Your Scans Explained

Three diagnostic scans were performed at two stations during your first visit to our office. Each scan provided different information, and taken together the results are very important in the development of a plan for your care.

Following is a description of the three scans.

A. Insight Millennium Subluxation Station
The Central Nervous System controls and coordinates all functions of the human body. It is comprised of three different areas - Motor Nervous System, Autonomic Nervous System and Sensory Nervous System.
You may be surprised when you hear that the Sensory portion of the nervous system (what allows you to feel/sense pain) is only 10% of your nervous system. There's another 90% that you cannot feel! This is the main reason we employ the following two scans. The first measures the Autonomic Nervous System and the second measures the Motor Nervous System.

1) Rolling Thermal Scan
Your Autonomic Nervous System regulates the organs, glands and blood vessels of the body. A person may have disturbances in the Autonomic Nervous System and experience no pain at all. By measuring skin temperature variations we can monitor autonomic function.

Your skin is the largest organ in your body. The blood vessels under the skin work as the body’s thermostat. They expand to release heat and contract to retain heat, controlling the body’s temperature. When there is stress on your body’s Autonomic Nervous System this process can be disturbed. This results in an imbalanced temperature reading along the spine.

Your scan figure shows results in degrees Fahrenheit, but for simplicity the results are displayed as colored bars. The colored bars indicate the level of severity of abnormality - white is considered within normal limits, while green is mild, blue is moderate and red is severe.

2) Static Surface sEMG Scan
Your Motor Nervous System controls the movement of muscles and your overall posture. Your Static Surface Electromyography (sEMG) scan can show disturbances to the Motor Nervous System. This scan reads the amount of electrical current (in microvolts) produced by your paraspinal muscles to determine how well your motor nerves are functioning and if they are working symmetrically. Remember that this entire process occurs without any sensation of pain to you!

This information is very helpful for us because the alignment of your spine depends on properly functioning postural muscles. If present, misalignments in your spine can affect motor nerve function and cause an abnormal amount of electrical current to flow to your muscles. This leads to muscles becoming weaker, stronger, tighter or fatigued on one side of your spine as compared to the other. This is indicated by colors or abnormal patterns on the scan.

Your scan results are displayed as three figures –

1. Static EMG Scan Normative Data. This represents a “normal” sEMG scan. Observe how this figure shows only white bars and both sides of the spine are the same. This represents normative data collected over many scans and is a perfect sEMG scan. Few scans will display this pattern but generally the more your scan resembles this the better your Motor Nervous System is functioning.
2. **Static EMG Scan EMG Amplitude.** This displays your sEMG scan as compared to the “normal” sEMG scan. Your scan displays results in microvolts, but for simplicity the results are displayed in this figure as colored bars. The colored bars indicate the level of severity of abnormality - white is considered within normal limits, while green is mild, blue is moderate and red is severe. Occasionally a black or yellow bar is present, representing extremely overactive or underactive musculature, respectively.

3. **Static EMG Scan Asymmetry.** This displays your sEMG scan symmetry results. This figure displays motor nerve function abnormality as a percentage imbalance, at each level of the spine and either to the right or left of the spine. For simplicity the results are displayed as colored arrowheads. The colored arrowheads indicate the level of severity of abnormality - white is considered within normal limits, while green is mild, blue is moderate, red is severe and black is very severe. All arrowheads display a number that shows the percentage of imbalance pull to the involved side.

**B. Associate Platinum Foot Scanner Station**

Foot Levelers’ Associate Platinum Foot Scanner enables us to screen for foot imbalances that can lead to postural problems throughout the entire body.

1) **Foot Assessment Scan**

Your foot scan image shows your results as compared to a “normal” scan image. The red areas on the foot scan show where your feet are applying pressure. Notice that the “normal” scan image shows symmetrical red areas on the ball and heel of the foot. Compare your scan image to this to see what level of arch drop and asymmetry your image shows.

Loss of arch height – which shows more red in the arch areas of the foot – can cause flattening and rolling of the feet. These instabilities can lead to conditions such as plantar fasciitis, knee pain, hip pain, back pain, and neck pain.

A properly aligned body will have symmetrical feet, level knees, pelvis and shoulders. Wearing stabilizing orthotics may help alleviate imbalances and conditions caused by these imbalances.