Dynamic Chiropractic

CHIROPRACTIC (GENERAL)

The Subluxation - More Than a Single Vertebral Misalignment

The concept of a subluxation as a single vertebra out of alignment with the vertebra above and below it is well-accepted within our profession. However, it is not accurate. When stress or injury occurs in one area of the spine, the whole spine becomes involved in the process of adaptation to that injury or stress. Muscles-from the toes to the skull-are involved in this adaptive process. This has driven us into divisiveness that should not have happened, as most researchers have concentrated on one element in this adaptive process, and found conflict with other researchers who have concentrated on other elements. We have also developed a variety of techniques that have concentrated on adjusting according to the findings their research has yielded. Thus, we have multiple techniques, with everything from Basic to Grostic being used with effectiveness. These techniques all deal with some portion of this complex total-body adaptive mechanism, and would not be in conflict if we understood this process better. My attempt here is to shed some light on this process.

My particular area of inquiry has been in the study of motion in joints; the muscles involved in that motion; how motion varies from normal when a subluxation is present. That variation from normal is, in my opinion, the only way a subluxation may be properly assessed. Any technique that normalizes motion in joints and increases muscle tone throughout the body is an acceptable technique.

The next question is, "What is the definition of normal mechanical function, and how may it be assessed accurately?" Some have defined a normal spine as one that shows no misalignment on an x-ray and little, if any, curvature. This would be true if our spines had not had to adapt to strains so severe that self-correction did not occur in a short span of time after the trauma. Unhappily, most people ignore discomfort until it becomes too painful to tolerate. During this interval, adaptation can reshape the muscles, ligaments and disc tissues to better accommodate the distress. If accommodation has been successful and pain is decreased, and nothing is done to assess the cause of the prior discomfort, the body accepts the reshaping of the spine. Thus a misalignment shows up on the x-ray, which may be very difficult (if not impossible) for a return to normal alignment.

However, many techniques do use misalignment as the way to adjust a subluxation with too much success for me to argue that it is wrong. On the other hand, we cannot x-ray patients each time they come in, so an easier and more reliable method should be found to assess whether a subluxation is present in that person on that date, and the approximate location of the subluxation. I believe this can be done with motion palpation and muscle testing.

We use the reflex neuromuscular distortion, always accompanying a subluxation, to find that it exists. This neuromuscular distortion affects the movement of the sacroiliac joints very specifically. Normal motion, when the spine bends forward, when it bends side to side, and when one leg is raised and then the other leg is raised, was established 50 years ago by Dr. Henri Gillet.

In any flexion subluxation in any vertebra in the spine, the distorted movement in the sacroiliacs is a lateral flexion distortion in which the ilia follow the lumbar spine, indicating increased muscle

tension in the flexors of the lumbar spine (the *iliopsoas* muscles). Normal movement of the ilia is away from the lumbar spine on lateral flexion of the trunk.

Any extension subluxation in any vertebra in the spine distorts movement in the sacroiliacs, by the ishium moving toward the sacrum when the knee is bent on that side. When the other knee is bent, the sacrum moves toward the ischium on that side. Normal movement is for the ischium to move away from the sacrum when that knee is bent. When the other knee is bent, the sacrum should move away from the ischium.

Rotational subluxation in any vertebra in the spine distorts movement in the sacroiliacs, by moving the ilium toward the sacrum when the torso bends forward. The normal movement is for the ilium to move away from the sacrum on forward bend of the torso.

These three directions of subluxations - flexion, extension and rotation - are the usual misalignments found. It is true that degrees of flexion or extension can vary 180 degrees rotationally, and rotation subluxations can have degrees of flexion and extension, but the major direction of distortion will follow the distorted sacroiliac movement I have just outlined.

Lack of specific breath motion is also an indicator of the presence of subluxation. Breath motion is measured by using a goniometer with at least seven-inch prongs. With this goniometer, one degree is equal to 3mm. If the goniometer prongs are placed with one on the ilium and the other on the scapulae, the measured motion on a deep breath should be 45mm. Anything less on either side indicates a subluxation somewhere in the spine is present. There should be 6mm of breath motion between vertebrae. No breath motion of this magnitude between vertebrae is also a prime indicator that a subluxation exists. This does not indicate the position of the subluxation, because there can be many breath motion locks in many different areas of the spine from a single subluxation.

Lack of breath motion between skull bones can also be prognosticative for a variety of directional misalignments. A lack of motion between occiput and temporal bones can indicate an extension subluxation somewhere in the spine.

A lack of breath motion between the occiput and parietal bones can also indicate a flexion subluxation somewhere in the spine.

A lack of breath motion between the sphenoid and the occiput bones can indicate a rotational subluxation.

After we have ascertained the direction of the subluxation from the sacroiliac tests, we move the spine in the direction opposite the indicated movement. Reluctance in movement is found to exist from the atlas down to near the subluxation, below which the spine seems to have free movement. In this area, a vertebra will be found in either flexion, extension or rotation, depending on the direction indicated on the x-ray.

Rotation subluxations, as indicated by the sacroiliac tests, exhibit rotary reluctant movement misalignment from the atlas down to an area in the spine, and normal rotary movement below. Since rotary subluxations involve from two to four vertebrae, exact positions of the vertebrae need the x-ray to be sure of the position needing release. Palpation may sometimes be quite close to the vertebra, since rotary muscles of the spine, when unbalanced in a subluxation, will be quite tender on the spastic tendon of the rotary muscle involved. A rotary subluxation will often have shoulder blades at varying levels, which can be easily observed by placing thumbs on the spine of the scapulae.

Flexion subluxations, as indicated by the sacroiliac tests, exhibit poor extension from the atlas down to the offending injury in the spine, and normal extension below the offending injury.

Extension subluxations, as indicated by the sacroiliac tests, exhibit poor flexion from the atlas down to the injury, and normal flexion below this point.

The Derefield leg-length tests have been used for the past 40 years to indicate that a subluxation is present in the spine. When present, it is a fine indicator. We have found that it is not present in a rotary subluxation; therefore, it should not be relied upon when a rotary subluxation is primary.

Muscle strength tests have been used to assess spinal subluxation as well. We have found that weakness in muscle strength follows exactly the scenario of being opposite the bend toward which the vetebra has moved: flexion subluxations have weak extensors; extension subluxations have weak flexors; and rotation subluxations have weak rotary muscles of shoulders, hips, forearms and knees.

I have used and advocated this method of spinal evaluation for the past 40 years. I have not found it in error.

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