense perspective, most clients, such as insurance companies and servicing agents, have implemented protocols and systems to ensure compliance with mandated reporting procedures. However, it is still the obligation of defense counsel to confirm their client is in compliance with these reporting procedures and is aware of possible risks and penalties if they are not followed. Failure to do so not only puts the client at risk for payment of penalties and recovery from CMS for damages, but also the defense attorney for violations of ABA and state ethics rules, as well as a possible malpractice claim. Therefore, it should be of paramount concern for defense counsel to ensure compliance with reporting procedures and reimbursement to CMS of any conditional payments made for the injuries at issue in the subject claim.

Defense counsel can assist clients in such compliance by gathering pertinent information in the discovery process. This may include written discovery requests specifically tailored to obtain the claimant's date of birth, Social Security number, HICN, Medicare and/or Social Security status, and information on medical treatment. At a deposition, ask questions regarding the claimant's prescription medication information and current medical providers. Discussing the importance of and need for such information with opposing counsel can often assuage any concerns regarding these inquiries.

Defense counsel must also consider taking Medicare's interests into account at settlement. Parties can refer to the present amount of conditional payments online the day the settlement agreement is drafted. In cases where there is a Medicare "lien," defense counsel should consider proposing the amount of the Medicare lien be held while claimant's counsel is negotiating the lien with Medicare. Once the final demand letter is received, payment can be issued directly to Medicare and both parties can feel confident that Medicare's interests have been satisfied.

Remember, if claimant or his/her counsel fails to satisfy the Medicare lien, the defendant or insurer will be responsible to pay it within sixty (60) days regardless if payment of the settlement has already been made to claimant. As is the case for the beneficiary's counsel, defense counsel should also document their file to demonstrate the steps taken to consider and protect Medicare's interests in the course of settlement.

#### Conclusion

Given the potential implications and penalties of failing to comply with the regulations controlling conditional payments, it is incumbent upon all parties to any workers' compensation claim to determine if any conditional payment issues exist. Identifying any conditional payment issues should be done as early as possible, and most definitely prior to finalizing a workers' compensation settlement. Identifying and correctly handling conditional payments involved in workers' compensation claims will ensure all involved feel certain regarding the closure of the claim.

#### COMPLEX REGIONAL PAIN SYNDROME – A MEDICO-LEGAL REVIEW

Larry D. Empting, M. D., Thomas M. Finn, J. D.
And
Ariane Koschorke

### **A Preliminary Note to Our Readers:**

The authors, an attorney, a physician and a soon to be law student, who translated articles from German, hope this Medico-Legal article will be the first of many such carefully researched articles which represent the collaborative efforts of Section Members, neuroscientists, physicians, medical school professors and allied health professionals to provide an educational resource free of bias or "slant". For this inaugural project, the authors specifically selected a medical condition, Complex Regional Pain Syndrome, about which articles in peer-reviewed medical journals abound in numbers far out of proportion to actual incidence of the condition.

While commending the research and scholarship of the medical and scientific community, the authors also recognize that the legal community; particularly in the workers' compensation realm, has allowed the pervasive fear of the diagnosis, the claim cost expected to be incurred (Hendler infra), the present lack of a "cure", to delay treatment at the point in time during the course of the condition when it is the most treatable; most articles in peer-reviewed medical journals having concluded that only a relatively small percentage of patients who are <u>correctly</u> diagnosed with CRPS will <u>ever</u> develop "classic RSD" symptoms and clinical signs, (Harden, Bruehl, Veldman, de Boer, infra). The authors hope that this comprehensive Medico-legal Review Article will "teach" the subject well enough that diagnosis and treatment of the condition will be expedited thereby reducing claim expense and disability.

Whenever possible, the authors have cited articles by national and international academicians, physicians and researchers who support "open access", were published in etc., such PLOS One, pursuant to "creative (http://creativecommons.org/licenses/by/2.0/) and may also be available on the website of Reflex Sympathetic Dystrophy Association (http://rsds.org/), via Google Scholar, Medline and other similar resources. The authors also invite readers to visit the website, http://apkarianlab.northwestern.edu/. That website makes available without cost many articles and studies authored by Dr. Vania Apkarian and other neuroscientists who report the strides made in neurodiagnostics across many chronic pain conditions in only the last decade.

This article will be available on the website of the State Bar of Georgia's Workers' Compensation Section:

http://www.gabar.org/committeesprogramssections/sections/workerscompensation/index.cfm

#### **Introduction:**

Complex Regional Pain Syndrome, formerly known as Reflex Sympathetic Dystrophy, or, when the result of a <u>known</u> nerve lesion, causalgia, is a fascinating; yet challenging neuropathic condition which is primarily diagnosed by criteria based upon clinical signs and symptoms. There is presently no "gold standard" diagnostic test to confirm or exclude the diagnosis [1]; and, making the diagnostic process more difficult, more frustrating, the "presentation" of the symptoms and even clinical signs may vary over time and even from one office visit to another [2].

The current International Association for the Study of Pain (IASP); Classification of Chronic Pain, Second Edition (Revised) defines Complex Regional Pain Syndrome as

"... characterized by a continuing (spontaneous and/or evoked) regional pain that is seemingly disproportionate in time or degree to the usual course of pain after trauma or other lesion. The pain is regional (not in a specific nerve territory or dermatome) and usually has a distal predominance of abnormal sensory, motor, sudomotor, vasomotor edema, and/or trophic findings. The syndrome shows variable progression over time. CRPS type I develops after any type of trauma, especially fracture, soft tissue lesion . . . . CRPS type II occurs after major nerve damage."

#### IASP describes the "main features" of CRPS as:

"Pain often, but not always, follows trauma, which may be mild or may be associated with significant nerve injury in the case of CRPS type II. It may follow any type of trauma, especially fracture, soft tissue lesion (e.g. crush injury), laceration, immobilization, or may be related to visceral disease, e.g., angina or central neurological disease such as stroke. The onset of symptoms usually occurs within one month of the inciting event. The pain is frequently described as burning and continuous and is exacerbated by movement, mechanical or thermal stimulation, or stress. The intensity of pain may fluctuate over time, and allodynia, and/or hyperalgesia may be found which are not limited to the territory of a single peripheral nerve. Abnormalities of blood flow occur, including changes in skin temperature and color.

Edema is usually present and may be soft or firm. Increased or decreased sweating may appear. Dystrophic changes of skin, nails, hair, and bone may occur. Impairment of motor function and joint mobility are frequently seen and can include weakness, tremor, and, in rare instances, dystonia. The symptoms and signs may spread proximally or, rarely, spread to involve other extremities." [3,4,5]

The pathophysiology (the study of how normal physiological processes are altered by disease) remains unclear; but is [presently] believed to be multi-factorial. Pathogenesis (the origin and development of a disease) is also a subject of evolving theory. Impaired Sympathetic Nervous System (autonomic) dysfunction, neurogenic

inflammation, deep tissue microvascular pathology, small-fiber neuropathy, capillary dysfunction/impaired oxygenation [6], central and peripheral sensitization, brain plasticity and even a genetic predisposition are implicated. [7] Adding to the confusion is the changing nosology (the science of description or classification of diseases) and terminology.

Reports of the clinical signs and symptoms now associated with CRPS have existed since the 16th century in France when Ambroise Pare is reported to have observed the condition in King Charles IX [8]. Description by Mitchell, Morehouse and Keen in 1864 of the clinical signs and symptoms now associated with CRPS which resulted from nerve damage from gunshot wounds sustained by Union soldiers in the Civil War is the origin of the term, causalgia, "burning pain". [9] In 1900, Sudeck described progressive bone atrophy as well as vasomotor and trophic changes which developed after trauma. [10,11] While numerous different names for the condition are Algodystrophy most common Sudeck's Dystrophy, are Algoneurodystrophy, Reflex Dystrophy, coined by DeTakats in 1937, [12] and Reflex Sympathetic Dystrophy (RSD), attributed to Evans in 1946 [13].

By 1994, as research and clinical experience continued to advance, it had been observed that dystrophy (atrophy) was reported to be present in percentages which varied between about 15% [14] and 25% of patients diagnosed with CRPS at 0-2 months duration increasing to 49.8% of patients which had been diagnosed after greater than 12 months [15]. Upon that and other emerging discoveries about the condition, diagnostic criteria designed to be more sensitive (i.e., *able to detect the disorder when present*) were developed at the Orlando Conference of IASP. At that conference, the condition was also sub-divided into CRPS Type I (replacing Reflex Sympathetic Dystrophy) and CRPS Type II (replacing causalgia). [16]

The Orlando diagnostic criteria was adopted by the IASP Committee for Classification of Chronic Pain. [17] However, those criteria, while found to be very sensitive, lacked specificity, (*minimizing false positive diagnoses*) resulting in over-diagnosis of CRPS. [18]

A "by invitation only" workshop was held in Budapest, Hungary in August 2003 to review the diagnostic criteria from the 1994 Orlando conference and to propose recommendations for revision to the IASP Taxonomy Committee. [19]

In 2004, at the second of the two meetings held in Budapest, that consensus group endorsed a set of Proposed <u>Research</u> Diagnostic Criteria which were designed to achieve greater specificity. To increase sensitivity, a separate set of Proposed <u>Clinical</u> Diagnostic Criteria were also endorsed. [20] In 2010, the results of a study comparing the diagnostic efficiency of the 1994 Orlando criteria and the "Budapest Criteria" was published demonstrating that the latter "set" of criteria ". . . retained the exceptional sensitivity of the IASP [Orlando Criteria]; but improved upon specificity, corroborating the validity of the Budapest Criteria." [21]

## **Terminology and Definitions:**

**Allodynia** - Pain due to a stimulus that does not normally provoke pain.

**Diagnosis** – The determination of the nature of a cause of a disease or the distinguishing of one disease from another.

**Diagnosis (Clinical)** – Diagnosis based on signs, symptoms, and laboratory findings during life.

**Diagnosis (Differential)** – The determination of which one of several diseases may be producing the symptoms.

**Dysesthesia** - An unpleasant abnormal sensation, whether spontaneous or evoked.

**Hyperalgesia** - Increased pain from a stimulus that normally provokes pain.

**Hyperesthesia** - Increased sensitivity to stimulation, excluding the special senses.

**Hyperpathia** - A painful syndrome characterized by an abnormally painful reaction to a stimulus, especially a repetitive stimulus, as well as an increased threshold.

**Neuropathic pain** - Pain caused by a lesion or disease of the somatosensory nervous system.

**Central neuropathic pain** - Pain caused by a lesion or disease of the central somatosensory nervous system.

**Peripheral neuropathic pain -** Pain caused by a lesion or disease of the peripheral somatosensory nervous system.

**Neuropathy** - A disturbance of function or pathological change in a nerve: in one nerve, mononeuropathy; in several nerves, mononeuropathy multiplex; if diffuse and bilateral, polyneuropathy.

**Nociception -** The neural process of encoding noxious stimuli.

**Nociceptive neuron** - A central or peripheral neuron of the somatosensory nervous system that is capable of encoding noxious stimuli.

**Nociceptive pain -** Pain that arises from actual or threatened damage to non-neural tissue and is due to the activation of nociceptors.

**Nociceptive stimulus** - An actually or potentially tissue-damaging event transduced and encoded by nociceptors.

**Nociceptor** - A high-threshold sensory receptor of the peripheral somatosensory nervous system that is capable of transducing and encoding noxious stimuli.

Noxious stimulus - A stimulus that is damaging or threatens damage to normal tissues.

Paresthesia - An abnormal sensation, whether spontaneous or evoked.

**Sensitization** - Increased responsiveness of nociceptive neurons to their normal input, and/or recruitment of a response to normally subthreshold inputs.

**Central sensitization** - Increased responsiveness of nociceptive neurons in the central nervous system to their normal or subthreshold afferent input.

**Peripheral sensitization** - Increased responsiveness and reduced threshold of nociceptive neurons in the periphery to the stimulation of their receptive fields.

**Somatosensory** - Relating to or denoting a sensation (such as pressure, pain, or warmth) that can occur anywhere in the body, in contrast to one localized at a sense organ (such as sight, balance or taste).

**Sudomotor** - Denoting the autonomic (sympathetic) nerves that stimulate the sweat glands to activity.

**Vasomotor** - Of, relating to, affecting, or being those nerves or the centers (as in the medulla and spinal cord) from which they arise that supply the muscle fibers of the walls of blood vessels, include sympathetic vasoconstrictors and parasympathetic vasodilators, and by their effect on vascular diameter regulate the amount of blood passing to a particular body part or organ.

