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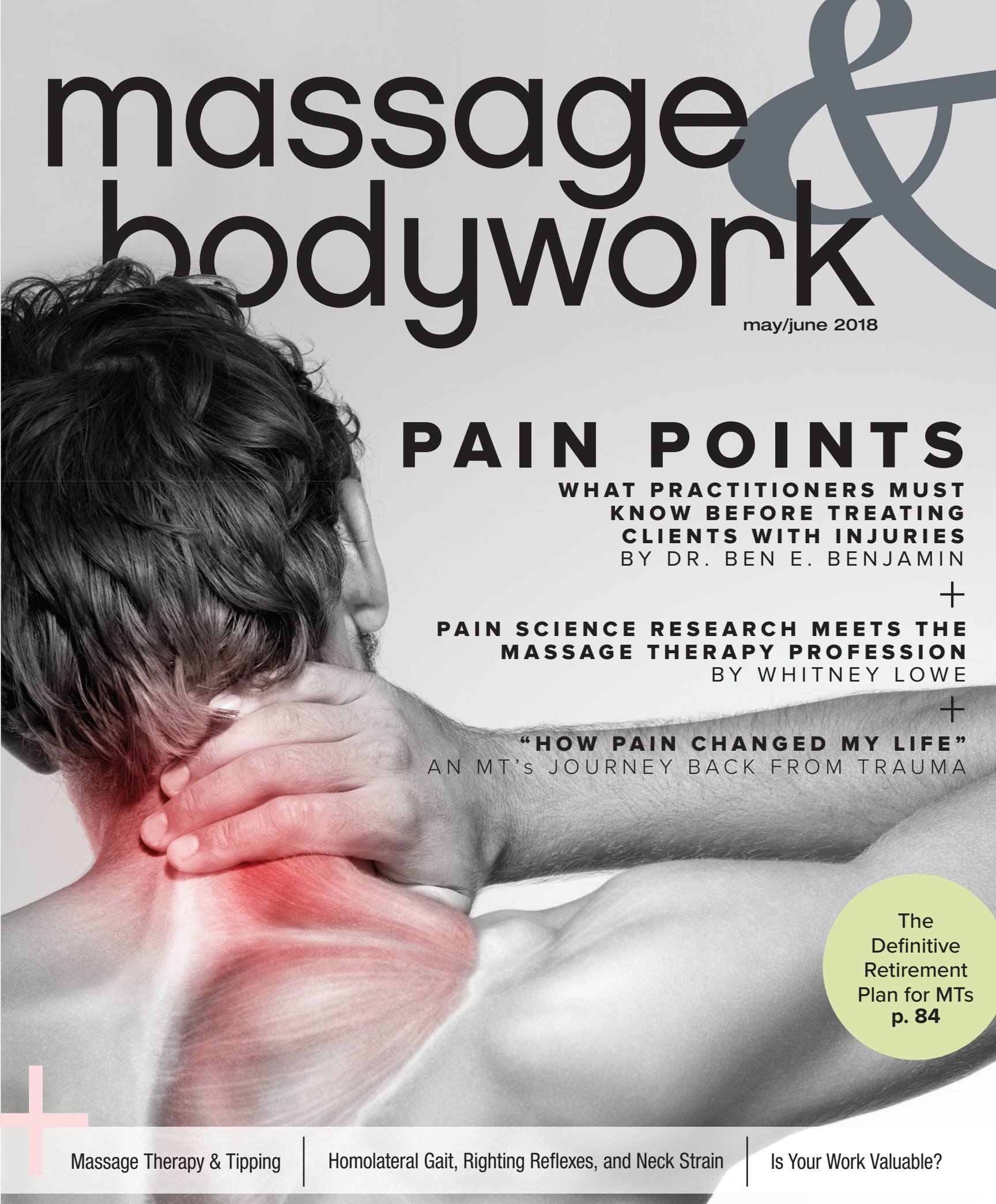

PAIN POINTS

WHAT PRACTITIONERS MUST KNOW BEFORE TREATING CLIENTS WITH INJURIES

BY DR. BEN E. BENJAMIN

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PAIN SCIENCE RESEARCH MEETS THE MASSAGE THERAPY PROFESSION

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"HOW PAIN CHANGED MY LIFE"

