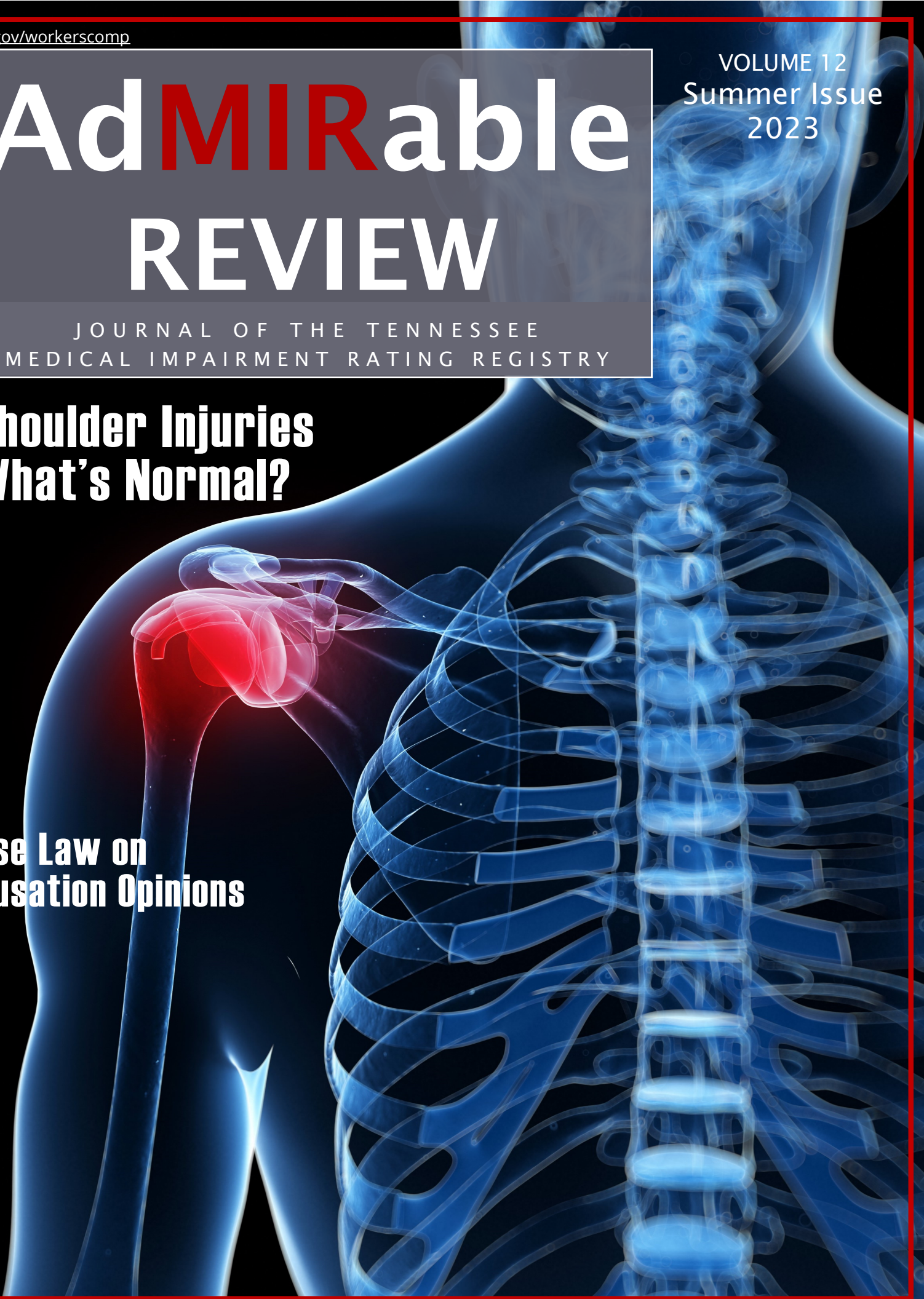


AdMIRable REVIEW

JOURNAL OF THE TENNESSEE
MEDICAL IMPAIRMENT RATING REGISTRY

Shoulder Injuries What's Normal?

Case Law on Causation Opinions



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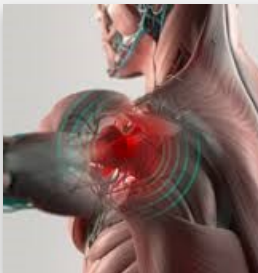
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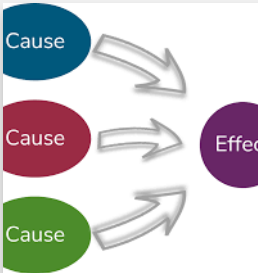
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What's Normal?—Part 1: Shoulders

James B. Talmage, MD, Robert B. Snyder, MD, J. Willis Oglesby, MD

On Oct. 1, 1939, Winston Churchill described Russia as "a riddle wrapped in a mystery inside an enigma" during a radio address on the invasion of Poland by Nazi Germany and the Soviet Union. For many patients, employers, insurance adjusters, case managers, attorneys, physicians performing independent medical exams or utilization reviews, and workers' compensation judges, shoulder injuries can be as puzzling as Churchill's above description.



Why do doctors suspect one injury, obtain an MRI, change the diagnosis, and then operate on three or four issues when the "injury" occurred doing a task the worker has done daily before with no problem (low violence "injury"), suggesting that at most, just one injury may be present? A 2021 study of "Cognitive Biases in Orthopaedic Surgery" (Janssen, 2021) concluded that cognitive biases affect decision-making and reasoning in orthopedic surgeons, just as they do in all humans. Two common biases that affect diagnosis and surgical recommendations are base rate neglect and confirmation bias. Before we discuss these, we need a preliminary discussion of shoulder imaging and injury/pathology diagnosis.

Patient History

The authors cannot find published research linking specific shoulder symptoms to specific shoulder disorders. Many doctors believe night pain suggests either rotator cuff disease or glenohumeral joint osteoarthritis, but finding confirmation of that belief in published studies is difficult.

In our opinion, taking time to talk with the patient can help direct the examination and testing. A single traumatic event is fairly straightforward, with the position of the limb and the direction of the applied force pointing to the capsule-labral-biceps structures or the rotator cuff as the likely involved structures. Repetitive use and gradual onset syndromes are more difficult to analyze. One patient's "catching" may be another's "slipping". Noting the patient's description of activities that provoke the symptoms can help direct the physical exam and further workup. As vague as the shoulder examination can be, if it precisely reproduces the patient's complaints, it becomes stronger evidence regarding any pathology. Subtle instability is a great imitator as a source of shoulder pain, particularly if posterior or inferior. Aside from "dead arm" symptoms or positional

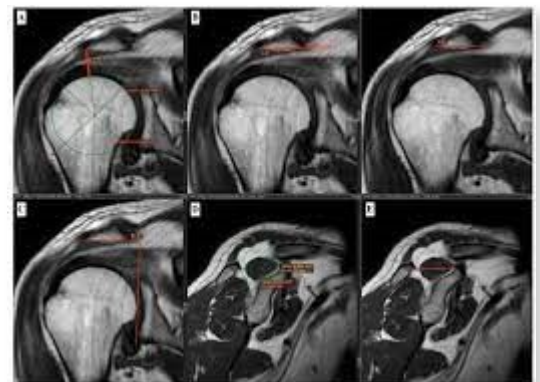
weakness, it may be described as deep and aching, perhaps with a confusing overlay of secondary cuff overload tendonitis pain pattern. Part of the history and examination should not overlook pain that could be emanating from the neck, supporting myofascial groups, neurovascular structures, or organs in the thorax and abdomen. It is not possible to make an accurate shoulder diagnosis if these are not considered and excluded.

There are published studies that correlate rotator cuff pathology with cardiovascular risk factors (Applegate, 2017; Djerbi, 2015; Bishop, 2015; Hegmann, 2023). This is logical as the supraspinatus tendon attachment to the humerus is a “watershed” point at the boundary of arterial circulation coming from the anterior shoulder and from the posterior shoulder. Ischemia from atherosclerosis should manifest in the rotator cuff, just as it does in several common stroke syndromes at “watershed” locations of the brain’s major arteries (Thaler, 2023).

A cross-sectional case series of 761 workers found a correlation between self-reported preference of sleeping prone with both arms abducted about 90 degrees and rotator cuff disease recognized only by pain and physical exam (Holdaway, 2018). Using just pain and physical exam rotator cuff disease was associated with cardiovascular risk factors (Framingham score), but not with one measure of ergonomic stresses at work (Hand Activity Level).