#### <u>Pathophysiologic Mechanisms – A Speculative Model:</u>

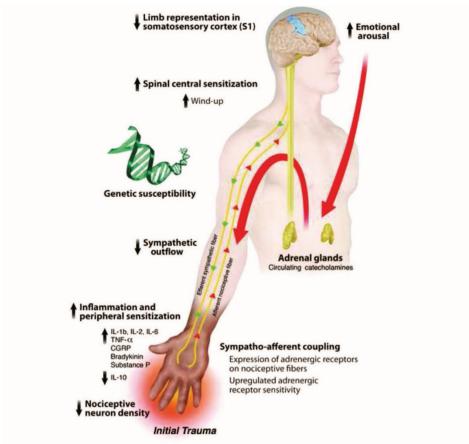


Fig. 1. Speculative model of interacting complex regional pain syndrome mechanisms. CGRP = calcitonin gene-related peptide; IL = interleukin; TNF = tumor necrosis factor.

Used with express written permission by Prof. Stephen Bruehl, Professor Anesthesiology, Vanderbilt University School of Medicine, Nashville, Tenn., and published in Anesthesiology, An Update on the Pathophysiology of Complex Regional Pain Syndrome, Anesthesiology 2010;113 - 713-25

#### **Epidemiology/Incidence/Risk Factors/Inciting Event:**

Numerous studies establish that CRPS is diagnosed across a wide demographic spectrum. Age ranges from children to the elderly have been reported by several studies as has a female to male ratio of 4:1; that the condition has been diagnosed more frequently in Caucasians than all other racial groups combined.

Identification of those specific injuries, surgeries, inciting events and demographics which may increase the risk of development of CRPS has been widely studied and reported in the medical literature. Common denominators have been isolated. Distal radial fractures, strains, sprains, carpal tunnel releases, neuromas/resection of neuromas, and immobilization of the affected member are implicated. One study [22] found that the most common injuries were strains/sprains in 39 (29%) of the 134 CRPS patients studied. Thirty-two (32) (24%) developed the

condition <u>after</u> surgery; and 22 (16%) had developed the condition after fractures. Eleven (11) with contusions or crush injuries represented 8%. Only 8 (6%) were found to have "spontaneous" onset; largely because no specific injury could be recalled. Another 11% of the patients developed the condition following lacerations, venipunctures, etc. This study found that 48% of the patients had developed CRPS in lower extremities; 44% in upper extremities. Forty-six percent (46%) had developed the condition on the <u>right</u> and 38% on the <u>left</u>. Sixty-four (64) (47%) of the 134 patients in this study had a history of physician imposed, physical immobilization ["hard" casts/splints] following the injury or surgery for the injury.

These findings are consistent with those made and reported by many other researchers which specifically studied potential risk factors. The most thorough of such articles at the time this article was written (Spring 2015) is the 2015 Review Article, Potential Risk Factors for the Onset of Complex Regional Pain Syndrome Type I: A Systematic Literature Review. [23] This Systematic Review collects and analyzes well-known studies by de Mos, et al. [24], Jellad, et al. [25], Allen et al. [26], Moseley, et al. [27] and others.

Several studies also dispute the contention that the diagnosis is more frequent and that litigation concerning the diagnosis more likely when the condition occurs following a work-related injury. [28]

A population-based study by Sandroni, et al, in Olmsted County, Minnesota (the home of Mayo Clinic), is often cited as having determined an incidence "risk-rate" of only 5.46, per 100,000 person years; a female to male ratio of 4 to 1. However, the Olmsted County study was limited to CRPS Type 1 [29]. The Sandroni study was quickly criticized in a letter to the editor of the medical journal in which the Sandroni study had been published. [30] An incidence rate of 26.2/100,000 person years, which included CRPS Types I and II with a female to male ratio of 3.4 to 1, determined by De Mos, et al., and published in 2007 is generally considered to be more realistic [31].

In one of the studies most frequently cited by CRPS researchers, the landmark study of signs and symptoms of 829 patients diagnosed with Reflex Sympathetic Dystrophy [32], Netherlands researchers Veldman, Raynen, Arntz and Goris found that 628 patients were female (76%), the rest male (24%), essentially a 3:1 ratio. Age range was 9 to 85, the median age, 42. Four hundred eighty-seven (487) (59%) of the patients were diagnosed with the condition in an upper extremity; 342 (41%) in a lower extremity. In 545 (65%), the RSD followed trauma (mostly fractures); in 155 cases (19%), an operation. Other less common inciting events were 15 (2%), reporting an inflammatory process; 34 (4%) precipitants such as injections or intravenous infusions. Neurological symptoms with sensory changes in a "glove" or "stocking" like distribution were regularly reported. Complaints considered to be consistent with a subsequent diagnosis of "RSD" often appeared within 1 day; however, a number of patients did not display symptoms (and/or signs) until at least 1 year after the presumed inciting event.

Thirty-nine (39) patients reported "spread" to one or more limbs; 57 experienced recurrence in the same limb after a period with few or no symptoms. In 30 of the 57 (53%) no cause or explanation for the recurrence could be identified. As it relates to the impact of delayed treatment, the mean elapsed time between the beginning of symptoms and signs later diagnosed as RSD was 405 days; the median 156 days. Consistent with the research performed years later and reported by Harden, Bruehl, et al. (2002) [33] and de Boer (2011) [34], signs characterized as "trophic" were documented when the condition had been present for more than 12 months in less than 40% of the 829 patients. The "Veldman study" also reported generally normal electromyographic (EMG) stimulation; that most cases of RSD did not progress to "classic" RSD clinical signs; and, more than half of the longstanding cases did not show signs of tissue dystrophy or atrophy. The Veldman study also rejected the "staging" theory and suggested that a subdivision into primarily "warm" or "cold" as related to skin temperatures at onset provides ". . . a more realistic description of RSD." [35]

Others studying epidemiology and incidence have reported data similar to the Veldman study. In 2014, researchers in Scotland performed a retrospective cohort study of 390 patients who had undergone elective foot and/or ankle surgery. [36] A total of 17 patients (4.36%) were found to meet the IASP criteria: the mean age was 47.2; 14 (82.35%) were female. Twelve (12) patients (70.59%) had developed "newonset" CRPS after a primary procedure; 5 (29.41%) after multiple surgeries.

Relevant to the workers' compensation realm, the University of Washington School of Medicine conducted a retrospective chart review of 134 patients published in 1999 [37], reporting a mean age at time of injury/inciting event of 37.7 years; but, the mean age at initial evaluation at the pain center was 41.8 years, many patients not receiving specialized treatment during a mean duration of 30 months. Seventy percent (70%) of the patients were women, 30% male, a ratio similar to other studies.

This study by the University of Washington reported 56% of the patients had sustained and were receiving treatment for work-related injuries, the distribution of the precipitating injuries ranging from most frequent in service occupations (at 14%) to the least, 2.2%, in machine trades.

However, a study performed of patients treated in a Dearborn, Michigan pain clinic between 1995 and 2002, published in 2004, reported only 8% of patients were involved in litigation, 34.4% were being treated for work related lower extremity injuries, a percentage almost equal to the 32.8% being treated under traditional insurance plans [38].

The University of Washington study, consistent with findings from other studies, found Myofascial Pain Syndrome to co-exist in 56% of the cases; also confirming that the longer the duration of CRPS symptoms, the more likely a myofascial pain component was also found; suggesting a Central Nervous System ("CNS") feature common to both conditions.

Other studies focusing specifically on upper extremities have reported incidence of CRPS following distal radius fractures as high as 39% [39] An incidence rate between 5% to 8.3% post carpal tunnel releases, with or without introgenic damage (caused by or arising as a complication of medical or surgical intervention) is also reported. [40]

There are few studies specifically designed to compare the incidence of CRPS Type I, II and NOS within the same cohort; one epidemiological study [41] performed at two military pain management centers upon male and female soldiers injured in Operation Iraqi Freedom found that of the 162 soldiers studied, 144 were men; 18 were women with an average age of 34.6 years. A total of 10 cases of CRPS were diagnosed; 3 of which were CRPS Type 1; 7, Type II. That ratio may be explained by the nature of the wounds sustained in battle, the CRPS Type II predominance attributable to penetrating wounds from bullets and shrapnel which damaged peripheral nerves. Together, these 10 total cases of CRPS represented 6% of the cohort – well within civilian incidence rates.

However, the recent research article [42] reporting the retrospective Chart Review by Dellon, Andonian and Rosson of Johns Hopkins of 100 patients diagnosed with CRPS Type I ("RSD") is significant for this reason: 40% had undergone upper extremity surgeries, 30% lower extremity surgeries, which did not resolve the patient's pre-surgery symptoms. Seventy (70) of the 100 were discovered to have unresolved neuromas, nerve lesions or continuing nerve compression and then underwent repeat surgery for those unresolved neuromas, nerve injury/lesion/compression. That 40% of the patients reported excellent results following repeat surgery, another 40 "good", suggests that the actual distribution between CRPS Types I and II could be different than historically reported. Dellon, et al., documented that 19 upper extremity and 15 lower extremity neuromas were resected and cite the articles which describe the surgical techniques for resection of neuromas of the radial sensory and lateral antebrachial nerves, the medial antebrachial nerve, the posterior cutaneous nerve (upper extremity) and the deep peroneal nerves, the saphenous nerve and calcaneal nerve of the lower extremity. Of the repeat surgeries performed, resection of neuromas was second (at 34) only to repeat neurolysis (at 52). [43,44] Other studies have also found that excision of neuromas was the most common types of elective foot surgery. [45]

The Reflex Sympathetic Dystrophy Syndrome Association of America (<a href="http://rsds.org/">http://rsds.org/</a>), and the Departments of Anesthesiology and Critical Care Medicine of Johns Hopkins collaborated to conduct a web-based Epidemiological survey of Complex Regional Pain Syndrome. Respondents to a questionnaire posted on the website of RSDSA were invited to participate in a 75-question survey between October 2004 and February 2005; 1,359 responded. The average ages of the respondents, the duration of the disease, the ratio of female to male, the inciting events, the symptoms and signs, "spread" of symptoms and signs were all similar to those reported in carefully "controlled" studies reported in the medical literature. [46]

## "Spread"/Recurrence:

While still in common usage in the lexicon of CRPS, the term, "spread", is falling into disfavor as the nature and mechanism of this well-documented phenomenon is being revealed through neuroscience and neurodiagnostics. In the exhaustive 2009 article authored by Schwartzman and others entitled, *The Natural History of Complex Regional Pain Syndrome* [47], 844 patients meeting the IASP diagnostic criteria were retrospectively studied. Of those 844 patients, 656 reported a duration of more than one year. Two hundred four (204) (31.1%) reported that their symptoms had "spread" to areas contiguous to the site of the initial injury. Seventy-five (75) (11.5%) reported spread to the contralateral extremity. Other types of "spread" included 71 (10.8%) reporting "spread" to an ipsilateral extremity (e.g., right arm to right leg). Seventy-four (74) (11.3%) reported CRPS symptoms in the other extremity on the opposite side (e.g., right arm to left leg).

Contiguous "spread" occurred the "earliest" (within 1 to 2 years) and remained the most common type during the first 10 years; however, generalized spread to all extremities appeared late in the disease process.

This sequence of the appearance of spread was also reported in a study of 20 patients with longstanding CRPS published in early 2015 and authored by DiPietro and other medical researchers in Australia [48]. The title of that article contains the term increasingly associated with the phenomenon of "spread", i.e., "interhemispheric".

A retrospective study, specifically of the patterns of spread experienced by 27 patients of a pain clinic in Philadelphia, published in Pain in 2000, identified three kinds of spread; but then hypothesized that all of the types of "spread" may be due to aberrant Central Nervous System (CNS) regulation of neurogenic inflammation. [49]

More recently, researchers from the Netherlands, also studying "spread", evaluated 185 CRPS patients retrospectively. [50] These researchers analyzed the type of "spread" and concluded that "spread" frequently occurs spontaneously, that contralateral spread is far more likely to occur than ipsilateral "spread" and that "diagonal" spread is relatively rare. These researchers hypothesized that the <u>patterns of "spread"</u> appear to involve spinal cord and/or supraspinal rather than systemic mechanisms. Significantly, these researchers also speculate that "spread" to the contralateral extremity – the most frequently occurring type of spread – may be contributed to by interhemispheric spread of cortical activation.