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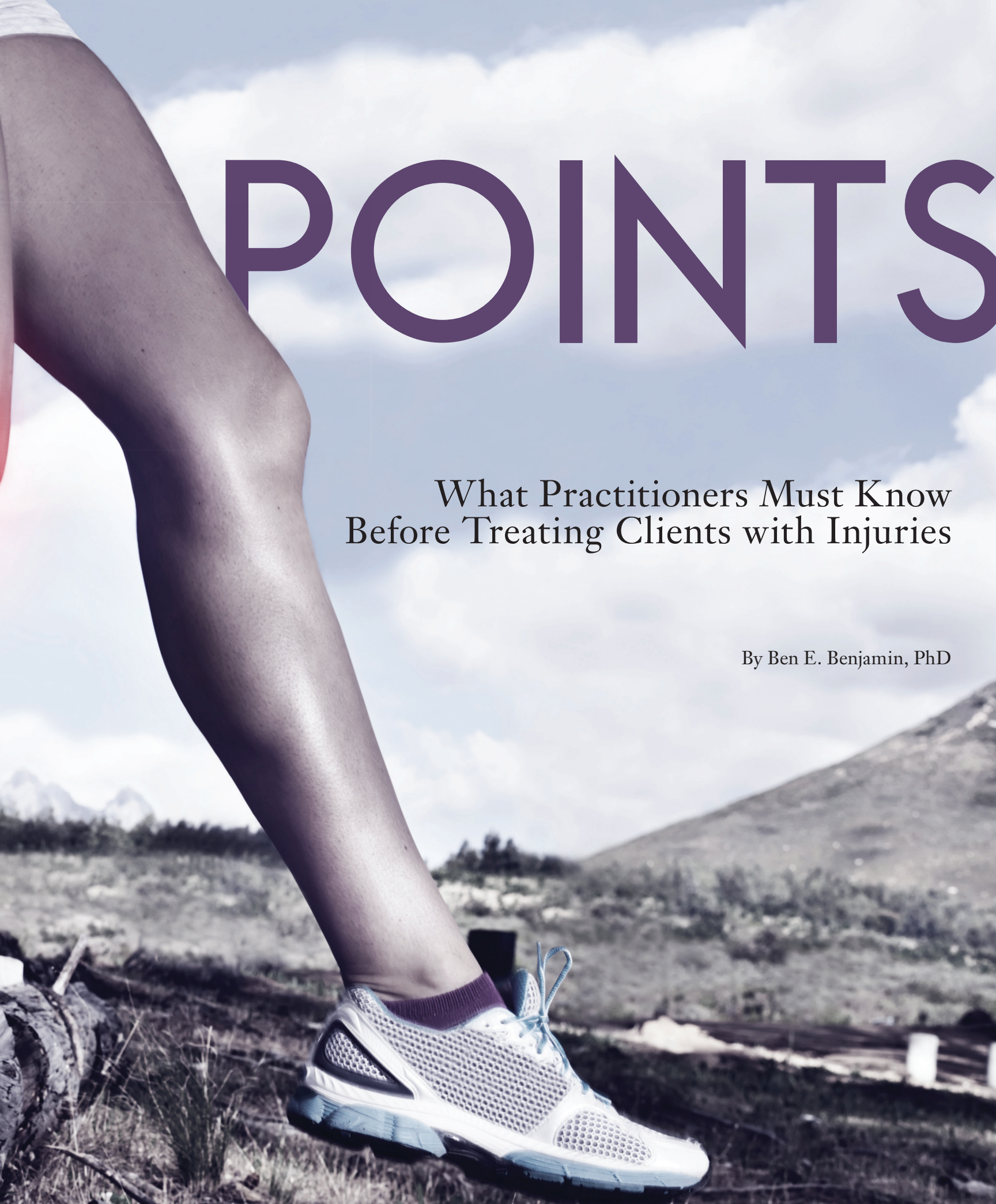
PAIN



POINTS

What Practitioners Must Know Before Treating Clients with Injuries

By Ben E. Benjamin, PhD

FORWARD

This excellent article from Ben Benjamin shines a light on a much-needed subject for discussion in the massage therapy profession—the widespread inability of massage therapy graduates to translate functional anatomy into physical assessment before massaging clients who report pain and dysfunction. The missing link, in my opinion, has always been a lack of orthopedic assessment skills tailored to massage therapy.