Imaging (and Physical Exam)

Imaging is increasingly utilized by surgeons for surgical decision-making, as the best reviews of physical examination of the shoulder indicate that few shoulder disorders can be reliably diagnosed by physical exam alone (Hippensteel, 2019, Two articles). Anterior instability, subscapularis tendon tears, and massive acute full-thickness rotator cuff tears (“pseudoparalysis”) are the exceptions, so most painful shoulders cannot have a diagnosis established by just physical examination. Physical exam is further confounded by the shoulder having many different physical exam tests, each commonly referred to by an eponym (eg, Jobe test, Hornblower test, etc.) with many practicing physicians unaware of exactly how the test was performed by the authors of the original publication (Somford, 2017). Thus, many physicians use their own modification of the physical exam test, for which no data is available on reliability or validity. In reviewing medical records, exactly what a single surgeon did performing a physical exam of the shoulder is problematic.



Imaging (x-ray, ultrasound, MRI, and MR Arthrography) are considered “objective tests.” However, many insurance adjusters, case managers, and even surgeons are unaware of the publications on the reliability of imaging studies. Reliability is defined as “can two radiologists agree on whether a finding is, or is not, present on MRI, etc.?” Also, published studies exist on accuracy or validity/accuracy (defined as “do the MRI findings agree with the surgical arthroscopy findings”). Arthroscopy is usually considered the “gold standard” or completely accurate test, and the accuracy of MRI or ultrasound are measured against arthroscopy as if arthroscopy were the truth. However, the few published studies on the reliability of arthroscopy for diagnosis of pathology are not reassuring.

Kappa

Before we talk about agreement (reliability), we need to define the scientific terms. One common metric is “k” or kappa. This simple math calculation is a fraction that compares the agreement between two observers (or two observations) to the agreement expected by chance

$$k = \frac{p_o - p_e}{1 - p_e}$$

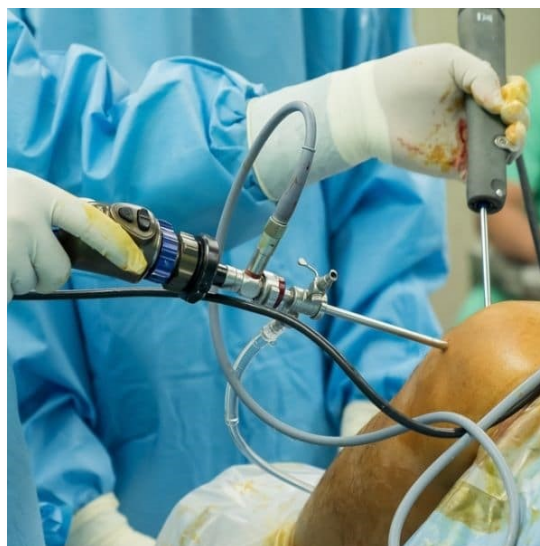
alone. +1 is perfect or 100% agreement, and -1 is perfect disagreement. An observer has a “50-50” chance of correctly guessing a single coin flip. Not all comparisons in medicine have a “50-50”% chance of agreement, and the greater the expected agreement by chance, the lower the resulting kappa will be. Not all medical studies use the same *words* to describe the agreement measured by kappa, but many either use this one or a close approximation. Percent agreement is easier to understand. In the table below, the % “Reliable” is the percentage of cases in which two observers agree on the presence of the finding, with the “% Reliable” reflecting the potential range for agreement by chance alone commonly seen.

Value of Kappa	Level of Agreement	% of Data that are Reliable
0-.20	None	0-4%
.21-.39	Minimal	4-15%
.40-.59	Weak	15-35%
.60-.79	Moderate	35-63%
.80-.90	Strong	64-81%
Above .90	Almost Perfect	82-100%

Arthroscopy Reliability

A study (Lee, 2007) showed 27 orthopedic surgeons viewed 27 shoulder arthroscopy videos without sound from ten cases with PARTIAL rotator cuff tears, as full-thickness tears are easy to identify and presumably surgeons would agree on the arthroscopy finding of a full-thickness cuff tear. Using the Snyder classification for the location and severity of the partial rotator cuff tear, the mean correct score (*actual agreement*) was 80% with a range of 40% to 100% for individual surgeons. The overall kappa for the study was 0.512. The number of shoulder arthroscopies a surgeon performed each year and having had fellowship training in shoulder surgery did *not* correlate with a surgeon's accuracy of interpretation of the arthroscopy videos.

Agreement on tears of the labrum (a cartilaginous reinforcement of the attachment of the shoulder capsule to the glenoid portion of the scapula) is more challenging, as some parts of the labrum are easier to see at arthroscopy. Also, the superior labrum where the biceps long head tendon attaches to the glenoid can have tears (abbreviated SLAP – Superior Labrum Anterior to Posterior tears) that must be differentiated from asymptomatic, congenital sublbral foramina/recesses, and Buford Complexes. These three congenital anomalies do not affect shoulder function, do not cause



symptoms, and do not need treatment, but can be misidentified at arthroscopy as SLAP tears. Doing an unnecessary “labral repair” on these asymptomatic congenital anomalies can restrict shoulder motion (Frank 2015) significantly. In a cadaver study (Pappas 2013) of 102 shoulders, 7% had a Buford complex, and 21% had a sublbral foramen that could be misidentified as a labral tear at arthroscopy. Only one shoulder had a true SLAP tear (Type II for the shoulder surgeons reading this).

A U.S. study (Wolf, 2018) showed 24 arthroscopy videos to ten fellowship-trained shoulder surgeons who were asked to evaluate the labrum. Each surgeon was shown the same videos twice, but two months apart, so both intra-observer (can the surgeon make the same diagnosis twice and agree with himself) and inter-observer agreement (can the surgeon agree with the “official” interpretation of the video) can be reported.

An earlier study (Wolf, 2011) had 11 experienced shoulder surgeons view 50 videos of the superior labrum at arthroscopy. The videos in this study included normal cases and cases with labral injury. Each surgeon viewed the videos on three different occasions a few months apart, twice without, and once with a clinical vignette of the patient's symptoms and physical exam.

The surgeon's diagnosis changed when viewing the same video with the addition of clinical information for 28% of the videos (example of confirmation bias), and the agreement on the surgical treatment recommendation based on the arthroscopy videos was suboptimal. The results were similar to prior studies on arthroscopy agreement (Gobezie, 2008; Sasynick, 2007).

Intraobserver and Interobserver Agreement of Tear Type, Position/Extension, and Preferred Treatment Method^a

	Intrarater Kappa (95% CI)	Interrater Kappa (95% CI)
Superior labrum (SLAP)	0.65 (0.52-0.79)	0.48 (0.46-0.50)
Anterior labrum	0.84 (0.76-0.91)	0.76 (0.74-0.78)
Inferior labrum	0.20 (0.09-0.31)	0.16 (0.15-0.18)
Posterior labrum	0.58 (0.45-0.71)	0.50 (0.48-0.52)
Hill-Sachs	0.79 (0.69-0.89)	0.66 (0.64-0.68)
Buford complex	0.66 (0.53-0.79)	0.34 (0.32-0.36)
Anterior sublabral foramen	0.63 (0.50-0.76)	0.48 (0.46-0.50)
Meniscoid superior labrum	0.59 (0.53-0.64)	0.09 (0.07-0.11)
Position and extension of tear	0.70 (0.65-0.76)	0.54 (0.54-0.55)
Preferred treatment	0.67 (0.59-0.75)	0.40 (0.39-0.40)
	Very Good Good Moderate Fair Poor	

Figure 1: Data from Wolf et al, 2011. Agreement in the classification and treatment of the superior labrum. Am J Sports Med

The newest study (Calvo,2023) used 36 arthroscopy videos of rotator cuff tears viewed by four shoulder surgeons, each from a different continent. Since they all were videos with cuff tears, the expected agreement was higher, so the kappa values appear to be lower. For full-thickness cuff tears, the actual agreement ranged from 83% to 94% (kappa 0.44-0.53). For partial thickness cuff tears of <50% of the tendon thickness, the actual agreement was 95% (kappa 0.74), and for partial tears of >50% of the tendon thickness the actual agreement was 93% (kappa 0.58).

TABLE 4
Generalized Kappa Values for Between-Rater (Interrater) Agreement^a

	Generalized Kappa (50 Cases × 11 Raters), κ (Standard Error)		
	Classification (6 Groups)	Treatment (6 Groups)	Treatment (3 Groups)
Viewing 1 (no patient history)	0.467 (0.014)	0.371 (0.015)	0.420 (0.014)
Viewing 2 (with patient history)	0.387 (0.015)	0.353 (0.014)	0.396 (0.014)
Viewing 3 (no patient history)	0.469 (0.016)	0.366 (0.014)	0.425 (0.016)

In summary, full-thickness rotator cuff tears are likely the most reliably identified finding that can be seen at surgery but, with the variability of surgeon interpretation of findings at surgery, arthroscopy is not a perfect "gold standard" test. Other arthroscopy findings are less reliable, making evaluation of published studies comparing imaging findings to arthroscopy findings problematic. This also

introduces confusion in analyzing individual cases for utilization review or impairment rating.