Presenting the question whether the mechanism(s) implicated in "spread" may also be involved in "recurrence", is the case of <u>one</u> patient, the subject of a 2011 article authored by clinicians at Duke University Medical Center [51]. A 49-year-old female had developed CRPS in her right upper extremity following an IV Phenergan infiltration which had been performed <u>after</u> bilateral carpal tunnel syndrome surgery in 2004. By 2006, the patient had been diagnosed with CRPS, had undergone treatment,

culminating in a Spinal Cord Stimulator implanted in her cervical spine which was controlling her symptoms. However, on a trip to a North Carolina beach, she was "stung" on her right foot by a jelly fish and developed new CRPS symptoms and clinical signs in the right foot, which were then "mirrored" in the patient's left foot, less than 8 hours after being "stung". The Duke clinicians hypothesized that the neurotoxin released in the jelly fish "sting" caused some form of "trauma" to C fiber and A-delta fibers setting in motion the development of "new" CRPS symptoms in the patient's bilateral The authors theorized that the patient had a poorly regulated lower extremities. sympathetic nervous system with impaired peripheral vasoconstrictor activity for which the patient had undergone implantation of neuromodulation (Spinal Cord Simulator) and was prone to development of CRPS in both lower extremities; the authors concluding that the patient's decreased ability to control vasodilation, coupled with a possible genetic susceptibility, led to development of CRPS in all four extremities. These authors then concluded that patients with a prior history of CRPS who undergo treatment and enter remission should avoid elective surgeries "such as knee and wrist surgeries" which are known to be associated with development of CRPS. Other authors suggest that careful identification and selection of those patients whose previous CRPS had entered remission could undergo successful re-operation; particularly for carpal tunnel syndrome given the high rate of failure of CTS releases and complications [52]; and recurrence of CTS in a reported 19% with 12% requiring re-operation. [53]

Recurrence has been studied; although not nearly as extensively as "spread". The term, "recurrence", denotes a return of CRPS after a period with no or few complaints.

Professors Veldman and Goris performed a study of 1,183 patients with "RSD" between November 1984 and April 1994 [54] and reported their findings in 1996. Eliminating those patients whose symptoms may actually have been "spread" rather than "recurrence" of the condition in the same and/or other body part(s) after a period of "remission", Veldman and Goris reported that 34 (3%) of the 1,183 patients had experienced recurrence in the same limb in which the condition had previously been present after "remission" between 3 months and 20 years. Another 6% (76 of the 1,183 patients) experienced recurrence in a different extremity. Fifty-three percent (53%) of the recurrences appeared spontaneously, the authors estimating that 1.8% of patients with CRPS would experience recurrence.

## **Diagnosis**

As there is not only <u>no</u> "gold standard" diagnostic test; but, as there is also lack of agreement among researchers of the diagnostic value of many of the tests which are performed, [55,56] CRPS is considered by many to be <u>presently</u> a clinical diagnosis of exclusion. Complicating the diagnosis and classification of CRPS has been the IASP redefinition of "neuropathic pain" in 2012. [57] That revision of the former definition, "pain initiated or caused by a primary lesion or *dysfunction* in the nervous system" was considered to be necessary as the former definition was deemed to lack both specificity and anatomic precision. [58] The 2012 redefinition, the recommendation of

neurologists, was (and remains), "pain arising as a direct consequence of a lesion *or disease affecting the somatosensory system.*" [59]

Because CRPS Type I was postulated to arise in the absence of a known nerve lesion, the redefinition resulted in continuation of the challenges by some "experts" to the existence of CRPS as a medical condition; [60] and, secondly, an impassioned response signed by many highly regarded CRPS authorities and researchers, reminding the medical community that very recent discoveries had implicated damage to tiny nerve fibers; hence CRPS Type I would qualify as "neuropathic". [61,62,63,64,65,66] Thus, that redefinition may actually hasten the elimination of a distinction between Type I and II (even if diagnosed correctly) [67], a very recent (2014) IASP article stating, "The distinction between CRPS I and CRPS II thus appears to be somewhat artificial." [68]

The distinction between CRPS Type I and Type II has implications beyond the medical/academic community. The ICD-9 Codes 337.20, .21, .22 and .29 did not differentiate between "RSD" and causalgia; however, the ICD-10 does via Codes G90.5 Complex Regional Pain Syndrome Type I (CRPS I); which is then "subdivided" into G90.51 for the upper limbs and G90.52 for the lower limbs, [69] and causalgia, G56.4, G57.7.

ICD-10 Codes G90.5 (RSD) is not a billable code per ICD-10 and excludes causalgia of the upper and lower limbs (G56.4, G57.7, respectively) which are billable codes [70]. In the IASP periodical, *Pain*, published on line ahead of print was the announcement of the formation of an IASP Task Force for development of a new classification for chronic pain for the ICD-11, the revision for which will be subject to approval by vote in 2017 [71]. In an article co-authored by contributors to the chronic pain classification, the IASP Task Force first defined "chronic pain" as that pain which has "... endured for 3 months or more, but can be continuous or interrupted by painfree intervals" recognized that the lack of adequate coding in the ICD ". . . makes the acquisition of accurate epidermiological data related to chronic pain difficult, prevents adequate billing. . . ." The IASP Task Force is responding to the challenge of rational principles of classification adaptable to different types of chronic pain by giving ". . . first priority to pain etiology, followed by underlying pathophysiological mechanisms, finally body site." [72] With the great strides make neuroscience/neurodiagnostics in the last 5-10 years, the focus on 'underlying pathomechanisms' may "unify" **CRPS** Ι Types and II. (See Neurosciences/Neurodiagnostics, infra.)

The diagnosis of CRPS like many other medical conditions is primarily clinical; requiring accurate patient "history"; i.e., anamnesis (recollection, a patient's faculty of remembering the origin, emergence, of symptoms, etc. of a medical condition) and physical examination. [73]

Diagnosticians, classically trained in the process described in the legendary text, *The Elements of Clinical Diagnosis* [74], understand that an accurate diagnosis begins

with the patient history, including what can be <u>observed</u> at "bedside". Professor Klemperer's medical text states at p.4, Chapter 1, Anamnesis and General Condition:

"Anamnesis – An exact history of a case is of the greatest importance; for, frequently, the decision of a diagnosis hinges upon it." [75] [76]

In large part, because of the influence Dr. Klemperer had worldwide upon the establishment of a methodical process for "taking a bedside history" to <u>begin</u> the process of formulation of an accurate diagnosis and (only) then to proceed to recommendation for a treatment plan, medical narration became an area of vital interest to medical school professors. [77]

Because the IASP CRPS clinical diagnostic criteria (infra) requires that there be "reports of . . . " at least one symptom in three of the four following categories: sensory, vasomotor, sudomotor/edema and motor/trophic, the physician/co-author believes that proper execution of the anamnestic steps must begin with a thorough, detailed history directly from the patient. A clinician familiar with the variable presentation of CRPS over time, would be likely to discover through skillful probing questions the patient's history of symptoms which might have been misinterpreted or even overlooked by a referring primary care physician or a specialist who rarely sees this condition.

Next, the clinician must perform his/her own physical examination; not rely upon reports of a physical examination performed by a referring physician or prior examining physicians.

After the detailed patient history has been taken and the physical examination performed, the physician/co-author then reviews any diagnostic studies, recognizing that most diagnostic studies add little to the diagnostic process; but, <u>can</u> assist in the differential diagnosis by identifying and implicating other conditions (infra at "Diagnostic Testing").

Similarly, the physician/co-author defers review of the medical records and reports of examinations by previous/other physicians until a history has been taken, his clinical examination performed <u>and</u> he has reviewed diagnostic studies, if any, in order to form his own completely independent diagnostic impression.

<u>Finally</u>, since the diagnosis of CRPS is <u>clinical</u>, few diagnostic studies are likely to add to or alter a diagnostic impression; however, diagnostic "tests" which may confirm, refine – or even exclude – the diagnosis may be ordered/performed.

#### CLINICAL DIAGNOSTIC CRITERIA

IASP <u>specifies</u> that the differential diagnosis must consider and exclude unrecognized local pathology (e.g., fracture, strain, sprain), traumatic vasospasm, regional vascular disease, cellulitis, other regional infection, Raynaud's disease,

thromboangiitis obliterans, thrombosis, specified neuropathy, erythromelalgia, specified regional motor disease, and regional autoimmune process. [78].

#### The CRPS <u>clinical</u> criteria by the Budapest Consensus are:

- 1) Continuing pain, which is disproportionate to any inciting event;
- 2) Must report at least one symptom in *three of the four* following categories:

**Sensory**: Reports of hyperalgesia and/or allodynia;

*Vasomotor*: Reports of temperature asymmetry and/or skin color changes and/or skin color asymmetry;

**Sudomotor/Edema**: Reports of edema and/or sweating changes and/or sweating asymmetry;

**Motor/Trophic**: Reports of decreased range of motion and/or motor dysfunction (weakness, tremor, dystonia) and/or trophic changes (hair, nail, skin);

3) Must display at least one sign\* at time of evaluation in *two or more* of the following categories:

**Sensory**: Evidence of hyperalgesia (to pinprick) and/or allodynia (to light touch and/or deep somatic pressure and/or joint movement);

**Vasomotor**: Evidence of temperature asymmetry and/or skin color changes and/or asymmetry Sudomotor/Edema: Evidence of edema and/or sweating changes and/or sweating asymmetry;

**Motor/Trophic**: Evidence of decreased range of motion and/or motor dysfunction (weakness, tremor, dystonia) and/or trophic changes (hair, nail, skin):

4) There is no other diagnosis that better explains the signs and symptoms

These clinical criteria are used for all subtypes of CRPS i.e., CRPS Type I (formerly "RSD"), CRPS Type II (formerly "Causalgia) and CRPS-NOS (Not Otherwise Specified: Partially meets CRPS criteria; not better explained by any other condition.)

[79]

# <u>Clinical Evaluation and Testing With Traumatic Nerve Injury and/or Neuropathic Pain:</u>

## The Evaluator, History and Examination

The patient who is being seen for evaluation of a possible traumatic nerve injury, or neuropathic pain of unclear origin, possibly related to an injury, has the reasonable expectation that the evaluation will result in a specific diagnosis, recommendations as how to test/prove that diagnosis and what treatments could be instituted to cure or provide relief for the condition. It is imperative to have an accurate diagnosis and

<sup>\*</sup> A sign is counted only if it is observed at time of diagnosis.

testing confirmation when possible to delineate the details of that diagnosis before treatment begins. Diagnostic testing and treatments should be individualized for each patient. This is particularly true for a complex issue like neuropathic pain with its wide spectrum (mild to severe) and many etiologies (*the cause of a disease*), and the signs and symptoms change over time [80].

In the subsections which follow, the crucial steps and features of this clinical evaluation of CRPS/neuropathic pain will be delineated.

Evaluator Skill Set: The medical specialty (e.g. Anesthesiology, Physiatry, Orthopedics, Neurology, Neuropsychiatry, etc.) is less important than the evaluator's knowledge of the peripheral nerve system and secondarily the Central Nervous System (brain, the spinal cord). Most neuropathic pain cases involve trauma to a limb, and in those cases, injury and damage to specific peripheral nerves providing sensation to those limbs (i.e. pain fibers travel from the traumatized area through peripheral nerves to the spinal cord and brain). There are many good texts on peripheral nerve anatomy and injuries [81]. Examiners should choose one highly respected text and refer to it often.

For example, a worker falling off a ladder and impacting the hand/wrist, arm, shoulder and neck may complain of pain and numbness in the little finger (ulnar) side of the hand and forearm. Pain in that distribution could be from damage to the pain fiber of the ulnar nerve anywhere along the nerves course, such as at the wrist or the ulnar nerve at the elbow or the lower part of the brachial plexus or the 8th cervical root. By history and exam the Evaluator will locate the site or sites of damage to the nerve. Not infrequently injuries which result from falls, more than one section of the nerve going from the hand to the spinal cord can be damaged (e.g. a lower brachial plexus injury and ulnar nerve injury at the wrist). If more than one site is injured along the course of that same pain fiber from hand to spinal cord, that is referred to as "double crush." Without knowledge of the peripheral nerve pain conduction system (peripheral nerve neuroanatomy) an accurate diagnosis is difficult to achieve; the clinician must be able to identify the nerve(s) which is/are damaged. Many short focused neurology texts used in medical student training can be useful here [82].