What I like most about this article are the specific educational solutions Benjamin offers. Under the "Pathways to Learning and Mastery" section, he eloquently outlines strategies for massage therapists to fill this void in assessment skills.

A skilled massage professional is able to accurately recognize both indications and contraindications and knows when to refer for additional health and medical intervention. In many cases, a massage therapist may be the only provider who sees a client on a regular basis, thereby serving as the first line of health and wellness defense. Proper training in assessment helps massage therapists make good decisions about treatment and referral.

I hope this article inspires my fellow massage educators to teach skills that will contribute to massage therapists being recognized as equal partners in the care of people in pain.

Benny Vaughn, LMT, ATC, CSCS, owner Benny Vaughn Athletic Therapy Center

At some point, all practitioners in the massage and bodywork field are asked to treat clients who are experiencing musculoskeletal pain, usually due to injury. If we choose to work on injuries, then we are responsible for having the appropriate training, skills, and knowledge to assess the client and determine if we can safely treat them. Common malpractice suits against massage therapists can result from a massage therapist's failure to refer the client or collect all the important information (omission), or from acts that result in harm to a client (commission).[1] Sometimes therapists inadvertently hurt their clients and remain unaware of this mistake because the client never returns. The cases I am called to testify in are because the therapist and/or the organization they work for are being sued for clients' injuries as a result of these errors. The following are examples based on real cases.

CASE #1

A few years ago, I was asked to testify in a case where a massage therapist performed a deep-tissue massage on a client with shoulder discomfort. The client left the session in such shoulder pain that she required multiple surgeries to recover.

CASE #2

In another case, a therapist worked on a client who complained of discomfort in her leg. After a 45-minute session, the client immediately lost the use of her lower leg and foot. The therapist told the client that was to be expected and it would go away in a day or so. The client lost the use of her foot for several months and continues to have ongoing weakness and tremors in her lower leg and foot.

CASE #3

A client came in for a massage complaining of tension in his mid-back. During the massage, both the client and the massage therapist heard a popping noise that seemed unusual. The client experienced pain that did not go away and eventually sought medical treatment. A physician ordered an X-ray that showed a rib was broken. The client demanded the therapist cover medical bills and loss of income.

CASE #4

A client came in complaining of some discomfort in the neck. Using his elbow, the massage therapist worked with intense pressure on the client's neck. After the session, the client was in so much pain, he was unable to lift his arm.

These cases demonstrate the need to address the knowledge and skills necessary to work responsibly on clients in pain from a musculoskeletal injury. I will also detail the various pathways toward competence and mastery.

5 Questions to Ask Yourself

(before working on clients with pain)

1. Do you have an excellent knowledge of anatomy?
2. Can you locate and/or palpate the 200-plus commonly injured structures in the body?
3. Do you know how to perform all the necessary assessment tests for the various parts of the body?
4. Can you easily tell what you can and cannot treat, and refer appropriately?
5. Do you have the treatment skills to address all of the most common injuries?

THE IMPORTANCE OF PHYSICIAN REFERRAL

We cannot know what we do not know. In order to safeguard the client and the practitioner, every client in pain should see a physician if they have not already done so. Let me give you an example of a situation where this was critically important.

A client came to see his therapist complaining of neck pain and a slight headache. After a detailed history, he was taken through a series of assessment tests. The therapist found very, very weak muscles in the neck by doing resisted rotation, resisted side flexion, resisted extension, and resisted forward flexion. From his training, and having tested many clients, the therapist knew this was very unusual and likely indicated a serious medical problem. He also noted some muscle and neck ligament injuries that could be amenable to his style of treatment. The history also revealed this client had not seen a physician about his neck and head pain, and he was afraid of doctors because of a bad experience when he was in a hospital when he was younger.

Luckily, this therapist had good judgment and communication skills he had learned in his basic massage training. The therapist gently, but firmly, recommended that the client see a doctor soon because he saw some things he did not quite understand and that needed a specialist's attention. He told the client he could not proceed with any treatment unless he saw a doctor first. He also recommended a doctor that he personally knew who would give the client the time and attention he needed. It turned out that this client had an advanced brain tumor and would have died within the next few months had he not seen a neurosurgeon. Had this therapist not insisted that the client see a doctor and had just started treating the minor injuries in the client's neck, it is likely this client would have died.