MRI Reliability

MRI is considered an objective test that many assume is 100% accurate. This unfortunately is not true. Recent MRI studies have usually been done with higher-strength magnets, yielding higher-resolution images. Older studies used lower-powered magnets that yielded lower-resolution images. In general, higher-resolution images yield reports of more pathology.

A systematic review (Adriani, 2023) found 75 studies on the MRI evaluation of rotator cuff disease. Full-thickness cuff tears had inter-observer kappa values of 0.52 to 0.90, while partial-thickness tears had kappa values of 0.13 to 0.43. Fast-spine echo and proton density images, when included, improved diagnostic reliability. Measurements of tear size had inter-observer kappa values of 0 to 0.98, and retraction distance had kappa values of 0.58 to 0.98. Combining studies mathematically into the equivalent of one large study (called a meta-analysis) was not done, as the studies reviewed used magnets of differing strength, different MRI imaging settings, and different imaging techniques. Atrophy of the rotator cuff muscle disconnected from bone by the full-thickness tear (a sign of an older tear) had inter-observer kappa values between 0.22 and 1.0, while fatty infiltration of the cuff muscle (another sign of a chronic tear) had kappa values between 0.1 and 0.99. This is a very wide range of reliability, meaning if a reader of MRI reports does not have experience with a particular radiologist to permit a judgment of that doctor's accuracy, it is hard to know the significance of many radiology reports.



A systematic review nine years earlier (Roy, 2014) used studies with older MRI technology and reported agreement of imaging with arthroscopy using different statistical measures. For rotator cuff tears, full thickness or partial thickness, MRI was correct at a rate of 91% (9% falsely labeled as no tear by MRI with a tear noted at surgery -sensitivity) and 86% (14% falsely labeled as a tear by MRI but no tear at surgery- specificity). MRA (magnetic resonance arthrography) and ultrasound studies with older technology had equivalent accuracy.

Magnetic resonance arthrography (MRA) is generally considered to be better at detecting labral tears compared to traditional MRI (Arirachakaran, 2017; Symanski,

2017). This is true even for the new generation or 3 Tesla magnet strength units (Ajuied, 2018). Obtaining MRI images in abduction and external rotation (an uncommonly used, non-standard position) increases MRI accuracy, like the “peel back” maneuver used by surgeons at arthroscopy to help differentiate SLAP tears from congenital anomalies (Shafiei, 2022).

Most radiologist reports, and most surgeon’s records in which the doctor saw the actual images, do not state the magnet strength, type of imaging, or machine settings, so a reader of medical records cannot know how to evaluate the accuracy of the reported findings to the published literature. While the literature has many published studies showing the existence of cases of MRI apparent rotator cuff tears and labrum tears, which at arthroscopy are shown to be false positive reports (no tear at arthroscopy), the BWC Utilization Review and Medical Impairment Rating Registry medical records rarely have a case with an MRI finding that was not “repaired” at surgery. Despite being commonly found in cadavers, MRI/MRA reports, and operation reports rarely identify the common congenital anomalies that can be misidentified as SLAP tears. No logical explanation is available for Tennessee surgeons or Tennessee radiologists being significantly more accurate than surgeons and radiologists in other states or countries. An older study (Theodoropoulos, 2010) used arthroscopy as the gold standard and found that fellowship-trained musculoskeletal radiologists were significantly more accurate than community radiologists.

Biases

Base rate neglect is failure to consider how common a finding is in the general population or asymptomatic population, and includes assuming a finding on imaging must be a source of symptoms. One study found 35%, 43%, and 88% of orthopedic surgeons ignored this concept completely (Janssen, 2021). Ignoring the base rate of imaging findings in older adults can lead to flawed conclusions as to the reason for symptoms.

In medical training, physicians learned that when a probable cancer appeared on an imaging study, it likely explained the patient’s symptoms. However, as humans age, normal (“degenerative”) aging changes occur. The hair color, facial wrinkles, hand x-ray, and low back MRI of a person at age 20 are not the same as they will be when that person is 60. “Age happens.” The prevalence of imaging findings in asymptomatic adults at the same age as the symptomatic patient must be considered before concluding the imaging finding is the cause of symptoms.

Confirmation bias is “where evidence that supports one’s belief is preferentially considered, and contradicting evidence is suppressed or ignored” (Janssen, 2021). An example of this bias is seen in medical records in which the surgeon’s physical exam findings from office visits before the MRI or EMG change after the surgeon has seen the testing report, and the physical exam findings then suddenly match those physical exam findings expected for the diagnosis supported by the testing (Suri, 2010; Calfee, 2009).

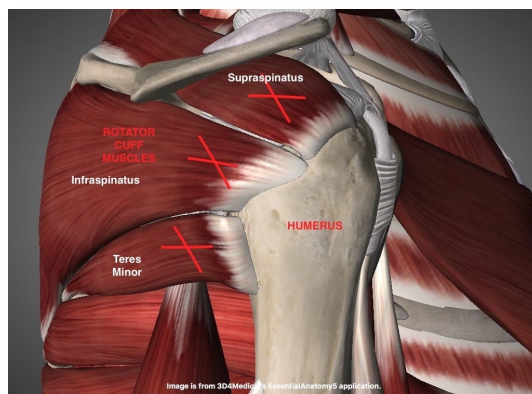
A dictionary definition of normal might be “conforming to a standard; usual, typical, or **expected.**” Failure to recall “What’s expected” at a given age compromises diagnosis and surgical planning. In this issue, we will now explore the shoulder as humans age. Failure to consider aging when evaluating shoulders is “Base Rate Neglect.”

Rotator Cuff Tears as We Age

Multiple studies have evaluated the rotator cuff in ASYMPTOMATIC ADULTS as we age. Sher (1995) reported on 25 asymptomatic adults aged 40-60 with 4% having a full-thickness cuff tear and 24% having a partial thickness cuff tear by MRI. In asymptomatic adults older than 60, 28% had full-thickness tears and 26% had partial-thickness tears. Reilly’s review (2006) reported dissection of 2,553 cadavers (*who tended to be old and may or may not have had symptoms when alive*) found 12% with full-thickness cuff tears and 18% with partial thickness cuff tears. That review noted four publications on MRI in asymptomatic shoulders found 10% with a full-thickness tear and 16% with a partial thickness rotator cuff tear.

Moosmayer (2010) compared 50 asymptomatic adults with full-thickness tears to 50 adults with shoulder pain and a full-thickness tear. MRI factors that predicted the tear would be symptomatic were a size larger than 3cm, a positive tangent sign (a sign of chronic supraspinatus atrophy), and Grade 2 or greater fatty infiltration of the supraspinatus and infraspinatus (another sign the tear is chronic).

These studies suggest that the presence of a rotator cuff tear in a symptomatic adult cannot be assumed to be the source of pain for that individual. There are studies of *asymptomatic* athletes, assuming sports



participation means high ergonomic stress on the shoulders of these young athletes. Full-thickness and partial-thickness cuff tears were found in 0%/33% of Little League baseball players' dominant shoulders (Pennock, 2018), 0%/25% of Professional Taiwanese baseball players (Su, 2019), 0%/65% of elite volleyball players (Lee, 2019), and 0%/6% of professional and collegiate hockey players (Hacken, 2019). Thus, having a partial thickness rotator cuff tear is compatible with asymptomatic high-level ergonomic use of a shoulder.

Of more interest are the studies of middle-aged adults presenting with unilateral shoulder pain, and having bilateral shoulder imaging to permit evaluation of the contralateral asymptomatic shoulder. Liu (2017) published a series of 189 Texas workers' compensation injury patients with an average age of 58 and bilateral MRI done for unilateral shoulder pain after a single incident at work. MRI was abnormal in 99% of the symptomatic shoulders and 98% of the asymptomatic shoulders. In the symptomatic shoulder, the structural changes were judged to be worse than the asymptomatic shoulder in 48%, bilaterally equal in 17%, and actually worse in the asymptomatic shoulder in 35% of these patients. The authors state "...most observers would accept that if the pathologic features are either less or equal in the symptomatic compared with the asymptomatic shoulder or knee, then the problem can likely be attributed to atraumatic age-related changes."

"These studies suggest that the presence of a rotator cuff tear in a symptomatic adult cannot be assumed to be the source of pain for that individual."