Pain feeding from the injured limb goes into the spinal cord up to the brain (the Central Nervous System). Chronic pain *input* can alter nerve cells in the Central Nervous System and can change the pain pattern, pain distribution and subjective experience of pain. Hence, the examiner must also be knowledgeable in the neuroanatomy of spinal cord and brain pain pathways. It is not uncommon that, following focal nerve damage in a limb, pain sensations spread and enlarge over time, but the main/worst area of a painful nerve injury usually remains the most prominently abnormal on examination. For non-neurologists it is helpful to review a basic pain neuroscience "teaching article" [83]. Having a good working knowledge of neuropathic pain is essential both from a neuroscience stand point [84] and clinically [85].

In a significant percentage of nerve injuries, the Sympathetic Nervous System does feed into the damaged peripheral nerve (Sympathetic Maintained Pain/SMP) [86]. The Evaluator must have an understanding of the Sympathetic Nervous System as it originates in the brain, tracks through to the thoracic spinal cord and out to the limbs by way of the thoracic, cervical (stellate) and lumbar sympathetic ganglion.

All of these neural structures, the peripheral nerves, the Central Nervous System and the Sympathetic Nerve System, can interact and influence one another and can change over time, months and years after the initial injury. Understanding these dynamic modulations over time and the wide spectrum (mild to severe) of neuropathic pain disorders is crucial to evaluating and treating these patients. (See, Treatment, infra).

History and Injury Phenomenology: A thorough history of the etiology and course of the injury is essential for localization and estimation of severity of injuries to the nerves. It is commonly said in medical education that the diagnosis is largely formulated by eliciting the patient's history and then confirmed by exam and testing. The phenomenology of the injury gives much information in localizing which nerves are damaged. A common injury, an inversion sprain of the ankle where the foot rolls on its outside and then oftentimes flexes down can be used as an example. This sprain stretches the nerves of the top and side of the foot; so common nerve injury complaints are the superficial peroneal on top of the foot and sural nerve on the outside of the ankle and foot. A less common injury occurs when the foot is "run over", for example, by a forklift, damaging the nerves on the top (superficial peroneal nerve) and the bottom of the foot (medial and lateral plantar nerves). A side to side compression or clamping of the foot (e.g., a foot trapped between a forklift and a wall) commonly damages the saphenous nerve on the inner ankle/foot, the sural nerve on the outside of the foot and ankle and the compresses interdigital nerves between the toes.

With knowledge of the peripheral nerves, an examiner can identify most of the actual nerves damaged while taking the history and then confirm it with the exam. In addition, patients can relate if the damaged nerve is "touch sensitive" or "cold sensitive", respectively, touch and cold *allodynic*, as well as change of the neuropathic symptoms over time, such as "spread" beyond the original area of injury.

Numerous studies confirm that the more detailed the history, the patient's descriptions of the origin and development of any symptoms experienced, the more likely that terms used by the patient to describe the symptoms will be consistent with the clinical examination in which clinical <u>signs</u> will be documented. [87]

For example, in a/the retrospective study of 64 patients all of whom were diagnosed with CRPS reported <u>subjective</u> "symptoms", describing the nature and quality of their pain in descending order; e.g., 46 of 64 (71.9%) described their pain as "burning". Other descriptions of pain in descending order of report were, sharp, throbbing, aching, shooting, stabbing, numbness and tingling with patients reporting these "symptoms" decreasing to 44, 40, 33, 27, 12, 12 and 10, respectively. [88] This retrospective study is also of value as the <u>clinical signs</u> found in the same cohort of 64

also diminished in those otherwise meeting the IASP criteria for CRPS. Findings of clinical <u>signs</u> such as allodynia, edema, erythema, hyperesthesia, <u>decreased</u> skin temperature, peripheral nerve pain, skin atrophy, hyperhydrosis, dysesthesia, hair growth changes, <u>increased</u> skin temperature, decreased toenail growth, hyperpathia and thickened toenails decreased in the 64 patient cohort from 57, 39, 36, 32, 19, 10, 10, 9, 8, 7, 6, 3, 2 and 1, respectively.

Most patients are also able to articulate whether, over time, the areas of pain and touch/cold allodynia "spread" to areas beyond the site of the initial nerve injury (e.g. from a damaged nerve such as superficial peroneal to the whole foot or/and up the leg). This can lead to concern about central sensitization as a focal nerve injury becomes more diffuse and can evolve to a more diffuse CRPS-I from a CRPS-II focal process. Even if pain and other symptoms have spread, the original peripheral nerve injury site may still remain the most damaged and/or symptomatic. A thorough linear history and timeline are crucial here for both diagnosis and treatment.

Part of a detailed history includes determining what diagnostic testing has already been performed, what therapeutic measures were tried and what improvement (or worsening) occurred. For instance, if any antineuritic pain medications were tried and/or were helpful, improvement with these medications often indicates nerve pain independent of the sympathetic nervous system (Sympathetic Independent Pain/SIP). A 2011 pilot study performed in Germany concluded that if the patient benefited from prior sympathetic nerve blocks, it was a reliable predictor that the pain is maintained by the sympathetic system (Sympathetic Maintained Pain/SMP); and that therapeutic blocks performed after a diagnostic block lasted significantly longer (up to six days) compared to blocks with saline which, even accounting for "placebo effect", lasted less than six hours. [89]

Also, by going over the phenomenology of the injury in detail and the orthopedic history, an examiner can get a good idea of the force applied to the injured limb; the more forceful, the more likely the nerve injury will be more severe or permanent (e.g. a stiletto heel on the top of the foot damaging a branch of the superficial peroneal nerve versus multiple Lisfranc fractures by a forklift driving over the foot causing a severe multi-nerve trauma). An examiner needs to know historically if focal or diffuse nerve pain symptoms were present before or after casting or surgery for an orthopedic fracture or injury. Even with the best techniques, swelling in a cast and/or the necessary dissection for surgery can irritate or damage nerves; immobilization a known, well-documented "risk factor" for development of CRPS.

Hence, with a detailed history alone, the examiner can have a very good idea of which nerves are involved, how severe the nerve injury is likely to be and "guideposts" can be identified to use and focus upon during the exam to further confirm and delineate the specific nerves damaged. It is not uncommon that the focused peripheral nerve history can help reveal multiple orthopedic and nerve injuries that can be contributing to causing pain(s) in the damaged limb or body part; in fact, it is seldom that just one nerve is involved.

<u>Examination and Detailed Neurosensory Exam</u>: Once the history is obtained and recorded in the clinician's notes, a focused orthopedic and general exam of non-neurologic features is helpful in looking for sources of bony, ligamentous, soft tissue and tendon pain (i.e. nociceptive pain producers). Nerves coming from damaged bony or soft tissues will transmit pain (nociceptive pain) from the injury site to the Central Nervous System.

It is important to know the underlying "bony pain picture" upon which the neuropathic pain is superimposed. If the nerves themselves, and the pain fibers within those nerves, are damaged, numbness and/or pain from the damaged nerves (neuropathic pain) can occur. The neuropathic pain will be (at least initially) in the peripheral neuroanatomic distribution of the nerve damaged. During this part of the exam, the examiner would look for Tinel's signs (a cutaneous tingling sensation produced by pressing on or tapping the nerve that has been damaged or is regenerating following trauma) along the course of the peripheral nerves. Contusion, constriction, entrapment by ligaments, swelling, etc., can cause one (or multiple) sites on the peripheral nerve to be damaged. Palpating positive Tinel's signs over the ulnar nerve fibers at the wrist, elbow site, brachial plexus, etc. can help to localize where the nerve is damaged. For example, a Tinel's sign at the wrist may lead to successful decompression at Guyon's canal for ulnar nerve entrapment; but, a blow to the midforearm can cause a non-surgically repairable neuroma "in situ" in the ulnar nerve. [90]

A clinician must compare the specific nerve distributions on the injured side to the opposite side and to different nerve distributions on the same side. Patients do not know what the anatomic distributions of each nerve are; but, the clinician does, so it is easy to be precise and objective about which nerves are affected. A patient may complain of "pain in the foot", but the examiner can discern which specific nerves are involved such as sural versus superficial peroneal versus plantar versus calcaneal versus saphenous, etc. This "neuroanatomically" detailed testing exam technique not only helps guide what interventions may be helpful in certain nerves, but it also helps illustrate or rule out any psychological or embellishment on the patient's part. Of course, if the distribution is diffuse as in CRPS-1, the clinician still looks for focal nerve areas that are most affected. If, by history, one or two nerves were most affected and then a general diffuse pattern developed, that would be more compatible with CRPS-2 (focal nerve/causalgia) evolving into diffuse CRPS-1 (or RSD), possibly with a Sympathetic Maintained Pain component. [91]

Each nerve in the injured limb needs to be tested for abnormalities in multiple different sensory modalities. Painful injured nerves can have injury to both small myelinated A-delta pain fibers and very small unmyelinated C-pain fibers. These are tested using light touch (e.g. finger brush, cotton swab or tissue brushing), pinprick and cold evaporant (e.g. acetone drops). Specifically within the peripheral nerve distributions of interest one <u>first</u> looks for mild, moderate or marked diminishment of the normal sensations. <u>Secondly</u>, one is looking for abnormal or pain sensations to these normally non-painful stimulations. To touch and cold stimulation one can get

paresthetic (odd), dysesthetic (uncomfortable), or allodynic (painful) sensation to normally non-painful stimuli (See also terminology/definitions, supra). If normal "pin" sensation is substantially more painful than normal, it is "hyperalgesia". Other sensations such as pressure, vibration, or position which are transmitted by much larger fibers (and more protected and less vulnerable to trauma), the large myelinated A-beta sensory fibers, can be normal or near normal even in very painful injured nerves. Hence, squeezing or heavy brushing or palpation or monofilament testing or vibration testing can all be fine even with a very painful A-delta and C-fiber mediated traumatic peripheral nerve injury. To be valid and useful diagnostically, an examiner needs a very detailed multi-sensation A-delta and C-fiber exam. Casual, non-peripheral neuroanatomic and non A-delta/C-fiber exams will often yield non-diagnostic "sensory grossly intact", "non-focal sensory exam" or "non-anatomic" descriptions often seen in records. To avoid missing the diagnosis one has to be very specific and neuroanatomically exact to be accurate and to guide the therapeutic interventions.

One concern about a "sensation based" disorder like painful traumatic nerve injury is that the exam is "subjective"; not "objective". In the "Art of Medicine", a clinician relies on the subjective report of the patient together with the expert examination and intellectual medical formulation to come to the most accurate "physical diagnosis," and then, to guide therapy. With a full and exacting history and neurosensory examination, very good accurate and useful working diagnoses can be obtained. Using neuroanatomic knowledge and performing a complete neurosensory exam technique, the variations of each patient's pain sensitivity and "pain behavior" (or attempts to mislead by a patient) can be minimized. Individual evaluators must, with clinical experience, come to their own "internal" graduation of pain exam findings; but, research notes various quantifications in "severity scores" that can be helpful [92]. Conversely, not performing a clinical examination in this manner can lead to missing the diagnosis or making a misdiagnosis. The most accurate diagnosis made, as early as possible, usually leads to the best treatment and most expeditious treatment and at the least cost. [93].

Needless to say, a valid, thorough neurosensory exam <u>requires</u> the patient to be in a gown and to have any clothing or coverings (braces, stockings, gloves, anesthetic patches, etc.), any neuromodulatory device (SCS/PNS, etc.) to be off, ideally for 24 hours, [94] and without skin modulating creams or oils (topical antineurotic creams, etc.).

## **Diagnostic Testing**

There is no "CRPS Test." A complete and thorough neurosensory/pain history and an exacting neurosensory exam are still collectively the gold standard for traumatic painful nerve injuries and CRPS. While a side-to-side temperature difference of 1°C or greater is considered to be "significant", such temperature differences are also known to fluctuate over time [95]; and even sweating with quantitative sudomotor axon reflex testing (QSART), is variable and nonspecific. The evaluator can also "rule out" other diagnosis(es) including peripheral vascular disease, rheumatologic disease,

inflammatory autoimmune peripheral nerve disease, etc. Three-phase bone scans may be of value; but debate exists regarding sensitivity and specificity [96]. With variable presentation and clinical course fluctuations over time and even from patient to patient, in the end, as is reiterated throughout the literature at their core, traumatic painful peripheral nerve traumas and CRPS are "Clinical Diagnoses". There are clinical series and meta-analysis reviews that can give "trends" or probabilities; but these trends and analysis generally are difficult to apply reliably to <u>individual</u> cases and can neither "confirm" nor "rule out" CRPS confidently.