FUNCTIONAL KNOWLEDGE OF ANATOMY

Before working on a client in pain, one must have a strong foundation in anatomy. In teaching thousands of therapists in different parts of the world, I have found that most therapists do not have this skill. A therapist needs the ability to locate and put their finger on the hundreds of body structures that are frequently injured. Many short-lived injuries occur in muscles, yet most chronic injuries occur in the tendons, ligaments, fascia, joints, bursae, and nerves. In my experience as a teacher, most therapists can find every muscle, tendon, and ligament in an anatomy book, but have difficulty finding those structures on a person's body.

In order to give an effective treatment, you need the ability to find the injured structure. For example, can you locate the distal attachment of the supraspinatus tendon with your finger, or the intertransverse ligament between C6 and C7, or the proximal end of the medial collateral ligament, or the iliolumbar ligament, or the anterior talofibular ligament attachment to the lateral malleolus? The list is long for each and every structure in the body. This is what functional anatomy means when treating a person in pain.

HISTORY TAKING AND ASSESSMENT TESTING

Taking a thorough history of each client is an important first step in the assessment process. For each part of the body, there are 20–30 specific questions to ask, and clients' answers must be considered in conjunction with the results of the assessment tests. For example, if you ask a client what daily motions are painful or if they can sleep on their side, their answers are indicative of different conditions. It is important to properly determine which structure is injured.

Assessment testing means the ability to correctly perform a functional anatomical test for each structure in the body. There

are a series of physical assessment tests for every part of the body that tell you where you should concentrate your work. Some areas of the body are fairly easy to test while others are more complicated. There's a simple test to assess an Achilles tendon injury. You simply ask the person to rise up on the ball of the foot, and if that causes any discomfort in the Achilles tendon, that is likely the area to focus on. Then, the question is, do you know how to locate and work on the posterior, medial, lateral, or anterior Achilles tendon? Performing these tests for certain parts of the body is not easy to master without someone there to help you get it right.

A more complicated area is an injury to the shoulder, which often requires 20–30 assessment tests to differentiate the many injuries that occur to the tendons of the subscapularis, supraspinatus, infraspinatus, teres minor, biceps, and triceps, as well as to the acromioclavicular joint and ligament, the glenohumeral joint, the subdeltoid bursa, and so forth.

The knee requires at least 18 tests, the neck 40 tests, and the low back 26 tests. The differentiations that follow are easy if you have been trained to tell the difference, and are very difficult if you do not have that specific knowledge: intercostal muscle strain versus a broken rib; ligament sprain in the low back versus a disk issue; neuroma versus an interosseous muscle strain; patella ligament injury versus an infrapatellar bursitis.

In order to work skillfully with musculoskeletal injuries, one must be able to perform assessment tests accurately, understand their meaning, and combine that information with the person's history and functional anatomy.

TREATMENT STRATEGIES

Once you have identified what structures are injured, there are multiple techniques a skilled therapist can perform to treat those problems: cross-fiber friction therapy, massage, myofascial therapy, muscle energy, strain counter-strain, Active Isolated Stretching, and so forth. However, without the assessment skills to pinpoint what is actually injured and the accurate palpation anatomy knowledge, we would be guessing and working in the dark. For example, if you are working to reduce adhesive scar tissue and you are a quarter-inch away from the injured structure, then the treatment will fail. Precision and accuracy are key to any treatment strategy employed.

BASIC CONCEPTS

There are a number of basic concepts and essential principles about the injury process and assessment testing that practitioners must know to intelligently assess and understand a client's injury.

Here are just a few examples: referred pain, endangerment sites, scar tissue formation, scar tissue adhesions, normal tissue healing, ligament laxity, the role of fascia in injuries, the importance of healing in the presence of a full range of motion, the normal end feel of each joint in the body, the effects of poor body alignment, the importance and limitations of exercise rehabilitation, and much more. Without an understanding of these essential competence principles, we cannot safely and effectively treat clients with injuries. Let's review a couple of these.