Boersma (2020) used 30 consecutive Texas workers' compensation patients over 40 years old with an acute workplace incident resulting in unilateral shoulder pain. Bilateral shoulder MRIs were obtained. The reports from musculoskeletal specialized radiologists were given to 97 American and European academic medical center orthopedic surgeons (primarily upper extremity surgeons), who were asked to **guess** which of the two shoulders was the "injured" side (*the authors' thesis is that the onset of symptoms from aging degeneration is misperceived as injury by patients, and that misperception is commonly accepted by treating physicians*). After randomization, 46 surgeons received just the MRI reports, while 51 also received the patient demographics (age, sex) and mechanism of injury (but no physical exam). A coin flip would have guessed the injured or symptomatic side 50% of the time, and overall 59% of the cases had the symptomatic side correctly identified ("...slightly more frequently than would be expected by random chance"). The kappa for interobserver agreement was 0.10. Patient demographics and mechanism of injury did not improve the surgeons' guesses.

Barreto (2019) evaluated 123 adults with unilateral shoulder pain with bilateral MRI, and the MRI was interpreted by both a radiologist and a shoulder surgeon. The radiologist diagnosed a partial thickness cuff tear in 27% of the symptomatic shoulders and 20% of the asymptomatic shoulders, while the shoulder surgeon found partial tears in 31% of the symptomatic and 22% of the asymptomatic shoulders. Full-thickness tears were diagnosed in 6% of the symptomatic and 1% of the asymptomatic shoulders by the radiologist, and in 20% of the symptomatic and 8% of the asymptomatic shoulders by the surgeon viewing the same images. Thus, the full-thickness tear and osteoarthritis of the glenohumeral joint were the only 2 of 12 MRI findings that were statistically more common in the symptomatic shoulders. In the introduction to this study, the authors note five previous studies have shown bilateral alterations in the MRI findings in individuals with unilateral symptoms, and 18 studies in asymptomatic individuals (no symptoms either shoulder).

The most recent study by Yoon (2023) of 428 patients having arthroscopic repair of a rotator cuff tear between 2019 and 2021 used three Telsa MRIs (new high-strength magnets). For the patients with unilateral shoulder pain, the contralateral asymptomatic shoulder had a supraspinatus and/or infraspinatus cuff tears in 65 of the 145 patients (44.8%). If the contralateral shoulder had some, but milder symptoms compared to the more symptomatic shoulder having surgical repair, 74.6% (185/248 patients) had a similar rotator cuff tear in the less symptomatic shoulder. These summed to 63.6% of the non-operated contralateral shoulders having a rotator cuff tear. Among those with a subscapularis tendon tear (with or without also having a supra- or infraspinatus tear), 67.8% of the contralateral shoulders had a subscapularis tear. Again, signs of chronicity on the MRI of the shoulder having surgery (fatty infiltration of the subscapularis muscle) predicted a similar subscapularis tear in the contralateral shoulder.

Full-thickness rotator cuff tears in the presence of pain and functional limitations, and failure to resolve symptoms with time and non-operative treatment, should be and usually are repaired. Small randomized controlled trials have reported mean Patient Reported Outcome Measures are still better than their pre-operative score at 7+ years (Waterman) and at 11 years (Woodmass, 2022). Most of the reoperations (about 10%) were in the first year or two for recurrent tears or repair disruption. Repairing full-thickness tears and preserving rotator cuff integrity helps prevent superior migration of the humeral head and the inevitable osteoarthritis (nicknamed rotator cuff arthropathy) that occurs with large unrepaired full-thickness rotator cuff tears.

What happens to full-thickness tears that are not repaired? The studies on bilateral imaging of patients with unilateral shoulder pain identify a population with asymptomatic rotator cuff disease. Mall (2010) reported on two-year follow-up of asymptomatic full-thickness cuff tears. Forty-four patients developed pain during follow-up, and 55 remained asymptomatic. In the group developing new shoulder pain over time, 18% of the full-thickness tears increased in size.

Moosmayer (2013) followed 50 asymptomatic full-thickness tears for three years, and 18 (36%) developed shoulder pain. An increase in the size of the cuff tear (in millimeters), associated muscle atrophy and fatty infiltration, and development of biceps tendon pathology were more common in the group developing shoulder pain than in the group remaining asymptomatic. Keener (2015) followed for almost three years the largest cohort of asymptomatic shoulders – 118 patients with full-thickness tears, 56 patients with partial-thickness tears, and 50 normal control patients. 61% Of the full-thickness tears enlarged over time, compared to 44% of the partial-thickness tears, and 14% of the age-matched normal shoulders (controls) developed a new rotator cuff tear (“age happens”).

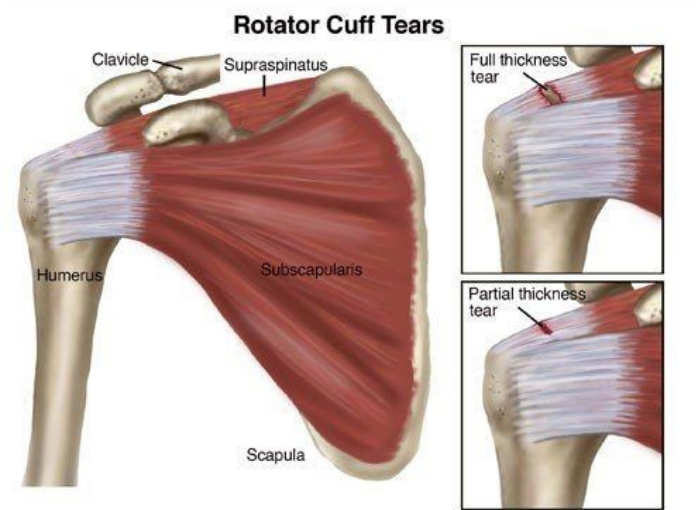
New shoulder pain in these initially asymptomatic shoulders developed in 50% of those with a full-thickness cuff tear, 46% of those with partial-thickness cuff tears, and in 28% of the controls (who had normal rotator cuffs on imaging at baseline).

Since partial thickness rotator cuff tears (or age-related thinning of the tendon) are so common, and may be asymptomatic, should they be “repaired”? As mentioned above, in Keener 2015, 44% of partial thickness cuff tears increased in size. Mall

(2010) found 40% of asymptomatic partial thickness tears became full thickness tears with two years of observation.

The conclusion is that rotator cuff disease, like life itself, is a progressive disease, and if a rotator cuff tear remains symptomatic and limits function, rotator cuff repair surgery is logical, whether the tear is full thickness or partial thickness.

Systematic reviews of outcome research have established that surgical shoulder pain patients in the workers’ compensation system have worse self-reported outcomes (pain and function) and worse return to work rates than do patients with



the same diagnosis and same surgery in the health insurance system (Harris 2005, Gruson, 2013; Fujihara, 2017; Dabija, 2017). This is logical. If the patient is told honestly that rotator cuff disease results from aging, genetics (Longo 2019, Tashjian 2009, Harvery 2004), and cardiovascular risk factors (Applegate 2017, Djerbi 2015, Bishop 2015, Hegmann 2023), the patient is treated with surgery, and then considers himself fixed, and returns to work. If, however, the patient is told “your job injured you,” the patient may have anger directed at the employer or fear of reinjury, both of which may result in reporting higher pain and lower function, and thus lower return to work rates.

Labral Pathology As We Age

The shoulder labrum has predictable aging change, similar to the rotator cuff. With anterior shoulder dislocations (most typically a sports injury), the anterior labrum is injured. The first description of injury to the superior labrum is credited to Andrews (1985), who described this as a repetitive traction injury from the pull of the long head of the biceps tendon on the superior labrum in throwing athletes, as the biceps helps decelerate the upper limb after the ball is released in the throwing motion.

Prior to Andrews, surgeons had been repairing full-thickness rotator cuff tears by primarily open surgery with good outcomes (Hawkins 1985). Surgery back then was done through small open incisions (either detaching the anterior deltoid, or small incisions through the superior deltoid) that permitted visualization and repair of the rotator cuff but did not permit visualization of the superior labrum. Thus, superior labrum degenerative tears may have been present, unrecognized at surgery, not repaired, and the patients did well. Today, at arthroscopy, the labrum and the rotator cuff are easily visualized, and it is common to see rotator cuff tears repaired with concomitant debridement or repair of the superior labrum or biceps tenodesis (to remove the pull of the biceps tendon on the superior labrum), and distal clavicular excision (to treat concomitant osteoarthritis in the Acromioclavicular joint).