With regard to painful traumatic nerve injuries and CRPS, the core issues of interest are: which nerves are injured, how severely <u>and</u> if the sympathetic system is feeding into the pain. Those are key questions for diagnostic testing and diagnostic maneuvers that are important for case by case therapeutic decision making.

Next, we will focus on electrodiagnostic testing of the nerves and testing for sympathetic impairment.

## **Electrodiagnostic Testing**

The standard NCV/EMG is one testing tool to examine injured peripheral nerves. Nerves have several functional types and sizes of nerve fibers. There are large caliber motor fibers with heavy "insulation" (myelin). There are also large myelinated A-Beta sensory fibers that transmit vibration and position messages. A standard NCV/EMG tests the larger fibers in the major nerves of the body. EMG tests only the intactness of large motor fibers to muscles; *EMG does not test any sensory or pain fibers*. Standard nerve conduction velocities (NCVs) measure the speed an electrical pulse travels down or up the nerve. Electricity follows the "path of least resistance"; therefore, the fastest nerve fiber conductions, the large motor fibers (impulses to make the muscle contract) and the larger myelinated A-beta sensory fibers (e.g. vibration and position fibers), are measured. In standard EMG/NCVs, no A-delta (small myelinated) or C-fiber (very small non-myelinated) pain fibers are measured. Standard EMG/NCV (large fiber) is often reported as "normal" or "negative" when there are actual painful nerve (small fiber) injuries; but with standard EMG/NCV these small-fiber injuries are not detected [97].

It has been known for decades that standard EMG/NCV studies can be negative in clinically confirmed radiculopathy. Also, some small nerves, purely sensory (no motor fibers), can be injured and are difficult or too small to test by standard EMG/NCV. If a painful carpal tunnel is released, the large motor and sensory fibers may work better (becoming normal by NCV) but the smaller A-delta and C-pain fibers (being less hardy) remain impaired and painful. On the other hand, if the standard EMG/NCV is abnormal in a peripheral nerve distribution of interest one can be confident that the nerve is fairly severely damaged or impaired.

One can test the small myelinated A-delta pain fibers, (the <u>voltage based</u> testing is more accurate than the <u>current based</u> testing). [98] It does require more cooperation from the patient, but even small nerves in the body can be tested compared to the non-injured side in a semi-quantitated format. This sensory nerve conduction study testing

of the small myelinated A-delta pain fibers can be very helpful in validating and ranking the severity of the impaired or damaged sensory nerves. Small C-fibers can be tested by quantitative sensory testing (cold and heat) techniques as well, but it is less used.

Undoubtedly, the masters of measuring and quantitating damage to traumatized peripheral sensory nerves are the Germans, via the Deutscher Forschungsverbund Neuropatisher Schmerz (DFNS); English translation: German Research Network on Neuropathic Pain: <a href="http://www.neuro.med.tu-muenchen.de/dfns/index.html">http://www.neuro.med.tu-muenchen.de/dfns/index.html</a>. Much clinical and research data can be gleaned from their 20+ subtypes of neurosensory testing. However, reimbursement in the U.S. is either none or minimal, so these testing modalities are generally not available. However, the German and the European quantitative sensory research and the many testing formats continue to encourage clinical work and research here in the United States.

## Diagnostic Nerve Blocks -Sympathetic Maintained Pain/SMP:

During the general exam, the clinician must also check for signs of alterations in autonomic nerve function such as temperature, color, sweating, and skin/hair changes. There is a wide range of changes seen from minimal or none to very severe. These changes (or lack of them) can be seen whether or not the sympathetic system is feeding into the pain; but <u>if</u> they are seen <u>and</u> the more prominent they are, the more likely there is Sympathetic Maintained Pain involved. However, if these signs are not seen one cannot rule out SMP.

The Sympathetic Nervous System, which runs from the brain through the spinal cord and finally out to the sympathetic ganglia (next to the thoracic spine) and eventually to the peripheral nerves of the injured limb, normally controls functions like microcirculation, sweating, etc. But, in a percentage of cases when the peripheral nerve is traumatized and damaged, the sympathetic nerve gets abnormally misconnected to pain fibers, thus worsening the neuropathic pain. This is like "adding gas to the fire". [99].

When sympathetic nerves misconnect and stimulate pain fibers (sympathoafferent misconnection), the sympathetic system then "maintains" or "mediates" the neuropathic pain, so-called "Sympathetic Maintained Pain/SMP" (versus Sympathetic Independent Pain/SIP of the damaged peripheral nerve). [100, 101, 102]. One can have a simple traumatized peripheral nerve injury (SIP only), SMP superimposed upon a peripheral nerve SIP injury (combined SIP/SMP), or a small injury spread via diffuse SMP (SMP only). The SIP only and the SIP/SMP changes can be CRPS-2 and the more diffusely SMP only spread CRPS-1.

The best way to determine the presence of Sympathetic Maintained Pain is to temporarily block the Sympathetic Nervous System and examine the patient while the block is active. In the upper extremity, this is most commonly done by blocking the sympathetic system at the level of the stellate ganglia [103]. As the sympathetic system comes from the brain to the thoracic spinal cord and out of the cord at (T1 through T12) to form the sympathetic chain, it then goes up to the stellate ganglia and out into the

arm. The proceduralist (a physician specialist who performs diagnostic or therapeutic procedures) uses fluoroscopy and boney landmarks to inject local anesthetic where the stellate ganglia should be, anterolateral near the C6-7 vertebral bodies, thus blocking the sympathetic flow into the arm. Similarly one can block the lumbar sympathetic chain typically near the mid-to-lower lumbar vertebrae. The best diagnostic information to be gained is by examining the patient (with the same neurosensory exam technique as noted above before the block), immediately after the block. If SMP is present, the diagnostic sympathetic blocks will lessen the neuropathic pain on exam: hence Sympathetic Maintained Pain.

The downside of the cervical and lumbar sympathetic chain blocks is that these are very near the regular pain fibers in the brachial plexus and the lumbosacral plexus respectively. Flow of the injected anesthetic (during a sympathetic block) from the sympathetic chain to the plexus can "numb up" the regular (somatic) pain fibers. When that happens, pain is relieved even if no Sympathetic Maintained Pain is present (false positive for SMP can occur). Even the best proceduralist may not be able to successfully anesthetize the variably anatomically located sympathetic chain (false negatives for SMP can occur). [104] Examining the patient directly after the block helps lessen the diagnostic "misses". Ideally in a successful sympathetic block, warm limbs will result; but producing no somatic pain fiber or motor fiber block, numbness or weakness in the limb. Alternatively, in the upper extremities one can block the sympathetic chain to the arm with a transthoracic T2 vertebral level sympathetic chain block [105]. The advantage at T2 is there is no chance of blocking regular somatic pain fibers; the downside is that the T2 level injection is near the lung so pneumothorax is a possible risk. These stellate, T2 vertebral and lumbar blocks can be therapeutic as well as diagnostic. There is no pure sympathetic lumbar chain block.

Alternatively, another option is to infuse the sympathetic blocking agent, phentolamine, as described by Raja [106] in 1991 and examine the patient while the circulating drug is active. German literature confirmed the usefulness and cost effectiveness of the phentolamine test for diagnosing Sympathetic Maintained Pain [107]. Raja [108] reconfirmed the test's clinical and research validity in his "Classic Papers" review article. The upside is there is no A-delta or C-pain fiber blockade (false positives) and good evidence for sympathetic blockade (reduced false negatives). Phentolamine testing is a diagnostic test; which neither "confirms" nor excludes a CRPS diagnosis; it documents Sympathetic Maintained Pain. Phentolamine also requires a special compounding of the drug and anesthesia monitoring as is done with the injection blocks. Phentolamine does allow testing of multiple limbs, not just one.

Whatever option is chosen for sympathetic blockade, it is crucial to have a good sympathetic blockade and to examine the patient while the sympathetic block is active in order to demonstrate the presence or absence of Sympathetic Maintained Pain. If missed, the diagnosis of SMP would be left untreated and the neuropathic pain would remain or worsen. In the physician/co-author's experience, slightly less than half of those presenting with a complex traumatic neuropathic pain syndrome were positive for Sympathetic Maintained Pain [109]. A patient going on to have multiple blocks or

ablative procedures on the other 50%, where <u>only</u> SIP is present, would be unnecessary, ineffective and costly.

<u>Diagnostic Summary</u>: The practical clinical neuroscience for diagnosing traumatically induced neuropathic pain including CRPS includes these three steps:

- 1. Delineate the force of trauma and the particular orthopedic bony and soft tissue injuries (nociceptive pain generators).
- 2. By detailed history and exacting peripheral nerve sensory exam determine which nerves were injured and how severely.
- 3. Determine if Sympathetic Maintained Pain (SMP) is present and superimposed upon the traumatic peripheral nerve injury Sympathetic Independent Pain (SIP).

Then, whether focal or diffuse, a clinician can address therapeutic interventions to the pain producers:

- <u>Nociceptive</u> (bone, ligament, etc.),
- <u>SIP (only) traumatic nerve injury,</u>
- SMP with SIP focal nerve injury or
- <u>diffuse SMP (only)</u>.

If SMP has been diffuse but "burns out", leaving a diffuse sympathetic independent central sensitization, that can be treated also as SIP, pharmacologically.

The key to the best individualized treatment for each patient is to make the most accurate diagnosis(es) and then design a treatment program for each component. Doing this early in the clinical course, especially if SMP is present, will give the best clinical outcomes and be the most cost-effective. Undiagnosed or untreated SMP, if worsening over time, is likely to be the poorest outcome and most likely to evolve into a catastrophic status. Accurate diagnosis(es) benefits the patient and other claim participants, enables insurers to estimate costs, set reserves and administratively resolve the case without litigation

## **Treatment:**

The IASP considers pain to be chronic when it has persisted beyond the normal tissue healing time. Three (3) months is often the "cut off" point for transition from acute to chronic pain [110]. Prompt diagnosis and commencement of treatment is known to offer the best opportunity for a good outcome with minimal residual pain or symptoms. [111]

Just as the neuroscience and neuroimaging are validating CRPS signs, symptoms and the diagnosis itself, clinicians are now more able to institute successful treatments. There are several credible sources for evidence – based treatment; including, the 2013 4<sup>th</sup> Edition of "Complex Regional Pain Syndrome: Practical Diagnostic and Treatment Guidelines" 4<sup>th</sup> Ed (2013). [112] However, treatment guidelines by ODG [113], ACOEM [114], and the Cochrane Collaborative Review [115] should be reviewed and compared

carefully to the treatment recommendations found in peer-reviewed medical journals and texts. [116]

Usually in most traumatic limb injuries there is nociceptive pain from bony and soft tissue trauma, pain from injured local small/large sensory nerves and pain fibers, and secondary muscle pain and trigger points proximal in the limb and spine, as well as anxiety and depression. These all need different medications in a complementary copharmacy. Early aggressive co-pharmacy is essential to keep the patient "manageable".

Early and accurate diagnosis and treatment of Sympathetic Maintained Pain/SMP (about 50% of these type of complex limb trauma cases) is crucial because SMP does not respond well to medication and is likely a significant pain driver to the brain. Conversely, CRPS pain to the brain can, as has been seen in imaging studies, drive the autonomic features. Interventions such as blocks, ablations, and neuromodulation (spinal cord stimulation) can substantially reduce an aggressive sympathetically driven CRPS.

With recent brain imaging science suggesting the possibility of brain changes that may not be reversible, it is even more important to work at vigorous early reduction in pain, minimizing administrative/bureaucratic delays, focusing on functional restoration and the emotional/psychological secondary effects of the CRPS pain. Breakthroughs, such as that reported in *Brain*, published November 19, 2014, illustrate advances being made in blocking neuropathic pain receptors.

Particularly with the brain imaging studies validating the emotional and cognitive functional changes in CRPS-affected brains, cooperation among claim parties is necessary to expedite diagnosis, treatment and claim resolution with restoration to suitable employment. It is crucial to remember that, collectively, traumatic nerve injury, CRPS-1 and CRPS-2, is a spectrum of disorders, some mild, some severe, sometimes progressive, sometimes not, and that each patient will require an individualized and adjustable treatment plan. Adherence to rigid "guidelines" can lead to errors in diagnosis, missed diagnosis; and then, ineffective treatment.

Unfortunately, because of the relatively low incidence of CRPS, the condition is often not recognized by primary care physicians, delaying diagnosis and referral to specialists.