An Understanding of Referred Pain

Referred pain means there is tissue damage in one place and pain felt in another place. Only certain areas of the body cause referred pain. For example, neck injuries can cause pain in the upper back, arm, hand, chest, and head, while shoulder injuries can cause pain felt in the arm all the way to the wrist, but not in the hand. An injury to the wrist, hand, knee, or

In my experience as a teacher, most therapists can find every muscle, tendon, and ligament in an anatomy book, but have difficulty finding those structures on a person's body.

foot causes no, or minimal, referred pain. Without an understanding of referred pain, a therapist might work on the area of the referred pain, which is often 6–12 inches away from the source of the injured tissue, wasting the client's time and money, and delaying proper treatment. It is not possible to be a skilled practitioner who works with musculoskeletal pain and injury without an understanding of referred pain.

Let me give you a few examples. A client comes in with pain at the medial border of the scapula. The first question is, has the client been seen by a physician to check out serious conditions? This type of discomfort could be referred pain from one particular ligament in the neck or it could be referred pain from an inflamed gall bladder or other visceral condition.[2] If you have the assessment skills, you can see if you can elicit the pain with one of six passive assessment tests of the neck and palpation of the ligaments that can cause this referred pain. In this case, with your knowledge and the results of the physician's medical assessment (which should occur before or soon after initial assessment), you can ensure that the client is safe and receives the right treatment.

Do you know what it means when there is pain in the shoulder and upper chest when lifting the arm to the side? It could be many different injuries in the shoulder but it could also be cancer of the lung. At 90 degrees of shoulder abduction, the lung moves, so pain in this area is a potential indication of a tumor in the lung.[3] If a client came in with pain in both heels, what would you think? This is one symptom of the potentially deadly disseminated gonococcal infection.[4]

To assess and work the cases mentioned above, a therapist would require a fair amount of training. Unfortunately, some therapists are under the illusion that just giving a massage or a deep-tissue treatment alone is sufficient to fix most problems. This is dangerous for many reasons. The client could be badly injured by the treatment. Or, the client may never try massage again because of a bad experience, which damages everyone in the profession. When people have bad experiences, the word spreads.

Knowledge of Endangerment Sites

Every therapist, not only those who specialize in working with pain and injury, needs to know the endangerment sites for each body part. Knowing where *not* to work is as important as knowing where *to* work. For example, it's essential to avoid applying too much pressure to the ulna nerve at the elbow, or the radial nerve in the lateral posterior forearm, or the anterior triangle and brachial plexus in the neck or the back of the knee, or the aorta when working the psoas muscle. These are all crucial parts of training that keep clients and therapists safe.

PATHWAYS TO LEARNING AND MASTERY

Critical Thinking

Training in how to work with pain and injury conditions is about learning how to think critically. It means being a certain kind of detective. Critical thinking is the most crucial and time-consuming part of the learning and therapeutic process. It means taking all you have learned and applying it to something you may have never seen before. It means figuring out things that at first seem a little confusing. There are hundreds of injury and pain conditions that are impossible to learn in an online setting only, because you need hands-on experience with the instructor right there to help you. You will frequently be confronted with new things. If you know your anatomy, know how to gather all the information you need directly from the client and from online and other research, and know all the assessment tests, then you will likely be able to figure out the majority of problems you encounter.

Live Clinic Learning

In my opinion, the most effective way to complete the learning process of how to assess and treat injuries is to participate in multiple live injury clinics. This can occur in a one-on-one mentorship setting or in a classroom/workshop. These learning clinics occur after you have learned the palpation anatomy, history taking, assessment testing, treatment techniques, and critical thinking skills to put it all together. Clients come to a free clinic and are assessed and treated by a team of student practitioners.

The students decide who takes which part of the history, who does which segment of the physical assessment testing, and who records the notes and the findings.

"Advanced Deep Tissue Muscular Therapy Techniques: Shoulder and Knee" with Ben Benjamin walks you through anatomy palpation and muscular therapy techniques. ABMP members earn free CE! www.abmp.com/ce.

Then, the team of student practitioners thinks through the findings together to determine what is injured and whether hands-on therapy is appropriate, or whether a referral to another discipline is more appropriate. This is all best done under the live supervision of a skilled instructor. Then, the student practitioners apply treatment, if appropriate, under supervision.

