

NAVIGATING YOUR WAY

The Science and Art of Muscle Palpation

The importance of palpation and what it means to us as medical practitioners cannot be overly stressed. This article discusses four guidelines that primarily address the science of muscle palpation and demonstrates how mastery of this skill can be used to determine and evaluate the best course of action by the practitioner.

BY DR JOSEPH E MUSCOLINO

When treating clients presenting with a specific musculoskeletal condition, massage should never be done unless an accurate assessment has first been made. An assessment informs the practitioner about the physical integrity of the tissues of the client's body that are to be treated and points the practitioner toward the appropriate treatment tools to facilitate the healing of the condition.

Of all assessment tools available to the massage practitioner, palpation, especially palpation of the musculature, is the most important. Indeed, muscle palpation is so integral to the field of massage therapy that I believe it's likely that the massage therapy profession leads all other health fields in muscle palpation skills.

The term palpation derives from the Latin word 'palpare' - to touch.

However, in the context of muscular assessment, palpation involves much more than simply touching the muscle. Muscular palpation has two major objectives.

The first is to locate the target muscle that is being palpated and, once it has been located, the second is to assess its health by feeling for its tone and texture.

- Is it tight or loose?
- Are there trigger points located within it?
- Is it inflamed or tender to touch?
- Are fascial adhesions present?

Assessing the health of the muscle is the most important aspect of palpation because the integrity of the tissues is





what determines our decisions regarding treatment. However, if we do not first locate and discern the muscles of the region, we will not even know what musculature we are assessing. Further, effective massage therapy often involves working the entirety of the muscle, from attachment to attachment. This can only be done if we know the exact borders of the muscle.

Palpation protocols

For these reasons, accurate location of target musculature is supremely important and is the basis for clinical remedial/orthopaedic massage. Each target muscle has a palpation protocol that can be carried out to identify and locate it. At times there may be a number of possible protocols that

work equally well for a muscle.

Unfortunately, because of the manner in which it's presented in textbooks and the classroom, muscle palpation is often not well learned by students and practitioners alike.

Muscle palpation is often presented as protocols to be memorised with little understanding of why each step is done. As with most things that are memorised they are often forgotten or, in time, become fuzzy leaving us with weak palpation skills. Further, the protocols are often passed along without being critically examined thus setting the stage for massage practitioners to learn less than ideal technique.

Instead of memorising a protocol for each and every muscle, it's better to learn

how to palpate.

In other words, we need to learn an approach to muscle palpation that allows us to figure out how to palpate the muscles of the body. Further, it's important to be sure that each protocol is ideal for not only locating the target muscle but also clearly discerning it from adjacent musculature and other soft tissues. This can be accomplished with a set of guidelines that addresses the science and art of palpation.

To thoroughly cover this topic, a fairly long list could be given. However, this list can be pared down to the most important guidelines that, when followed, allow us to accurately and easily figure out how to palpate almost every muscle of the body.

These guidelines can be presented in a straightforward and commonsense manner that facilitates critical reasoning. Critical reasoning skills not only inform and improve our ability to palpate; they also inform and improve our hands-on clinical treatment technique, making us more effective clinical practitioners.

Together, these guidelines comprise the science and art of muscle palpation.

The Science of Palpation

Guideline No. 1:

Know the attachments of the target muscle

The first guideline is to know the attachments of the target muscle that is being palpated. Knowing the attachments is the first necessary step because it gives us the general location of where to place our palpating fingers.

Simply put, we palpate between the muscle's attachments.

For example, if the target muscle is the levator scapulae, knowing that it attaches from the superior angle of the scapula to the transverse processes of C1-C4, tells us to place our palpating fingers between the superior angle and the transverse process spinal attachment (Figure 1).

Hence, the first necessary step for successful palpation is knowing the attachments of the target muscle. Each muscle palpation protocol should begin, not end here as is, unfortunately, often the case.

borders how do we know if we have strayed off it and onto an adjacent muscle?

The problem is that this guideline does not help us discern the borders, of the target muscle from the adjacent muscles and other soft tissues.

For deeper muscles, approaching palpation just by palpating from attachment to attachment is even more problematic because we can never be sure whether we are feeling our target muscle or a more superficial muscle that overlies it.

So, important as using guideline No. 1 is, it's not sufficient for effective palpation.

Guideline No. 2:

Know the actions of the target muscle

When the target muscle contracts, it hardens and becomes palpably clearer.

Continuing with the levator scapulae as our example, if we know the muscle's actions, we know what to ask the client to do to make it contract. We ask the client to elevate her scapula at the scapulocostal joint. The levator scapulae contracts and becomes palpably harder, allowing us to palpate its entirety and more easily discern it from the adjacent musculature (Note: It is best to have the client's hand in the small of the back while doing this because this position inhibits and relaxes the upper trapezius) (Figure 2).

Guideline No. 3:

Choose the best action of the target muscle to engage it

Adding contraction of the target muscle to knowing where to place our palpating fingers (guidelines No. 1 and No. 2) often creates an effective palpation protocol. However, there are many times when simply choosing any action of the target muscle will not be sufficient for a successful palpation. This is another place where some palpation protocols are less than ideal.

The purpose of guideline No. 2 is to engage the target muscle so that it hardens and stands out from the adjacent soft tissues. However, if the chosen action also causes other muscles to engage and contract, then discerning the target muscle from these other muscles will be difficult and our palpation will not be clear.



Above, Figure 1



To have access to the complete article, subscribe to Digital COMT.

[CLICK HERE TO SUBSCRIBE!](#)