## Early Diagnosis and Treatment is Critical

## **Early Diagnosis and Multiple Diagnoses:**

Often the orthopedic diagnoses are urgent and focused upon initially and primarily and the neuropathic pain component is not considered until later. This can allow pain from peripheral nerve injury/impairment to feed into and worsen centralized sensitization and/or CRPS/Sympathetic Maintained Pain/SMP. Hence, identifying and

treating the sources of the nociceptive neuropathic pain early improves outcomes and usually lessens residual disability. [117]

#### <u>Simultaneous or Early Treatment of Nerve Entrapment Pain:</u>

There are many bony injuries that need early and rapid, often surgical, repair. Bony fractures, joint disruptions, tendon tears, etc., need to be addressed directly, but screening and examination of the nerve structures early and before and after surgery is necessary to identify and effectively treat nerve injury or CRPS. Swelling and edema in and around orthopaedic injuries can be treated to lessen focal nerve collateral injury. Early steroids can be helpful [118], screening for focal nerve impairments can lead to successful decompressions (e.g. median nerve carpel tunnel impairment near a wrist fracture or impairment of common peroneal nerve at the fibular head with a knee joint injury). Doing a nerve decompression early or at the time of, or soon after, the orthopaedic surgery can often substantially improve functional outcome [119]. Early diagnosis and treatment of <u>both</u> orthopaedic <u>and</u> neurologic components may prevent development of Sympathetically Maintained Pain or CRPS.

#### Early Co-Pharmacy Institution:

Identification and early pharmacologic treatment of the multiple sources of pain should include management of nociceptive pain (bone, ligament, soft tissue trauma, etc.), myofascial pain (focal spasm and/or trigger points) and SIP neuropathic pain (e.g. focal nerve injury). Sympathetic independent nerve pain can improve with many non-narcotic antineuropathic medications such as seizure medications, tricyclic antidepressants, serotonin and norepinephrine reuptake inhibitors, etc. [120] These are medicines that work on CNS disorders that have secondary positive effect on nerve injury and nerve pain transmission. Topical antineuritic creams can also help focal nerve injuries (local anesthetics, antiepileptic drugs, ketamine, etc.) [121].

In traumatic nerve injuries, co-pharmacy is the rule rather than the exception; lower doses of synergistic medication combinations for the multiple contributing pain sources best manages the overall "pain" picture and improves functional restoration. Nociceptive medications (e.g. opiates) can be helpful for bony pain, but much less effective for nerve injury pain; while medications for nerve pain are less effective for nociceptive bone pain. However, used together to treat bony and nerve pain, they can be quite synergistic and effective. Managing the multiple sources of pain early maximizes the functional restoration and thus lessening the probability of depression.

## Nerve Decompression or Ablation:

The earlier an entrapped nerve is decompressed, the less likely permanent or long-term nerve pain will ensue. Nerves have a fair durability, but when chronically or severely compressed they will eventually become painful. If a nerve is decompressed late in the clinical case, even the best surgical technique may be insufficient if the nerve has, by that time, had intrinsic nerve damage that continues to generate neuropathic pain.

That is, decompressing a damaged nerve may not be helpful if decompressed too late. Paradoxically, decompressing an entrapped nerve later in the clinical course can lessen numbness but <u>increase</u> pain (i.e. numb compressed pain fibers, now decompressed and functioning better, will become <u>more</u> painful than prior to decompression). Hence when nerve damage is detected and diagnosed, nerve decompressions, even in a setting of CRPS, should be considered as early as possible [122].

Some nerve injuries can be severe enough to leave a traumatic neuroma within the course of a nerve (neuroma in situ) that is unresponsive to anti-neuropathic pain medications and/or in a site where motion constantly irritates the neuroma. Many times these are pure sensory nerves (no motor fibers) and can be considered for selective surgical ablation. For instance, severe foot/ankle trauma can damage the superficial peroneal nerve or sural nerve. These nerves can be surgically cut and the nerve stump can then be "tucked away" in local soft tissue such as muscle [123,124]. Denervation and numbness then can replace motion induced hyperpathia and touch allodynia. Another example would be section of multiple small branches of nerves in and around the traumatized and postoperative knee (surgical section of the branches of the saphenous, femoral, lateral femoral cutaneous, and peroneal nerve which supply pain fibers in and around the knee joint).

Re-decompression, neurolysis and/or scar revision in a prior operated nerve entrapment/compression can also be successful. A second decompression seldom makes the nerve pain worse and in selected cases can give improvement and/or help the nerve be more amenable to medication treatment. [125]

## Regional Nerve Blocks for Neuropathic Pain, CRPS and Sympathetic Maintained Pain:

As noted in the previous diagnoses section, a percentage of traumatic nerve injuries have a component of the pain maintained by the sympathoafferent misconnections (Sympathetic Maintained Pain/SMP). In those cases where SMP can be demonstrated in either CRPS-1 or CPRS-2, blocking the sympathetic nervous system can be helpful in "winding down" the SMP component. (See depiction at Pathophysiologic Mechanisms. A speculative Model, Supra). Local regional blocks (e.g. Guanethadine Bier blocks) generally have not been efficacious and can induce additional sequelae (e.g. tourniquet induced local additional nerve irritation/impairment). [126] And, of course, if patients are shown to have Sympathetic Independent Pain (SIP) only and no Sympathetic Maintained Pain/SMP, blocking the sympathetic system will quickly prove unhelpful. Systemic injections or infusions of potentially peripherally and/or centrally acting anti-neuropathic pain medications; (e.g., ketamine [127]) are of variable benefit at this time.

Empirically, in patients that have a clear component of SMP, repetitive sympathetic blocks (e.g. cervical stellate ganglion and lumbar sympathetic ganglion blocks) can be quite helpful, particularly if done early and in series. Doing single or a couple blocks in isolation usually is partially and temporarily helpful. But, doing a series, (e.g. two blocks per week for 3-4 weeks, total six to eight blocks) can achieve a

major improvement. However, it is hard to find large clinical published studies to give statistical support and each case needs individual treatment [128]. In the injuries where there is both focal nerve injury (SIP) and SMP the blocks improve the SMP only, and then the SIP needs to be treated simultaneously with antineuritic pain medication. PT/functional restoration while the blocks are operative increases the extent and enduring benefit of the sympathetic blocks. Blocking the SMP early, vigorously and repeatedly will often get the best outcome. Once SMP is entrenched, or centralized, sympathetic blocks later in the clinical course are less likely to be helpful; there are multiple pathophysiologic contributors to this chronicity [129].

## Sympathetic Ablation or Surgical Sympathectomy:

Patient selection here is critical. Many ablations or resections clinically and in published articles have statistically mediocre outcomes with the conjecture being procedures were done on patients or groups of patients who have been less well defined to make sure a Sympathetic Maintained Pain component is present. That is, if procedures have been performed on patients that have Sympathetic Independent Pain only (and NO SMP) they may have had no improvement. If, with the diagnostic sympathetic block (e.g. diagnostic stellate, T2 level sympathetic chain block, lumbar sympathetic block or diagnostic phentolamine infusion testing) the patient clearly has a component of SMP, the clinical pain improvement with either ablation or surgically resecting the sympathetic system is much higher. Again, this will help with the SMP component but may not change the SIP contributions.

Chemical ablation (e.g. alcohol or phenol, etc.) can be efficacious, but even the best proceduralist can have unexpected spread of the solution (and damage to) to other nearby structures. And likewise, radiofrequency or cryogenic ablation relies on bony landmarks to heat or freeze the local area of tissue where the sympathetic chain "should be" located anatomically. However with individual anatomic variation, even with the most experienced proceduralist, sometimes the ablation misses the sympathetic chain in part or altogether. And radiofrequency also can occasionally affect other nearby structures (e.g. brachial plexus) providing untoward sequelae [130]. These are all known complications of the procedures.

Surgical resection of the sympathetic chain (e.g. transthoracic scope of the T2 vertebral level sympathetic chain or retroperitoneal lumbar sympathetic ganglia section) benefit from the surgeon being able to directly visualize the sympathetic chain and then resect it. [131] Technique is important here to attempt to resect enough of the sympathetic chain and lessen crossing sympathetic reinnervation of contralateral sympathetics. An estimated 25% of individuals have crossing sympathetic fibers that can cause SMP to return and sometimes increasing sympathetic function elsewhere in compensation (e.g. increased sweating contralateral) [132].

<u>Spinal Cord or Peripheral Nerve Stimulation/Neuroaugmentation and Intrathecal Pump Placement:</u>

Placing electrodes over the spinal cord or next to peripheral nerves can allow for small electrical currents to block the pain transmission at sites between the pain generating damaged peripheral nerves and the brain mechanism of SCS. [133] In this fashion, a buzzing or tingling sensation can replace pain sensation. The mechanism by which spinal cord stimulation achieves pain relief is not yet fully known, but electrical and neurochemical are steadily being better understood [134,135]. Biomedical engineering improvements over the years in micro-electronics have allowed better "coverage" of the painful area and multiple "programs" that can be rotated. Many patients, with the newer spinal cord stimulator units for instance, have a 50-70% pain reduction and often commensurate medication reductions.

Spinal cord stimulation also has the advantage of the temporary trialing prior to permanent implantation; which is a "reversible" procedure. In this fashion, those patients with only a little pain reduction need not be permanently implanted.

There is also evidence that implanting spinal cord and peripheral nerve stimulation <u>early</u> rather than late ("last resort") can give better pain control and functional outcomes [136]. This may be particularly true in CRPS I, and makes sense particularly if one recognizes that long-term chronic pain induces changes in the brain that spinal cord stimulation will not affect. That is, in implanting a patient late in the clinical course, the painful input may be blocked by the spinal cord stimulator; but there are already permanent pain induced changes in volume, pain topographic representation, and brain chemical profiles in the corresponding parts of the contralateral brain hemisphere that continue with "centralized" sensitization and abnormal processing of pain and sensation inputs. [137,138,139]

In general, the goal is to lessen SIP, nociceptive and SMP components as much as possible, as early as possible, and if that cannot be accomplished, blocking that pain message from the injured peripheral nerve sites by spinal cord or peripheral nerve stimulation/neuroaugmentation as early as feasible, gives the best outcomes. Multiple studies have demonstrated the cost effectiveness of this spinal cord stimulation with particular attention to long-term medication savings. [140,141]

Likewise, one can trial an intrathecal injection or intrathecal pump. Implanting intrathecal pump permanently can infuse both pain medication (such as opiates), but also other medications with antineuritic qualities (such as Baclofen) that can help neuropathic pain by blocking the pain coming in from the periphery, for instance from the foot in through the cauda equina where the pump delivers low concentration but high strength medication, and then the pain does not go up to the brain. These are refillable pumps (on a monthly basis, sometimes longer), and with a talented pump management team one can often get good relief of pain in, for instance, low back and leg simultaneously.

## Cases of SMP with Orthopedic or SIP Surgical Needs:

In cases where the patient has demonstrated SMP present but needs an orthopedic surgery repair (e.g. ACL knee repair) or nerve compression entrapment (e.g.

carpal tunnel), special care and sequencing needs to be taken into consideration. One can preemptively block (preop, intraop, postop) sympathetic SMP input to decrease the chances of worsening SMP or flaring or worsening of "spreading" SMP. Ambulatory preoperative epidural catheters can be placed, peripheral nerve anesthetic regional blocks for the actual surgery can be done and continuing epidural sympathetic blockade by catheter after the surgery, can all lessen the probability of SMP worsening with a surgical procedure in a case where SMP is present. Of course, doing a sympathetic ablation or a surgical sympathectomy can also be a great preoperative maneuver to Sympathetic Maintained Pain worsening. However, ablation/sympathectomy, using the epidural block pre-, post- and intraoperative regional blocks would still be the best "insurance" to lessen the probability of postop SMP worsening (i.e. some patients can have unusual crossing sympathetic innervation) or recurring.

#### **Treatment Overview:**

Basically, each patient's treatment must be individualized according to the contributory pain diagnoses and titrated individually according to the patient's responses. However, simultaneous or closely "sequentialized" treatments of the patient's multiple contributory painful diagnoses as early as possible provides the best outcomes. Delays in diagnoses and/or treatment commonly increases both disability and medical impairment, limiting functionality and reducing the potential for return to suitable work; risks conversion of claims/injuries/condition to catastrophic status. Generally, claim costs are substantially higher with delays or inadequacies in treatment [142].