These additional “add-on” surgeries may be because the pain-generating structure cannot be definitively known from history, physical exam, and imaging. However, most adults with age related rotator cuff tears are not throwing athletes, and case series (Forsythe 2010) and randomized controlled trials of rotator cuff repair with or without debridement/tenodesis/tenotomy for SLAP lesions (Oh 2016), and a randomized trial isolated SLAP repair versus sham surgery (Schrøder, 2017) have shown no improvement in outcome by SLAP repair. A systematic review (Erickson, 2015) concluded that age 40 and older and workers’ compensation status are

independent risk factors for surgical complications with repair of SLAP tear, and evidence supports labral debridement or biceps tenodesis, rather than SLAP repair, in these patients.

Similarly, a meta-analysis of studies of rotator cuff repair with or without distal clavicular excision (Wang 2018) showed no difference in any surgical outcome by adding the AC joint surgery. A case series (Yiannakopoulos, 2021) of rotator cuff repair patients with 185 AC joints judged as “clinically symptomatic” and 312 AC joints judged as “arthritic but asymptomatic,” with neither group having surgery on the AC joint at the time of cuff repair with a minimum follow up of 28 months, found no difference in clinical outcomes. Only two of the 185 with symptomatic AC joints had subsequent AC joint surgery, and only three of the 312 with asymptomatic AC joints had subsequent AC joint surgery. When the 1% who have subsequent surgery on the AC joint are reviewed, secondary distal clavicle excision surgery has good outcomes (Bismuth, 2023).

Like all pain, psychosocial factors affect pain and post-operative function after shoulder surgery (Gil 2018, Vogel 2022). An Italian study compared 196 grocery store cashiers to 302 controls shopping in the same stores (Sansone 2014). The prevalence of shoulder pain was significantly higher in the group of cashiers (46.4%) than in the general population (25.5%). Specific pain prevalence (meaning after a medical history and physical exam, the doctors could state a diagnosis other than “shoulder pain”) was higher among the controls (19.5%) than among the cashiers (13.2%). This illustrates the effect of psychosocial factors on pain (Thorpe 2018).

Summary

Churchill’s quote about Russia applies to shoulder injuries. Surgeons’ diagnoses vary when viewing the same arthroscopic images. Studies on the validity and reliability of MRI/MRA/ultrasound, which compared the accuracy of the diagnosis based on imaging to the arthroscopic findings, found a substantial lack of accuracy. Not all MRI findings are confirmed at arthroscopy, although the literature suggests there should be MRI findings that do not need to be repaired, but this is rarely seen in records submitted to the BWC.

A physical exam can say “something is wrong” with a shoulder, but only a few shoulder injuries can be reliably diagnosed based on a physical exam. There is consensus that shoulders with pain and function limitations despite time and physical therapy benefit from the repair of full-thickness and partial-thickness rotator cuff tears. Shoulder surgery today commonly includes multiple procedures, perhaps because the shoulder lesion producing symptoms is so difficult to diagnose. (Surgeons get paid for each procedure they do on the day of surgery).

Adding labral repair or distal clavicle excision to rotator cuff repair does not have evidence-based literature support for improved outcomes. Biceps tenotomy or tenodesis may have a role.

Shoulder pain is affected, as is all pain, by psychosocial factors, yet this is rarely considered in the medical records submitted to the BWC. Shoulder pain is "a riddle wrapped in a mystery inside an enigma."

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Yoon T-H, Kim S-J, Choi Y-R, et al. Age, Tear Size, Extent of Retraction, and Fatty Infiltration Associated With a High Chance of a Similar Rotator Cuff Tear in the Contralateral Shoulder Regardless of Symptoms in Patients Undergoing Cuff Repair in the Index Shoulder. *Arthroscopy* 2023; 39 (7): 1611-17. <https://doi.org/10.1016/j.arthro.2023.02.008>

Medical Abstracts of Interest

Regarding Shoulder Pathology

Selected by James B. Talmage, MD

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Arthroscopy. 2023 Jul;39(7) 1611-11617

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Age, Tear Size, Extent of Retraction, and Fatty Infiltration Associated With a High Chance of a Similar Rotator Cuff Tear in the Contralateral Shoulder Regardless of Symptoms in Patients Undergoing Cuff Repair in the Index Shoulder

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DOI: [10.1016/j.arthro.2023.02.008](https://doi.org/10.1016/j.arthro.2023.02.008)

Abstract

Purpose

To investigate the prevalence of a contralateral rotator cuff tear (RCT) in patients with a symptomatic RCT requiring repair and to determine whether findings from magnetic resonance imaging (MRI) of the affected shoulder can predict the presence of a contralateral tear.

Methods

Patients with atraumatic RCTs who had undergone arthroscopic repair between March 2019 and February 2021 were reviewed in this study. MRI of both shoulder joints was performed to evaluate the bilaterality of RCT. Demographic factors and MRI findings of index shoulders were assessed using logistic regression analysis to reveal any correlations with the presence of RCT in the contralateral shoulder.

Results

A total of 428 patients were enrolled in this study. When the affected shoulders had a posterosuperior rotator cuff (PSRC) or subscapularis tear including either an isolated or combined tear, 63.6% and 67.8% had the same tears on the contralateral side, respectively. A contralateral-side tear was found in 74.6% (185/248) of symptomatic cases and 44.8% (65/145) of asymptomatic cases, which represents a significant difference ($P < .001$). Logistic regression analysis revealed that age ≥ 67.5 years, tear size ≥ 17 mm, Goutallier grade ≥ 1.5 , and Patte grade ≥ 1.5 were found to be indicative of potential contralateral PSRC tears. By contrast, the presence of a subscapularis tear in the affected shoulder was the only significant risk factor in predicting a potential subscapularis tear in the contralateral shoulder.

Conclusions

Among patients with a symptomatic RCT requiring arthroscopic repair, 63.6% with a PSRC tear and 67.8% with a subscapularis tear in the affected shoulder were found to have a similar tear in the contralateral shoulder regardless of symptoms. Age, tear size, extent of retraction, fatty infiltration of PSRC tears, and the presence of subscapularis tears were identified as factors predictive of tears on the contralateral side.

Level of evidence

Level IV, case series.

Medical Abstracts of Interest

Regarding Shoulder Pathology

*Selected by James B. Talmage, MD
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Clini Orthop Relat Res. 2017 Oct;475(10):2360-2365

Patients Older Than 40 Years With Unilateral Occupational Claims for New Shoulder and Knee Symptoms Have Bilateral MRI Changes

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PMID: [28600690](#)

PMCID: [PMC5599397](#)

DOI: [10.1007/s11999-017-5401-y](#)

Abstract

Background

Minor events that occur in the workplace sometimes are evaluated with MRI, which may reveal age-related changes in the symptomatic body part. These age-related changes are often ascribed to the event. However, evidence of similar or worse pathophysiology in the contralateral joint would suggest that the symptoms might be new, but the pathophysiology is not.

Questions/purposes

Using a convenience sample of occupational injury claimants with bilateral MRI to evaluate unilateral knee or shoulder symptoms ascribed to a single event at work, we sought to determine whether MRI findings of the shoulder and knee are more often congruent or incongruent with new unilateral symptoms.

Methods

Two hundred ninety-four occupational injury claimants employed at companies throughout Texas that do not subscribe to workers' compensation insurance, who were older than 40 years, and with unilateral shoulder or knee symptoms, were studied. Starting in 2012, all patients seen by OccMD Group PA who present with unilateral symptoms ascribed to work undergo bilateral MRI, based on several previous occasions where bilateral MRI proved to be a compelling demonstration that perceived injuries are more likely age-related, previously well-adapted pathophysiology. MRI findings (anything described as abnormal by the radiologist; eg, defect size or signal change) was considered congruent if the abnormality of one or more structures on the symptomatic side was greater than that of the corresponding structures in the asymptomatic joint. Bivariate analysis was used to compare the frequency of MRI findings congruent and incongruent with symptoms. Logistic regression was used to evaluate factors associated with MRI findings of the shoulder or knee.

Results

Less than half of the patients with shoulder (90 of 189; 48%; $p = 0.36$) or knee (45 of 105; 43%; $p = 0.038$) symptoms had worse pathologic features on the symptomatic side. Older age was associated with disorders in the infraspinatus tendon (59 ± 8 versus 56 ± 8 years; $p = 0.012$), glenoid labrum (60 ± 9 versus 57 ± 8 years; $p = 0.025$), and biceps tendon (60 ± 8 versus 57 ± 8 years; $p = 0.0038$). Eighty-seven percent of patients (91 of 105) had structural changes in the medial meniscus described by the radiologist.

Conclusions

Occupational injury claimants 40 years of age and older with unilateral knee and shoulder symptoms ascribed to a work event tend to have bilateral age-related MRI changes. Age-related disorders should be distinguished from acute injury.

