



The Body Is In Charge

By David Kent, LMT, NCTMB

Keeping It Simple Series

Welcome to the first installment of "Keeping it Simple," named for my preferred method of instruction.

I like to keep things simple and I strongly believe learning should be fun. Not too many people would have thought I could have made dissection simple and fun, but let me show you just how my curiosity works.

There are five senses we learn from: visual, auditory, kinesthetic, olfactory and gustatory. Everyone learns differently. I am primarily a visual and kinesthetic learner. The first time I learned about fascia, muscles, tendons, ligaments, cartilage and adipose in massage school, I processed the information by asking myself several questions: What do these structures look like? What do they feel like? And is it possible for me to see them? Lastly, where could I - a naive massage therapy student - find the answers to these questions? This was, after all, 15 years ago, when massage therapy instruction was slightly less sophisticated. I didn't know, so I improvised.

The local grocery store has its own lovely lab called the meat department. To be honest, I initially found the answers to these questions by purchasing a whole chicken and dissecting it! The next day, I brought my chicken to show the class. My classmates thought my findings were cool, and soon thereafter, the teacher made this exercise a regular part of the course. Thankfully, today there are more impressive ways to learn about anatomy firsthand.

I had taken my first sip from the "cup of dissection knowledge" and I was



hooked. It was this newfound addiction that led me to wonder how I could see, touch and study these structures in the human body. Ultimately, the answer to that question led me to create a full-body dissection course specifically geared toward massage therapists, acupuncturists and other allied health care professionals.

You might wonder how and/or why dissection is applicable or helpful to massage therapists. Let's think about it. Would you want a surgeon who has only read medical textbooks operating on you? Would you want a mechanic who has only watched engine repair videos working on your car? Of course not. You want somebody with real-world,

hands-on experience - you want an expert who has a thorough and in-depth understanding of their field.

Massage therapist Anna Gallagher attended a dissection course and had this to say: "This was the opportunity for the senses in my fingers and hands to relate to my eyes. This put everything together for me."

The human body is a complex unit. As healthy, fully functioning human beings, it's easy to take our capabilities for granted, which is another reason why massage therapists can benefit from a course in human dissection. Often, such a course educates us in unique scientific wonders of the body that we



wouldn't have otherwise known about or considered possible. I always am amazed at how often I find structural anomalies while dissecting the human body (G. **anomalia** = irregularity: a deviation from the average or norm; anything structurally unusual). Generally, anomalies are not taught in anatomy and physiology courses. However, it's important for all health care providers to consider the rare possibility of a structural anomaly when assessing the cause of a client's pain or dysfunction.

Sometimes, patients present with confusing, subjective complaints that are "out of the box." In these situations, I consider the potential causes of pain and/or dysfunction from an anatomical point of view. However, it's also important to remember that there are a number of other dynamics which influence pain and dysfunction, including nutritional, physiological, psychological, financial, professional and spiritual factors. While we, as massage therapists, cannot diagnose, we can assess patients by taking a thorough medical history and conducting postural analysis, range of motion (ROM), orthopedic, neurological and functional testing, and palpation exams. Each of these clinical assessment protocols is a means of narrowing down the origin of pain and dysfunction and designing a treatment plan.

Aside from typical discoveries, such as hip replacements, pacemakers, etc., I have encountered a few interesting anomalies over the years. For example, on one cadaver, the upper trapezius was missing; on another, the levator scapula had rib attachments bilaterally. What a mystery! I wish I could have known how these anomalies affected the regular activities in the daily lives of these people.

During another dissection, after reflecting the gastrocnemius muscle, I found two yellowish lumps, one proximal and one distal, on the lateral aspect of the soleus muscle. The larger proximal lump was approximately 12 mm wide and 35 mm long. Further investigation revealed that the lumps were lipomas (**Lip** = fat + G. - **oma** = tumor) that had taken the place of muscle tissue. Typically, the muscle fibers of the soleus slope infero-medially, which was the case for most of the fibers on the



soleus of this specimen. The exceptions were the fibers between the lipomas, which were running medially and laterally. Interestingly, the posterior aspect of the fibula also had developed a unique ridge that protruded approximately 6 mm posteriorly from the head and neck of the fibula to the proximal lipoma. In case you were wondering, the anomaly was unilateral.

And here is one of my favorite cases. See if you can identify this muscle: We discovered a muscular anomaly while dissecting an 87-year-old female cadaver. It was present bilaterally, deep to the pectoralis major and immediately lateral to the pectoralis minor. Inferiorly, this muscle attached to the sixth rib, blending with the fascia of the external oblique. Superiorly, the tendon of this muscle blended with the tendons of the coracobrachialis and the short head of the biceps brachii as they attached onto the coracoid process of the scapula. Here are a few more hints: This muscle is an accessory derivative of the pectoral mass

and is innervated by the pectoral nerves. It has a specific name that is 16 letters long, contains seven syllables, and has the following breaks:

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Can you name it?

To see an image of this muscle before making an attempt at the answer, visit www.kenthealth.com. Other structures are labeled as well, including the pectoralis minor, serratus anterior, and

other surrounding structures. If you do not have Web site access, see my next article for the answer!

I often wonder how these anomalies impacted these people in their day-to-day lives. The truth is, we will never know if an anomaly affected a particular person or not, since the only information we receive from most state anatomical boards is limited to gender, age, occupation and cause of death. Nevertheless, I invite you to join me in the dissection lab to discover one for yourself. You never know what you are going to find!

David Kent, LMT, NCTMB, is a writer, educator and international lecturer specializing in dissection, medical massage and practice building seminars. David, founder and president of Kent Health Systems, is a product innovator and has developed the Postural Analysis Grid Chart, Trigger Point and Muscle Movement Charts, Personalized Essential Office Forms and DVD Programs. His clinic, Muscular Pain Relief Center employs numerous therapists and receives referrals from area hospitals and various medical specialists.