## **<u>Determination of Medical Impairment:</u>**

Diagnosis and treatment of Complex Regional Pain Syndrome occurs in all medical benefit delivery and disability systems including "group" health; ERISA, Social Security Disability Insurance ("SSDI") [143], Longshore and Harbor Workers' Compensation Act, Defense Base Act [144]. In each of these benefit systems as well as the United States Military and VA-DOD, the IASP/"Budapest" diagnostic criteria is applied.

However, it has been primarily within some state workers' compensation benefit systems which require use of the AMA Guides for determination of <u>permanent medical impairment</u> that controversy has arisen. Perhaps the unsettled pathophysiology, the often "subjective" symptoms, characterized by some as consistent with malingering, etc. [145], a presentation which may vary from one medical office visit to another over time [146], has resulted in making the condition progressively more difficult <u>to rate</u> per the sequential revisions of the *AMA Guides*. However, Christopher Brigham, long associated with AMA Guide development, co-authored an article in 2011, the title of which might suggest another possible explanation: 'Management of Indemnity Costs for Workers' Impairment Ratings, a New Way for Managing Indemnity Costs for Workers'

## Compensation', which states:

"To date, many insurance professionals have been given insufficient support to achieve desired claims resolution even though solutions do exist. Data exists demonstrating the efficacy of solutions when properly utilized by these professionals. This paper shares the approaches that can contribute to significant claims savings." [147]

The title to Brigham's 2011 article was prophetic. In 2012, NCCI conducted research concerning the impact upon ratings (and therefore, indemnity for such ratings), comparing "PPD" claims from Georgia and Kentucky which retained the AMA 5<sup>th</sup> to those from Montana, Tennessee and New Mexico which switched to the AMA 6<sup>th</sup>. For each of the years 2005-2008, in Kentucky, the number of "PPD" claims was analyzed. The 3,956 in 2005 declined to 3,716 in 2008; and, the average rating declined from 7.7% (whole person) to 7.1%. In Georgia, for the years 2006-2008, (from data submitted to NCCI by the Georgia State Board of Workers' Compensation for a different research project), the number of "whole body" ratings declined from 906 in 2006 to 660 in 2008; and the average ratings from 9.4% in 2006 to 7.2% in 2008. The ratings for "all others" were averaged 11.1% (for 2,352 claims) in 2006; but declined to an average of 10% for the 2,111 claims in 2008. For both Kentucky and Georgia, NCCI found no connection between which edition of the AMA Guides was used and the decline in ratings; speculating that extrinsic factors such as the economy were involved.

In stark contrast, NCCI found decreases in ratings (and therefore indemnity) in each of Montana, Tennessee and New Mexico, states which had switched from the AMA 5<sup>th</sup> to the AMA 6<sup>th</sup>, of 28% in Montana, 25% in Tennessee and 32% in New Mexico; NCCI concluding:

"The results of this study provide evidence that a decrease in the average impairment rating is realized when a state switches from the fifth edition to the sixth edition of the guides, all else being equal." [148]

In <u>state</u> workers' compensation systems efforts to exclude the diagnosis have been pursued aggressively in <u>some</u> of those states which require the use of the *AMA Guides to the Evaluation of Permanent Impairment*, Fifth Edition, published November 2000. [149] In such states, exclusion of <u>the diagnosis</u> of CRPS is attempted by characterizing as <u>clinical diagnostic criteria</u> permanent medical impairment <u>rating</u> factors listed in Table 16-16, "Objective Diagnostic Criteria (see Terminology and Definitions, supra) for CRPS (RSD and Causalgia)":

#### **Local clinical signs:**

Vasomotor changes:

- Skin color: mottled or cyanotic
- Skin temperature: cool
- Edema

Sudomotor changes:

Skin dry or overly moist

#### Trophic changes:

- Skin texture: smooth, non-elastic
- Soft tissue atrophy: especially in fingertips
- Joint stiffness and decreased passive motion
- Nail changes: blemished, curved, talon-like
- Hair growth changes: fall out, longer, finer

#### **Radiographic signs:**

- Radiographs: trophic bone changes, osteoporosis
- Bone scan: findings consistent with CRPS

#### **Interpretation:**

- >8 Probable CRPS
- < 8 No CRPS</p>

The AMA Guides 5<sup>th</sup> Ed. was published in November 2000 and the text quoted below from Table 16-16 was <u>already</u> behind the science, contrary to published data; but also perpetuated the controversy [150], the suspicion directed to patients presenting with "subjective" pain complaints; but lacking some/most of the 11 "objective" clinical signs:

"Since a subjective complaint of pain is the hallmark of these conditions, and many of the associated physical signs and radiologic findings can be the result of disuse, the differential diagnosis is extensive; it includes somatoform pain disorder, somatoform conversion disorder, factitious disorder, and malingering. Consequently, the approach to the diagnosis of these objective findings. The criteria listed in Table 16-16 predicate a diagnosis of CRPS upon a preponderance of objective findings that can be identified during a standard physical examination and demonstrated by radiologic techniques. *At least eight of these findings must be present concurrently for a diagnosis of CRPS*. Signs are objective evidence of disease perceptible to the examiner, as opposed to symptoms, which are subjective sensations of the individual." [151] (Emphasis supplied)

In <u>Charter Oak Fire Ins. Co. v. Swanigan</u>, 2012 Tex. App. LEXIS 3312, an "IME" physician testified by deposition that an earlier edition of the AMA Guides required five of eight "criteria" to make the CRPS diagnosis; however, that "IME" physician added that the 5<sup>th</sup> Edition of The Guides increased the "objective" criteria to eleven, of which eight "signs" must be present. The "IME" physician's opinion was rejected by a Texas jury; but, this decision is indicative of the unfamiliarity of the bench and bar regarding the nature of the condition, the rapidly evolving science as well as the injuries/conditions/factors now regularly associated with CRPS. However, an encouraging appellate trend is seen in <u>Union County and P. Comp v. Workers' Compensation Appeal Court (Feaster)</u> Commonwealth Court of Pa. 2013 Pa. Commw. Unpub. LEXIS 803. While noting that Pennsylvania law ". . . directs that the AMA's guides to the Evaluation of Permanent Impairment shall be used in determining a claimant's degree of Impairment due to a compensable injury, we are aware of no

authority which declares the AMA the final, controlling authority in the diagnosis of medical conditions and the practice of medicine." That trend is seen in decisions which properly limit the AMA Guides 5<sup>th</sup> Ed. to determination of permanent medical impairment; <u>not</u> clinical diagnostic criteria of the condition, itself. See, e.g., <u>Tokico (USA) Inc. v. Kelly</u>, Ky, 2009) 281 S.W. 3d 771. 2009 Ky LEXIS 47; <u>Brown v. W. W. Martin Plumbing & Heating</u>, <u>Inc.</u>, 72 A. 3d 346; 2013 Vt. LEXIS 39.

Courts have recognized the same deficiencies regarding earlier editions of the AMA Guides. Hill v. Jackson County Bd. Of Educ., Supreme Court of Appeals of West Virginia, 2014 W. Va. LEXIS 1018 (AMA Guides 4th ed. 1993). Effective July 1, 2001, Georgia amended O.C.G.A. §34-9-263(d) requiring the use of the 5th Ed. of the AMA Guides for determination of permanent medical impairment which had been published the year before (2000). There was no change to the existing text of O.C.G.A. §34-9-263(a) which uses the word "disability"; not "impairment". Subsection (d) states, "In all cases arising under this chapter, any percentage of disability or bodily loss ratings. . . . ." The retention of the word, "disability", given the definition of "disability" found in Table 1-1 of the AMA Guides 5th Edition's Definitions and Interpretations of Impairment and Disability [152] suggests that both disability and medical impairment could be combined in Georgia to achieve a rating which recognizes the effect upon bodily systems, central nervous, brain, vascular, etc., which are now known to be affected by CRPS.

Almost as soon as the AMA Guides 5<sup>th</sup> Ed. was published, those Guides quickly became the target of considerable criticism nationally and internationally; and, not necessarily for reasons limited to the obsolete and/or rejected "science" relating to CRPS upon which Table 16-16 had been constructed. Among those criticizing the AMA Guides 5<sup>th</sup> Ed. methodology, specifically with regard to CRPS, were Professor John Burton who participated in performing an evaluation of California's Permanent Disability Rating System for the Rand Institute for Civil Justice at the request of the California Commission on Health and Safety and Workers' Compensation. The report thereof, published in 2005, specifically addressed Reflex Sympathetic Dystrophy, noting that "the area does not offer any empirical validation for its rating scales or its classification scheme" [153]. In 2002, the American Academy of Disability Evaluating Physicians (AADEP) issued a Position Paper: "Complex Regional Pain Syndrome I (RSD): Impairment and Disability Issues", which proposed methodology specific to CRPS for the evaluation of impairment and functional residual capacity in CRPS I. [154]

That the contributors to the AMA 5<sup>th</sup> actually increased the required "objective" "signs" to 8 out of 11 [155] from the previous edition is difficult to understand; much less reconcile with the science which <u>already</u> existed when the AMA Guides 5<sup>th</sup> Ed. were published. Seven (7) years earlier (1993), Prof. Veldman's landmark retrospective study of 829 patients had been published in *The Lancet* [156] an internationally respected peer reviewed medical journal. A search of Scopus [157] revealed 699 published documents which cite the Veldman article. The AMA Guides is <u>not</u> one of those documents. Prof. Veldman's study found that many of the AMA Guide 5<sup>th</sup> Edition's "objective" criteria were present in <u>less than half</u> of the patients who had been diagnosed

with CRPS <u>for more than 12 months</u> – the opposite of the "staging" theory which had long existed; <u>and</u> upon which the 8 of 11 "objective signs" was premised.

Reliance upon obsolete science with regard to the use of Table 16-16 <u>as clinical diagnostic criteria</u> was also challenged by empirical research reported two years <u>after</u> the AMA Guides 5<sup>th</sup> Ed. was published. That research by internationally recognized CRPS authorities; which included Dr. Norman Harden of Northwestern University, Dr. Stephen Bruehl of Vanderbilt University and Dr. Michael Stanton-Hicks of The Cleveland Clinic, confirmed Prof. Veldman's 1993 conclusions that the <u>clinical signs</u> upon which Table 16-16 is based do <u>not</u> emerge progressively, sequentially over time in "stages" as the condition "worsens". The research found, instead, that the clinical signs required by the AMA Guides 5<sup>th</sup> Ed., Table 16-16 at p. 496, <u>might</u> appear in <u>one</u> of the three CRPS subtypes identified, but those clinical signs occurred ". . . in the group with the briefest pain duration." [158]

A medical study authored by de Boer, et al., published in 2011 [159] considered by many to be definitive, described the ". . .signs and symptoms in CRPS1 in 692 patients between July 2004 and October 2007", which met the IASP (Orlando) criteria. This study, designed to assess the occurrence of signs and symptoms in relation to disease duration and to compare those to historical data based on a different diagnostic criteria set (Veldman) [160] found that signs that were <u>least</u> prominent in the total sample were hypoalgesia, sweating abnormalities, <u>trophic changes</u>, dystonia and tremor; (5 of the 11 clinical signs "required" by Table 16-16 of the AMA Guides 5<sup>th</sup>) which focus prominently on trophic changes:

- Skin texture smooth, nonelastic
- Soft tissue atrophy, especially in fingertips
- Joint stiffness and decreased passive motion
- Nail changes: blemished, curved, talon like
- Hair growth changes: fall out, longer, finer.