Level of Evidence

Level IV, diagnostic study.

Medical Abstracts of Interest

Regarding Shoulder Pathology

*Selected by James B. Talmage, MD
Published verbatim from PubMed.gov, in the public domain.*

J Occup Environ Med 2023 Aug 1:65(8):e527-e533

Cardiovascular Disease Risk Factors Predict the Development and Numbers of Common Musculoskeletal Disorders in a Prospective Cohort

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PMID: **37264528**

PMCID: [PMC10417266](#)

DOI: [10.1097/JOM.0000000000002895](#)

Abstract

Objective

The aim of the study is to assess risk of common musculoskeletal disorders (MSDs) based on cardiovascular disease (CVD) risk scores.

Methods

Data from a 9-year prospective cohort of 1224 workers in three states were analyzed. Baseline data included questionnaires, structured interviews, physical examinations, anthropometric measurements, nerve conduction studies, and individualized measurement of job physical factors. Monthly follow-ups were conducted. Framingham risk scores were calculated. A priori case definitions were constructed for carpal tunnel syndrome, lateral epicondylopathy, medial epicondylopathy, and rotator cuff tendinopathy.

Results

Adjusted RRs for one or more MSDs increased to 3.90 (95% confidence interval, 2.20-6.90) among those with 10-year cardiovascular disease risk scores greater than 15% and 17.4 (95% confidence interval, 3.85-78.62) among those with more than 4 disorders.

Conclusions

Cardiovascular disease factors are strongly associated with the subsequent development of common MSDs. Risks among those with multiple MSDs are considerably stronger.

Conflict of Interest Statement

Conflict of interest: K.T.H. is the Editor-in-Chief of the American College of Occupational and Environmental Medicine's Evidence-Based Practice Guidelines. D.L.D. has received payments from the University of Wisconsin at Milwaukee (UW System). R.K. has received funding for committee work for the American Board of Anesthesia.

Case Law: Complex Shoulder Injuries Yield Causation Questions

Jane Salem, Staff Attorney, Nashville



In a perfect world, doctors would always agree as to the work-relatedness of an injury. In the real world, they don't. Reasonable minds can differ.

The causation opinion from a physician chosen from a panel is presumed correct under the Workers' Compensation Law, but that opinion can be rebutted by a preponderance of the evidence. That happened in a pair of fairly recent cases involving shoulder injuries.

This article summarizes the cases and discusses what the attorneys and authorized physicians might have done differently.

Reliance on A 'Practice Extender'

In *Hagan v. Potomac Corporation*, the employee reported a shoulder injury from pulling and pushing pallets at work. She selected an occupational clinic from a panel, where a nurse practitioner saw her, and the notes were cosigned by an internal medicine specialist. The Bureau's rules allow nurse practitioners, physician assistants, and other "practice extenders" under supervision to "provide medical treatment ordered by an attending physician."

The nurse's notes did not describe a work accident but instead said the employee reported worsening pain in her arm and shoulder as her workday progressed. The nurse ordered an MRI, which revealed a rotator cuff tear and acromioclavicular osteoarthritis.

The supervising physician wrote in response to a causation letter, "Supraspinitis tears can be caused acutely by suddenly lifting something too heavy, falling on your arm, or dislocating your shoulder." None of those events occurred, the doctor added, so the employee's condition didn't arise primarily from work but was caused by degenerative changes.

Based on that opinion, the claim was denied. The employee sought treatment from an orthopedic specialist, who surgically repaired the torn rotator cuff.

After the procedure, he wrote in a letter that "there were no features on her diagnostic imaging or at the time of surgery that would clearly indicate that this was

a chronic tear in her left shoulder.” He continued, “Therefore, in the setting of an appropriate mechanism, I would conclude that her injury is greater than 50% work-related.”

After an expedited hearing, the trial judge accepted the surgeon’s opinion over the authorized doctor’s. The Appeals Board affirmed.

The Board wrote that the employee reported to both doctors that she felt increasing pain after “manipulating pallets at work,” but the authorized doctor or his nurse practitioner “elected to interpret this as a failure to identify a sudden, acute event.”



The judge and Board rejected that interpretation, reasoning that the authorized doctor “did not actually see the patient in a clinical setting but reviewed and ‘signed off on’ the reports of the nurse practitioner. The court further noted that [the surgeon] had the opportunity to view the internal structure of Employee’s shoulder during surgery.” In addition, the Board nixed the employer’s argument that the employee gave “false,” “curated” or “inconsistent” statements to the surgeon.

Diagnose First; Then Decide Causation

In *Grissom v. AT&T Services, Inc.*, a heavy ladder fell on the employee’s outstretched arm. A panel-selected orthopedist later performed arthroscopic decompression surgery to repair the labrum.

A few months later, the employee began feeling “tingling and burning” radiating from his neck down into his fingers on the same side. The authorized doctor called that a “new complaint” and wrote that it was unclear whether it would “fall under the purview of his workers’ comp claim.”

At the next visit, the doctor recommended an MRI of the cervical spine, which he said was not part of the current claim. At the next visit, he said the neck and radiating complaints were a separate claim.

The employee began treating on his own. A provider at a neurology clinic ordered a cervical MRI and EMG, and then referred him to an orthopedist.

The unauthorized doctor viewed the test results and ordered another shoulder

MRI. Ultimately, he performed a suprascapular nerve release. Afterward, he wrote in response to a letter that the EMG and later treatment were “causally related to [Employee’s] work injury . . . by greater than 50% considering all causes.”

After an expedited hearing, the judge accepted the unauthorized doctor’s opinion and ordered additional treatment with him.

The Board affirmed. The Board agreed with the trial court that the authorized physician recorded “new” complaints and speculated that they stemmed from the employee’s cervical spine. He gave no diagnosis, however, and noted that the additional testing he recommended might not be covered by workers’ compensation. The doctor reached that conclusion without evaluating the upper extremity and before the diagnostic testing.

“[N]one of [the authorized doctor’s] reports mention suprascapular neuropathy as a potential diagnosis,” the Board wrote. “It is incongruous for Employer to argue that [he] offered a causation opinion for a condition that had not yet been diagnosed.”



Legal, medical ramifications

Both cases involved “interlocutory” or *non-final* orders. The employee’s burden at that stage is “likely to prevail at a hearing on the merits.” This is a lesser degree of proof than must be offered at a final compensation hearing, which is the preponderance-of-the-evidence standard.

In *Hagan*, the judge ruled based on a record review and did not have an opportunity to view the employee’s demeanor. Perhaps the employer could have made a stronger case about “inconsistencies” if the hearing had been in-person, and the employee had been cross-examined.

In *Grissom*, the case was tried without deposition testimony. Frequently when medical causation is disputed, even at the interlocutory stage, the doctors are deposed to elicit detail and potentially discover flaws in their reasoning.

The employer argued that the unauthorized doctor’s response to a causation letter, and the fact that he admitted not having all of the initial treatment records, was insufficient proof for the employee to satisfy his burden. The Board disagreed, based on *all* of the evidence.

Returning to *Hagan*, while the rules allow for “practice extenders,” they also state, “[O]nly the supervising physician . . . may determine medical causation[.]” So, the implications for *all medical professionals* are to listen and record accurately the employee’s account of how she became injured. Also, given the complexity of this shoulder injury, it seems the authorized physician needed to examine it.

Finally, on *Grissom*, the implication for medical providers is, well, don’t jump the gun.

Things We Wish Every Authorized Treating Physician Knew About the TN Workers' Compensation Act Before Treating Our Clients

Rhoberta Orsland, Esquire; Jonathan May, Esquire

French writer and philosopher Voltaire famously wrote that “with great power comes great responsibility.” If there is one participant in the workers’ compensation system that holds “great power,” it is the authorized treating physician or ATP¹. That power comes in three very specific forms: the ATP’s assignment of anatomical permanent impairment, determination of causation, and the presumption of correctness afforded to the ATP opinion on medical necessity of recommended treatment. Moreover, the ATP’s statement about a patient’s ability to work is critical, as the ATP’s work status decision dictates whether the patient will be compensated for time he or she is unable to work while under the ATP’s care.

As part of these powers, the ATP sometimes inadvertently drops their patient into a virtual black hole where neither the workers’ compensation carrier nor the patient’s own health insurer will pay for continued treatment. The goal of this article is to explain these powers in more detail and make sure that whatever you choose to order, you do so with an understanding of the impact your decisions will have on a claim. As advocates for your patient, we want to ensure that you as practitioners understand how your decisions affect your patients in the workers’ compensation system in hopes that this knowledge will assist you in wielding your power.



