

The Art of Motion Palpation

Motion palpation is an art, and like all art forms, it is not an easy skill to master. Drs. Gillet, Faye, and Grice became masters of this art by continual practice over many years. The late Dr. J. Mennel, MD, was so gentle yet incredibly accurate with his diagnostic motion palpation. Dr. C.S. Gonstead practiced motion palpation and when the x-ray findings were not consistent with the motion palpation, he went with the motion palpation analysis rather than the static x-ray markings. Remember the Gonstead clinic saying, "You find subluxations on patients, not x-rays."

To learn the art of motion palpation, the doctor or student of chiropractic should continually evaluate the quantity and quality of the facet or vertebral body motion and must pay particular attention to the manner in which the motion stops. Remember that there are seven (7) motions that each vertebra participates in and that some of these can be coupled motions.

Joint play can be simply defined as that motion of a synovial joint that cannot be produced by voluntary movement. Magee in his text states the following:

1. Joint play is necessary for full, painless function of a joint and full ROM of that joint.
2. Joint dysfunction signifies a loss of joint play.
3. If any joint play movement is found to be absent, this movement must be freed before functional, voluntary movement can be fully restored.

How does this relate to the chiropractic subluxation complex or to how the adjustment helps sick people get well? Borrowing from Dr. David Seaman's work, *Chiropractic and Pain Control*, 2nd ed.

"Joint afferents travel in the dorsal columns and spinocerebellar pathways ... Afferent impulses from receptors in joint capsules and periarticular tissues, stimulated by joint movement, are conveyed by the posterior columns, the medial lemniscus, and thalamic relay neurons, to particular cell columns in the postcentral gyrus. From this information we can see that joint receptors drive cortical neurons. Thus, virtually any symptomatic picture might be a manifestation of joint dysafferentation (altered articular input)."

End feel is that sensation or tissue sense the doctor or student feels at the point at which passive movement stops. There are a number of different types of end feel:

Normal End Feel

1. Soft end feel -- This is soft tissue approximation as in flexion of the elbow joint.
2. Firm end feel -- This is ligament or capsular stretching as in knee joint rotation.

3. Hard end feel -- This is bone-to-bone stop, as in the olecranon impacting the trochlea of the humerus.

Abnormal End Feel

1. Less-elastic -- This is usually associated with scar tissue or connecting tissue contracture.
2. More-elastic -- This is commonly seen with areas of increased muscle tone or shortened muscles.
3. Springing Block -- This almost always indicates some type of internal dysfunction or deterioration such as meniscal tear. A rebound is felt and can often be seen.
4. Empty -- No reason for the stop of motion other than patient pain and immediate spontaneous reaction.
5. Premature or Early -- The motion stops before it should as in R.A., O.A., or ligamentous capsular contraction.
6. Extended -- As in constitutional hypermobility of joints. The sulcus sign of the shoulder (a multidirectional instability) is a fine example of this.

From the above information the motion palpation seasoned doctor can make an accurate diagnosis of the following:

- level of dysfunction
- degree of dysfunction
- determine the magnitude of the thrust to adjust the subluxation
- the direction or directions in which to adjust
- D.D. subluxations from compensations

Learning and utilizing motion palpation in your practice will enable you to get your patients well and to understand why!

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Editor's Note: Dr. Innes will be conducting his next Spine 2 seminar on December 4-5 in Seattle, Washington and his next Full Spine seminar on January 16-17, 1994 in Toronto, Ontario, Canada. You may register by calling 1-800-359-2289.

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