Mentorship

In a mentorship setting, the student practitioner brings in a client and does all these aforementioned steps, while the mentor watches and steps in when needed. This is a relationship that usually lasts a long time and allows for deeper development of every aspect of learning, from accurate palpation and correct technique and pressure in treatment to theoretical understanding and critical thinking. A mentorship will also develop the student practitioner's ability to connect and communicate effectively with the client. I have trained a number of people as a mentor or with a combination of classroom learning and mentorship. It is a very effective training model.

Classroom Learning

Learning in a classroom or workshop setting is the traditional way we have trained people in this profession. The advantages are many. It is cost effective, there are peers to study and learn with, and you get to practice finding all the anatomical structures and different techniques on many different body types. It is a live setting, so you can ask questions and get immediate help and feedback from an instructor.

Private Training

One-on-one private training has other benefits, especially for those who need to move at their own pace, either slower or faster than others. The most useful aspect of private training is that the student practitioner does every palpation, assessment test, and treatment technique on the instructor. In private training, whatever weaknesses the student has becomes evident very quickly and can be addressed in a customized manner. It is quite time consuming, but it's a very successful method of training.

Self-Study, Online Training, and DVD Learning

Self-study can be an effective part of the learning process for student practitioners who are disciplined and motivated self-starters. This can be through online courses, webinars, or repeat viewings of training DVDs. The advantages of this type of learning are that the person can move at their own pace. The limits are that many students cannot learn effectively unless they are in a physical classroom environment or with a private instructor. The biggest downside of this type of learning is that it is hard to know if you are accurately finding the anatomical structures, or if you are doing the assessment and treatment techniques correctly.

This learning process is most useful when it is combined and coordinated with in-class learning of the same material or in conjunction with private learning sessions where the instructor can check whether the student is doing the hands-on work and assessment testing correctly. I have often been surprised by how well the material is learned when I give a private session after online or DVD learning. I have also been horrified when giving a lesson to a student who thinks they have correctly learned the material but perform most of the testing procedures incorrectly, with too much or too little pressure, and cannot accurately find the anatomical structures. I have found that this method of training is best used to supplement classroom, mentorship, or private training.

Communication Skills Training

If you are a therapist who treats people in pain, you often have difficult news to convey. You may have a client who loves to play tennis but has a shoulder injury where serving and forehand strokes are out of the question for 6–8 weeks. Or a client who keeps sane by running but has a serious knee injury that ensures a worsening injury if she keeps running. Sometimes the news is worse and the person has to give up something they love permanently if they want to avoid further destruction of their body. I have had to give this news many times to clients who loved their soccer, ninja warrior training, gymnastics, or skiing. The therapist's ability to gently convey this bad news and come up with alternative strategies to help the client through this tough period is crucial.

In order to effectively treat clients with pain, therapists must receive extensive training to ensure that they are proficient in all the areas described above. Without this expertise, it is dangerous for practitioners to treat clients with musculoskeletal injuries. **m&b**

Notes

1. Dixie Wall, "Claims of Commission," *Massage Today* 8, no. 10 (October 2008), www.massagetoday.com/mpacms/mt/article.php?id=13873.
2. Eric Berg, "The Hidden Source of Your Neck and/or Shoulder Pain," Dr. Berg (blog), www.drberg.com/blog/the-hidden-source-of-your-neck-and-or-shoulder-pain.
3. "Signs and Symptoms of Lung Cancer," American Cancer Society, last revised February 22, 2016, accessed February 2018, www.cancer.org/cancer/lung-cancer/prevention-and-early-detection/signs-and-symptoms.html.
4. "Gonorrhea Symptoms," STD Test Express, last reviewed March 28, 2017, accessed February 2018, www.stdtestexpress.com/symptoms-of-gonorrhea.

Ben E. Benjamin holds a PhD in sports medicine and owned and ran a massage school for over 30 years. He has studied under James Cyriax, MD, widely known for his pioneering work in orthopedic medicine. Dr. Benjamin has been teaching therapists how to work with injuries for over 35 years and has been in private practice for over 50 years. He works as an expert witness in cases involving both musculoskeletal injury and sexual abuse in a massage therapy setting. He is the author of dozens of articles on working with injuries, as well as these widely used books in the field: *Listen To Your Pain*, *Are You Tense?*, and *Exercise Without Injury.*