Maximum Medical Improvement and Impairment Ratings

We will begin at the end by looking at the decisions that must be made in completing a C-30A Final Medical Report and how those decisions can affect your patients.

One of the first decisions that a doctor must make in completing this form is identifying the date that the patient reached maximum medical improvement or MMI. Generally, MMI is reached when the patient’s medical condition has stabilized and further improvement is unlikely. The date of MMI is important because

¹To be considered an ATP, a doctor must have been selected by the patient from a panel of physicians or the patient must have been directly referred to the doctor by a prior ATP.

temporary disability benefits cease on that date. Temporary disability benefits are the payments patients receive while treating when they are unable to work or are earning less while performing a light-duty position.

Several issues can arise when making this determination, the most problematic is when the determination is applied retroactively or prospectively. Here are some examples of how challenges can arise for all parties in the workers' compensation system.

Prospective MMI

The ATP orders two weeks of work hardening to see if the patient can return to her pre-injury employment. Up to this point, the ATP has kept the patient off work while she has treated. On the date the ATP orders the work hardening, the workers' compensation carrier sends the ATP a questionnaire asking if the patient has reached MMI. The ATP checks a box stating, "yes." As of the date the ATP answered the questionnaire, the patient's temporary disability benefits end, and she becomes ineligible for payment while completing her two weeks of work-hardening. Of course, because those two weeks are taken up by work-hardening, and the restrictions have not been lifted, the injured worker cannot earn income during those two weeks. Here, declaring MMI before the work hardening is completed creates a significant financial burden for the patient, which would be avoided by deferring a final decision about MMI until the patient completes the work hardening and returns for a final office visit with the ATP.



Retroactive MMI

Sometimes we see injured workers who have been unable to receive the treatment ordered by the ATP due to Utilization Review non-certification or other delays in care related to the procedures for handling a workers' compensation claim. Occasionally, when the ATP fills out the C-30A Final Medical Report, he or she will identify an MMI date that passed months earlier. This is problematic when the patient has been receiving temporary benefits up until that point. A retroactive MMI date creates a serious challenge for all of the parties. In these circumstances, the patient may owe the insurer a "credit" against the amount of their permanent benefit award under the statute. If that credit surpasses the amount of permanent disability benefits that are owed, the parties struggle to

settle the claim and patients often choose to close out the lifetime future medical benefits in exchange for an insufficient monetary award.

Delays in obtaining the C-30A Final Medical Report are another source of frustration for everyone. While the report should be completed within twenty-one days of MMI, we occasionally see Final Medical Reports that are completed weeks or even months later. The patient cannot complete their workers' compensation claim until that report is received. Again, because temporary disability benefits cease at MMI, if those patients are unable to return to work or were not offered a job at MMI, they will go without income while we are waiting for that C-30A Final Medical Report.

Turning to permanent impairment, which is also addressed in the Final Medical Report, some physicians believe that the workers' compensation law pays lifetime monetary benefits. That is not the case in Tennessee². Permanent partial disability benefits are calculated by multiplying the impairment rating assessed by the ATP using the 6th Edition of the AMA Guides to the Evaluation of Permanent Impairment by 450 weeks, and then multiplying the resulting number of weeks by the patient's compensation rate. The patient's compensation rate is 66 2/3% of his or her average weekly wage based on gross earnings from the year before the work injury.

Let's look at an example using concrete numbers, so these ideas are less abstract.

An injured worker suffers a medial meniscus tear and at MMI is assigned a 1% to the body. In this case, the patient would be entitled to a total of 4.5 weeks of permanent benefits. If before the injury the patient had an average weekly wage of \$600.00, then the weekly compensation rate for both permanent and temporary benefits is \$400.00³. Therefore, based on the 1% impairment, the injured worker is owed \$1,800.00 in permanent benefits. If the injured worker has not found employment earning at least the same or greater wage within 180-days of MMI, she may be owed a secondary award for "increased benefits," which is slightly larger if the patient is (a) over the age of 40, (b) lacks a high school education or GED, or (c) lives in a county with a high unemployment rate. Even if this hypothetical employee were to receive all of the multipliers (which is rare), the award increases to \$5,496.66.

Nobody would agree that amount of money compensates a patient who is unable to return to work. These awards are typically paid out in a one-time, lump-sum payment. As this example illustrates, permanent partial disability awards are primarily influenced by the patient's pre-injury earnings and the permanent

²In very rare circumstances, like paralysis or traumatic brain injury, a person could be found to be 100% excluded from employment and get weekly benefits until they reach Social Security Retirement, but this is only for exceptionally severe injuries and will not apply to most of your patients.

impairment rating assigned by the ATP, and they typically do not yield a substantial monetary award under Tennessee workers' compensation law.

While lawyers are not particularly good at math, we know that anything multiplied by zero will result in zero. For this reason, 0% impairment ratings often create the hardest choices for patients, as they will technically not be owed any monetary award. What they are owed under the law is lifetime medical care with the ATP as long as the future care primarily arises out of the original injury (as determined by the ATP). When people have a 0% rating, the only meaningful option available to them is to negotiate their right to lifetime medical care, which is often not in a patient's best interest. This can be especially problematic for individuals with permanent hardware or with permanent restrictions, and it leaves those patients with very bad options.

When it comes to MMI, restrictions, and impairment, both employees and employers look to the ATP for guidance. Ultimately, we are all just trying to get to the right answer on these issues, and the ATP's opinions are key to that answer.

Causation

Regardless of how confident the patient, adjuster, or attorney may be about their own analysis of what caused the patient's injury, the ATP is the person best suited – and empowered by the Tennessee Legislature – to make that determination. The only treatment that workers' compensation is required to provide is treatment that “primarily arises” out of the patient's employment or work-related event⁴.

During the course of a claim, ATPs are often asked to decide causation, as employers/insurers want to ensure they are only paying for treatment that primarily arises out of the employment. Of course, this analysis can challenge an ATP, who is understandably less concerned with “why is this treatment needed” than with “that this treatment is needed.” For that reason, the quicker the ATP can provide a causation opinion, the less time the patient will be in limbo waiting to get the necessary medical care.

However, where the ATP determines that a patient's current condition is no longer related to the work injury, the patient could get caught in a black hole where neither the workers' compensation carrier nor the patient's own health insurer will pay for continued treatment of the injury. In these types of scenarios, we would ask practitioners to give the question appropriate consideration and document the

³As of July 1, 2022, the “maximum” weekly compensation rate for permanent benefits is \$1,121.00, and the “minimum” weekly compensation rate is \$168.15. Most injured workers fall somewhere between these, of course.

reasoning behind the decision in hopes that the patient will not get stuck without any coverage for the condition.

Medical Necessity

One of the most frustrating aspects of treating an injured worker is the Utilization Review process. While the statute provides that the ATP has a presumption of correctness about medical necessity, the governing regulations provide the insurer with an opportunity to submit certain medications and treatment modalities for Utilization Review.



As counsel for injured workers, we are frequently copied on the Utilization Review decision to non-certify the ATP's recommended treatment. Our hope is that upon receipt of this notice, the ATP's office will take the time to sign the appeal form and submit it to the Medical Director. We understand that most of your clinics are not set up to handle that administrative burden, and we have begun to submit those appeals on behalf of the patient ourselves, though admittedly we do not have anything to contribute to the conversation on medical necessity.

If you find that you are struggling to treat the patient, we encourage you to take the time to file the appeal. The non-certification decision might be overturned by the Medical Director. Even when they are not overturned, the Medical Director will often respond with additional or alternative treatments should be considered before proceeding with the non-certified modality. If no appeal is taken, the non-certification is binding for six months unless a change is documented in the patient's condition that would support the ATP re-ordering the non-certified modality.

Conclusion

As you can see, both patients and employers will look to the ATP to share their unique expertise to help the parties navigate the workers' compensation system. We know that you take your role as the ATP seriously, and we hope after reading this article you have a better understanding of the power you hold and the reasons that someone may reach out to you for clarification on questions like causation, work status, date of MMI, or impairment.

⁴The term "primarily arises" has been defined as "more than fifty percent (50%) . . . considering all causes." Tenn. Code Ann. § 50-6-102(12)(B) (2022).



Rhoberta Orsland has called Memphis home for the last 30 years. She graduated cum laude from Rhodes College in 1999 before enrolling at the University of Tennessee College of Law. She earned her doctor of jurisprudence and obtained her license to practice law in Tennessee in 2002.