Because the table below documents the variable presentation of CRPS over specific periods of duration from "inciting event" to in excess of one year; at which point in time the condition would be "chronic" for those patients which remained symptomatic, displayed clinical signs, the authors requested and were give express written permission to reproduce and include in this article Table 3 from the original published article by de Boer, et al.:

Table 3.															
Distribution of the signs and s	ymptoms categori	zed according	to the duration	of complaints fo	r IASP patients.										
	0-2 Months	2-6 Months	6-12 Months	>12 Months	Total sample										
	n = 48	n = 211	n = 70	n = 352	n = 681										
	n	Positive	%	n	Positive	%	n	Positive	%	n	Positive	%	n	Positive	%
Symptoms															
Spontaneous pain	48	41	85.4	211	184	87.	2	70 6	5 92.9	352	334	94.9	681	624	4 91.6
Increasing pain after exercise	47	44	93.6	209	198	94.	7	70 6	7 95.7	349	334	95.7	675	643	95.3
Unexplained diffuse pain	47	42	89.4	204	193	94.	6	69 6	6 95.7	345	335	97.1	665	630	95.6
Area larger than original trauma	48	43	89.6	208	189	90.	9	70 6	7 95.7	352	292	83	678	59	1 87.2
Signs															
Sensory															
Allodynia deep pressure pain	46	15	32.6	194	80	41.	2	67 3	6 53.7	301	207	68.8	608	338	55.6
Allodynia pain after movement	46	21	45.7	196	89	45.	4	66 3	9 59.1	307	206	67.1	615	35	5 57.7
Allodynia after light touch	48	15	31.3	209	58	27.	8	70 2	9 41.4	349	158	45.3	676	260	0 38.5
Hyperesthesia	47	10	21.3	209	58	27.	8	69 2	7 39.1	351	143	40.7	676	238	8 35.2
Hypoesthesia	45	13	28.9	197	56	28.	4	68 2	2 32.4	314	126	40.1	624	21	7 34.8
Hyperalgesia	48	24	. 50	207	80	38.	6	70 3	9 55.7	350	207	59.1	675	350	0 51.9
Hypoalgesia	46	7	15.2	194	42	21.	6	67 1	3 19.4	312	91	29.2	619	153	3 24.7
Vasomotor															
Color change/difference	47	29	61.7	209	136	65.	1	70 4	3 61.4	352	170	48.3	678	378	8 55.8
Temperature difference	47	32	68.1	207	119	57.	5	69 3	9 56.5	350	177	50.6	673	36	7 54.5
Sudomotor/edema															
Transpiration disturbance	48	15	31.3	210	37	17.	6	69 1	4 20.3	349	70	20.1	676	130	6 20.1
Edema	48	29	60.4	211	136	64.	5	70 3	4 48.6	350	132	37.7	679	33	1 48.7
Trophic															
Hairgrowth change	47	10	21.3	207	75	36.	2	69 1	8 26.1	319	56	17.6	642	159	9 24.8
Nail growth change	47	3	6.4	205	33	16.	1	69 1	4 20.3	321	100	31.2	642	150	0 23.3
Trophic skin disturbance	47	11	23.4	205	55	26.	8	67 1	3 19.4	324	101	31.2	643	180	0 28
Motor															
Limitation of movement	48	37	77.1	208	142	68.	3	68 5	0 73.5	348	268	77	672	49	7 74
Limitation of strength	45	15	33.3	200	86	4	3	65 3	4 52.3	314	209	66.6	624	344	4 55.1
Dystonia	47	3	6.4	203	13	6.	4	69	5 7.2	318	103	32.4	637	124	4 19.5
Tremor	47	3	6.4	204	11	5.	4	69	3 4.3	317	58	18.3	637	75	5 11.8
Bradykinesia	46	25	54.3	189	92	48.	7	67 3	4 50.7	297	214	72.1	599	369	5 60.9

Contrary to the "staging" upon which Table 16-16 of the AMA Guides 5<sup>th</sup> Ed is premised, the conclusions by de Boer, et al., are consistent with those of Veldman (1993), Harden and Bruehl (2002); but are also pertinent to an intriguing article by Huge, et al., from 2008 [161] which may explain the subtypes found by Harden and Bruehl based upon pathomechanisms involved in CRPS; that is, an ongoing aseptic peripheral inflammation process in "acute" CRPS, a degeneration of A-delta and C-fibers in both "acute" and "chronic" diagnoses; then Central Nervous System involvement (which would explain contralateral changes) (see "spread/recurrence" supra).

In his article in the 2008 IAIABC Journal, entitled "AMA Guides Sixth Edition" New Concepts, Challenges and Opportunities" [162], Brigham neither denies nor disputes the criticism of the AMA 5<sup>th</sup>, [163,164].

While appearing to adopt in the 6<sup>th</sup> Ed. of the Guides the IASP Budapest diagnostic criteria [165], the AMA 6<sup>th</sup> Ed. continues to require for "rating" purposes "signs" based upon many of the same now discarded notions regarding CRPS:

"Complex regional pain syndrome (CRPS) is a challenging and controversial concept that is dealt with in Section 15.5 (pp. 450-454). CRPS is difficult to diagnose accurately, and epidemiological studies indicate that most such diagnoses are made within a workers' compensation context; therefore, this is a particularly challenging diagnosis to rate. CRPS is only rated when the diagnosis is confirmed by defined objective parameters (present at the time of the rating), the

diagnosis has been present for at least one year and verified by more than one physician, and other etiologies (physical and psychological) have been excluded. If these criteria are met, then adjustment factors (functional history, physical examination findings, and clinical studies are defined) and the number of "objective diagnostic criteria points" (Table 15-25, p. 453) are used in Table 15-26 (p.454) to define the class and magnitude of impairment. This same approach is used in the lower extremity chapter." [166] at p. 42]

And, from p. 538 of Guides to the Evaluation of Permanent Impairment, Sixth Ed:

"The pain is associated with specific clinical findings, including signs of vasomotor and sudomotor dysfunction and later, trophic changes of all tissues from skin to bone." (Emphasis supplied) [167]

Not only are an increasing number of <u>States</u> expressing reservations regarding the use of the AMA Guides as "<u>clinical</u>" <u>diagnostic criteria</u>; but, Korea which generally adopted The AMA Guides 5<sup>th</sup> Ed., but then specifically rejected the pain-related impairment process, chose CRPS as the first object of its national impairment evaluation for pain. [168,169]

The authors recognize that effort to construct a means to assess "impairment" for "pain" is difficult for most chronic pain conditions. However, for a medical condition such as CRPS, as more is being learned about its true nature and mechanisms, the authors suggest that a more reliable, more accurate means of assessment of disability and medical impairment should be used such as the AADEP Position Paper, [170], or the Severity Score developed in 2010 by Harden, Bruehl, Perez and other international CRPS experts 171].

In the past decade, it has become increasingly evident that CRPS I and II should not be "rated" based upon the injury to a specific member; which resulted in development of CRPS since the condition <u>does</u> involve the Central Nervous System 172]. The first known decision to that effect was issued recently in California in accordance with the AMA Guides 5<sup>th</sup> Ed. [173] A Power Point by UCLA Medical School Professor, Dr. Mark H. Hyman provides guidance in calculating impairment coordinating the CNS damage within the AMA 5<sup>th</sup>. [174]

# Neurodiagnostics: The Future is Here

In the last two decades remarkable advances have been made in the use of neurodiagnostics to study the effect of pain upon the brain [175].

To begin to understand the complexity of induction of pain "signals" and transmission, that pain does <u>not</u> obey somatopic borders led to the realization that

neural substrates that mediate pain are plastic; which, in turn, required that neuroscientists and medical researchers study and understand that chronic pain has a cellular and neural basis. [176]

The advent of neurodiagnostic imaging has quickly furthered understanding of pain mechanisms. [177] Imaging techniques such as fMRI enable researchers to study functional reorganization across a number of different chronic pain conditions. [178] For example, Diffusion Tensor Imaging ("DTI") detects the relationship between gray matter decreased density and white matter connectivity. [179]

Within the past five years, the trickle of discoveries made by neurodiagnostics has become a torrent. By 2011, researchers at Northwestern University and The University of Toledo (Ohio) had reported that the brain has distinct morphological "signatures" across different chronic pain conditions; including CRPS. [180]

In 2009, researchers in Germany reported their findings from functional (fMRI) imaging confirming Central Nervous System involvement in CRPS. [181]

Brain imaging studies show activity in the cortex, other grey matter and white matter: "pain neuromatrix" structures in CRPS patients. [182] Changes in both volume of brain matter and function of brain matter can be seen by fMRI. [183,184] Changes in the brain grey-white matter interactions help explain CRPS clinical symptoms and signs in the autonomic nervous system (Sympathetic temp/sweat/swelling, etc.), as well as emotional and cognitive symptoms frequently dismissed by some as manifestations of psychological or personality disorders. Proven brain structure and functional imaging changes seen in CRPS patients illustrate neurocognitive and neuropsychiatric symptoms which were previously difficult to explain. The neuroimaging by Apkarian and others, specifically of the brains of CRPS patients, the discovery of abnormal gray-white matter interactions in emotional and autonomic regions of the brain is "objective" corroboration of recent conclusions by other researchers which have found that CRPS patients do not have predisposing psychological conditions, states or disorders. [185,186,187] These studies also illustrate how these brain findings in CRPS are different than, for example, low back pain. [188] Motor (e.g. dystonia) changes are also seen. [189,190]

In short, we are seeing science confirm physical and psychological brain changes from CRPS, and even some showing reversal of some of the brain CRPS changes with successful treatment. [191] It is realistic to expect the routine use of functional brain imaging to assist in diagnosing CRPS and other Chronic Pain Conditions in the near future. [192]

#### **Conclusion:**

Since 1864, when Mitchell, Morehouse and Keen co-authored the first known description of the neuropathic condition now known as Complex Regional Pain Syndrome and correlated the condition with injuries to nerves, theories about the

pathogenesis, pathophysiology and even the course of the condition have changed as frequently as the "name" of the condition. As this Medico-legal article establishes, in the absence of any "gold standard" diagnostic test, the condition must be diagnosed by a detailed anamnestic patient history and a thorough clinical examination; the process, steps and components of which have been discussed herein. The development of "The Budapest Criteria" in 2004, as modified by Harden/Bruehl in 2007, increasing the sensitivity and specificity of those criteria, has resulted in diagnosing the rarely occurring condition correctly in most instances despite the very vicissitudinous nature and variable presentation of the condition over time. When diagnosed early, with appropriate treatment, patients have the best chance of recovery and a return to a productive life. Until use of the neurodiagnostics and the clinical protocols for such use, as described by Dr. David Borsook of Harvard Medical School in his 2011 article, "How Close Are We in Utilizing Functional Neuroimaging in Routine Clinical Diagnosis of Neuropathic Pain?", becomes commonplace, the diagnosis must be made by clinical examinations performed by physicians with the integrity and the experience necessary to diagnose the condition correctly and to institute effective treatment promptly.

#### **Biographies**

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Dr. Larry D. Empting did his undergraduate work at Concordia College (Magna cum laude), Moorhead, Minn. with an interest in Mind/Brain interactions and dual majors in Psychology and Biology and dual minors in Chemistry and Speech/Communications. He then spent three years doing Alzheimer's Disease research with the Neuroscience Department/The Neuropsychiatric Institute/Psychiatry Department at the University of North Dakota. He did his medical school at the University of Minnesota, Minneapolis. He did dual residency training at Johns Hopkins in Baltimore, MD, first in Psychiatry and then in Neurology. He then joined the Johns Hopkins Neurology faculty as a teaching clinician in general neurology, but also as the Director of the Johns Hopkins Pain Treatment Center, a multispecialty neuroscience based clinical and research group with particular interest in non-malignant neuropathic pain. He has been in the Southeast for 25 years now specializing in the neurodiagnostic evaluation and treatment of severe and complicated traumatic injuries including industrial and workers' compensation cases with a particular expertise in traumatic neuropathic pain syndromes. His current practice is in Atlanta, GA at the Independent Neurodiagnostic Clinic.

#### Thomas M. Finn

Thomas M. Finn has decades of civil litigation experience and is a frequent lecturer throughout the state. Finn represents clients in employment law and personal injury matters, including workers' compensation and Social Security Disability claims. After he earned a bachelor's degree from Georgia State University, he attended the Walter F. George School of Law of Mercer University and received his J.D. in 1973. He was admitted to practice in Georgia in 1973 and opened his firm in 1975. In 2000, he was appointed as co-chair of the Medical Committee of the State Board of Workers' Compensation Advisory Council and was then assigned to the data statistics subcommittee of the Governor's Workers' Compensation Review Commission in the following year. Finn has been the lead or amicus attorney in several reported appellate decisions involving workers' compensation law, including a 1998 Supreme Court of Georgia case against a major restaurant chain that reversed the decision of a lower court. A valuable member of his community, Finn serves as a Legal Aid volunteer attorney and a former member of the board of directors of the Georgia Legal Foundation. In addition, he was named a trustee of the Riverside Military Academy in Gainesville, GA, in 2013.

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  \*See companion "Poster" of DTI "films" of Brain in Chronic CRPS Pain, etc. at:
  - \*See companion "Poster" of DTI "films" of Brain in Chronic CRPS Pain, etc. a <a href="http://apkarianlab.northwestern.edu/publications/posters.php">http://apkarianlab.northwestern.edu/publications/posters.php</a>
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