Ms. Orsland clerked for Justice Janice M. Holder with the Tennessee Supreme Court until 2004. Thereafter, she went on to work for an insurance defense firm where she primarily handled workers' compensation cases before accepting a Workers' Compensation Specialist position with the Tennessee Bureau of Workers' Compensation. During her time as a Specialist, Ms. Orsland mediated workers' compensation claims, evaluated workers' compensation settlements for approval, and issued orders determining entitlement to workers' compensation benefits. Over the last seven years, Ms. Orsland served as a staff attorney for the Court of Workers' Compensation Claims, assisting Judges Jim Umsted and Deana Seymour with cases assigned to the Memphis Court.

Ms. Orsland and her husband live in midtown Memphis with their two children. She co-owns Liberation Escape Rooms in Southaven, Mississippi and volunteers with several organizations that serve Memphis's homeless population. She is an active member of her church and loves to write music in her spare time.



Jonathan Louis May is an attorney at Morgan & Morgan, where he devotes his practice to representing employees in workers' compensation claims. Mr. May has extensive experience handling car and truck accidents, workers' compensation claims, premises liability claims, medical malpractice actions and insurance denials and/or bad faith actions. Mr. May has litigated matters in state and federal courts throughout Tennessee, as well as arguing cases before the Tennessee Court of Appeals. Mr. May was named a Mid-South SuperLawyers® Rising Star in 2012, 2013, 2014, 2015 & 2016. Mr. May is also certified as a civil mediator under Tennessee Supreme Court Rule 31. Mr. May was named one of the Memphis Business Journal "Top 40 Under 40" in 2017 in recognition of his service to the community as both an attorney, sports media contributor and small business owner.

Mr. May was born and raised in Memphis, and is a graduate of Ridgeway High School. In 2004, he earned his Bachelor of Arts from the University of Alabama. Mr. May continued his education and received his Juris Doctorate upon graduating Cum Laude from the University of Tennessee in 2008. During law school, Mr. May was a member of the American Association for Justice Mock Trial Team and the Robert F. Wagner National Labor & Employment Moot Court team, and was selected to the Order of Barristers, a national honorary organization recognizing oral advocacy and brief writing skills.

In addition to his litigation practice, Mr. May has been an active member of the Memphis Bar Association and Tennessee Bar Association. He is a 2015 graduate of the Tennessee Bar Association Leadership Law class, and serves as a member of the 2017-2019 TBALL steering committee. Mr. May served as a member of the Memphis Bar Association Young Lawyers Division Board of Directors in 2014 before being elevated to Vice-President in 2015. He was elected by his peers to serve as President of the MBA-YLD in 2016. In 2016, Mr. May also completed an intensive seven day trial advocacy training program held at Stanford University in California. Mr. May and his wife have three young children and live in East Memphis. The May family enjoys spending time together at the Memphis Zoo, Shelby Farms Park, and Children's Museum of Memphis. Mr. May is a good cook, a mediocre golfer, and an outspoken fan of the Memphis Tigers, Memphis Grizzlies, Alabama Crimson Tide and Atlanta Braves. Mr. May co-created and co-hosted a weekly sports talk radio program, 3 Shades of Blue Radio, about the Memphis Grizzlies on Sports 56 WHBQ from 2013 through 2017. He and his wife also founded a local clothing company, 901 Collection, which celebrates Memphis while raising money to support local charities such as Youth Villages, Shelby Farms Park Conservancy, West Cancer Center, Mid-South Spay and Neuter and the Mid-South Food Bank.

Update on the Certified Physician Program

Jay Blaisdell, MPA



The Tennessee Bureau of Workers' Compensation placed the Certified Physician Program (CPP) on hold last year pending the approval of legislation that authorizes the program. Also known as the "Workers' Compensation Administrative Bill," the legislation was introduced to the Tennessee General Assembly on January 19, 2023, passed the Senate on February 16, 2023, and passed the House on March 13, 2023. The bill became law when Governor Bill Lee signed it on April 13, 2023. On September 20, 2023, the General Assembly's Government Operations Committee reviewed and approved the program rules, Tennessee Rules and Regulations Chapter [0800-2-33](#), that will govern the CPP.

With these hurdles behind us, I am happy to report that the Certified Physician Program will resume operations on November 1, 2023. On or after that date, physicians will once again be able to register and take the Bureau's free, online course, "Best Practices for Treating and Evaluating Injured Workers," which is required for those seeking an appointment as a Certified Physician. Other requirements include having a current and unrestricted license to practice medicine, osteopathy, or chiropractic in Tennessee, having malpractice insurance, being board-certified or board-eligible, and obtaining approved training in the AMA Guides, 6th Edition. Physicians who meet these requirements may apply for appointment on or after November 1, 2023.



The names of Certified Physicians will be posted on the [CPP website](#). These physicians have agreed to treat and evaluate workers' compensation patients and follow the best practices taught in the Bureau's online course. Consequently, they are eligible to earn "add-on" fees in their workers' compensation practice: an additional \$80 for initial assessments (billed as Z0815), an additional \$40 for each follow-up visit (billed as Z0816), and an additional \$100 for completing the Final Medical Report, C30-A (Z0817).

Owing to the pause in the program, physicians who have already been appointed will start their three-year term anew on November 1, 2023. Physicians who are interested in becoming certified should visit the CPP website and register their email address. If you have any questions, please visit the CPP website and see our [FAQ](#), or feel free to contact me at Jay.Blaisdell@tn.gov.

AdMIRable Review Editorial Staff

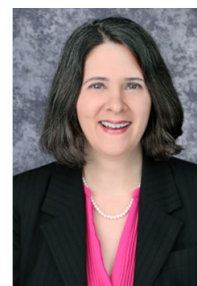
Kyle Jones

Kyle Jones is the Communications Coordinator for the Tennessee Bureau of Workers' Compensation. After receiving his bachelor's degree from MTSU, he began putting his skillset to work with Tennessee State Government. You will find Kyle's fingerprints on many digital and print publications from videos to brochures published by the Bureau. Kyle believes that visuals like motion graphics can help explain and break down complex concepts into something more digestible and bring awareness to the Bureau's multiple programs that are designed to help Tennesseans.



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Sarah Byrne is a staff attorney for the Court of Workers' Compensation Claims. She has a bachelors' degree in journalism from Belmont University and a masters' degree in English from Simmons College in Boston. After working in religious publishing and then state government, she earned a law degree from Nashville School of Law in 2010. She first joined the Bureau of Workers' Compensation in 2010 as a mediator.



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Brian Homes is the Director of Mediation Services and Ombudsman Services for the Tennessee Bureau of Workers' Compensation. In this role, he directs policy and leads twenty-three mediators and six ombudsmen as they educate the public about workers' compensation and help resolve benefit



disputes. He has had the privilege of helping thousands of injured workers, their employers, and insurance companies make informed decisions. A 17-year veteran of the Bureau, he has, of recent, created and implemented the Next Step Program, which assists unemployed workers' compensation claimants return to the workforce.

Robert B. Snyder, MD

Dr. Snyder was appointed Medical Director for the Bureau of Workers' Compensation in January, 2014 after 37 years of private practice in Orthopaedics. He graduated from Wayne State University School of Medicine in Detroit and completed two years of general surgery training at the University of Pittsburgh before he came to Nashville, completing his residency in Orthopaedics and Rehabilitation at Vanderbilt University. Dr. Snyder has presented lectures for the American Academy of Orthopaedic Surgeons, Arthroscopy Society of Peru, the American Orthopaedic Society for Sports Medicine, the National Workers Compensation and Disability Conference, the National Association of Workers Compensation Judges, and in Tennessee: the Chiropractic Association, the Orthopaedic Society, the College of Occupational and Environmental Medicine, the Pain Society, the Neurosurgical Society, the Tennessee Medical Society, and Tennessee Attorney Memo. He has made numerous other presentations to attorneys, case managers, employers, adjusters and insurers. His activities with the Bureau have focused on Medical Treatment Guidelines, the Drug Formulary, Utilization Review, Case Management, Fee Schedules and physician/provider communications.



James B. Talmage, MD

Dr. Talmage is a graduate of the Ohio State University for both undergraduate school (1968) and medical school (1972). His orthopedic surgery training was in the United States Army. He has been Board Certified in Orthopaedic Surgery since 1979 and also was Board Certified in Emergency Medicine from 1987 - 2017. Since 2005 he been an Adjunct Associate Professor in the Division of Occupational Medicine, Department of Family and Community Medicine at Meharry Medical College in Nashville. In 2013 he was Acting Medical Director for the State of Tennessee Division of Worker's Compensation. In 2014 he became Assistant Medical Director for the renamed Bureau of WC. He has been an author and co-editor of the AMA published books on Work Ability Assessment, and the second edition of the Causation book. He was a contributor to the AMA Impairment Guides, 6th Edition,



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