Tending the Wind – Chapter 6 Chiropractic – Part 1 by Dr. Lauren Chattigré

Chiropractic as a profession is just over a hundred years old, but various forms of spinal manipulation have been used by numerous cultures throughout history. Hippocrates used manipulative procedures to treat spinal displacements, and is credited with the phrase "Look to the spine for disease." Similar procedures were performed by several American Indian tribes, and appear in the records of ancient Asian and Egyptian cultures. Treatment by "bonesetters" became popular in England and America during the 19th century, but manipulation techniques weren't systematized until the development of chiropractic and osteopathy in the late 1800s.

The story of chiropractic begins with Daniel David Palmer (1845-1913). He moved from Canada to the U.S. just after the Civil War, and after being a sometime farmer, beekeeper, goldfish peddler, and grocer, became interested in spirituality and healing. He took a course in magnetic healing (treating disease by influencing the magnetic field surrounding the body) and opened an infirmary in Davenport, Iowa. During his practice he became interested in the nervous system as a carrier of the body's self-healing vital energy (which he called *innate intelligence* – a concept similar to homeopathy's vital force), and postulated that disturbance of the nerves would cause an excess of this life energy in some areas, and deficiency in others. The spine, being the major conduit of nerves, was of key interest.

Palmer's first spinal adjustment was performed in 1895 on a janitor in his building who had gone deaf 17 years earlier after working in a bent position and feeling something pop in his back. A lump had developed at the spot. Palmer's examination concluded that one of the janitor's vertebrae was out of its normal position, so he delivered a forceful thrust with his hands to "reduce" it back into place. After several treatments, the janitor's hearing was restored. He termed the thrust an "adjustment" and the malpositioned vertebra a "subluxation." He reasoned that a subluxation impedes normal nerve flow and causes disease. If the structural integrity of the spine is restored, the functional integrity of the nervous system returns, and the body's self-healing vital energies are once again freely able to maintain homeostasis.

Over the next two years, Palmer perfected his technique, each time using the bony prominences of individual vertebrae as levers for repositioning. (This would eventually be termed a *short-lever* adjustment. A *long-lever* technique uses leverage contact points distant from the vertebral joint in question.) He then opened the first chiropractic school. A patient versed in Greek had come up with the term chiropractic: *kheir* meaning hand (*chiro* in Latin), and *practikos* meaning practical (relating to practice rather than theory, or engaged in work). The American Heritage Dictionary defines chiropractic as "a system of therapy in which disease is considered the result of abnormal function of the nervous system. Treatment usually involves the manipulation of the spinal column and other body structures." Would that it were that simple.

The definition of chiropractic and the terminology and techniques it employs are the ongoing subject of much discussion, debate, and even courtroom battles. Debate began when new schools of chiropractic developed techniques in addition to Palmer's short-lever adjustment to treat subluxations. Palmer felt the adjustment must be specific to one vertebra at a time, and not employ manipulation of a series of vertebrae. He also limited his practice to the spinal adjustment without the addition of other healing methods. Those who adhered to Palmer's strict principles became known as "straights" and those who deviated by adding long-lever techniques or other modalities were called "mixers." Lines were drawn between various schools and associations which still exist today.

As hand-held instruments (such as today's commonly used Activator) became available which could produce a similar rapid (*High Velocity*) and shallow (*Low Amplitude*) specific force (*HVLA thrust*) to individual vertebrae, further argument evolved between

manual adjusters and instrument adjusters. Some organizations and legal bodies don't recognize instrument adjusting as part of chiropractic. Some of this argument is semantic, but most of it stems from the fact that instrument adjusting applies a much lower force to the spine than manual adjusting, and seldom produces the audible "crack" caused by joint separation and cavitation of joint fluid. Proponents of a strictly manual technique argue that the joint must be forced beyond its elastic limits, which generally involves movement sufficient to overcome the fluid tension between joint surfaces resulting in cavitation. Proponents of instrument adjusting argue that their higher-speed, lower-force, extremely specific thrusts are sufficient to restore the joint's normal neuromuscular homeostatic mechanisms without taking the joint beyond its elastic limits. For now, leaders in the profession define a chiropractic adjustment as any HVLA thrust delivered with controlled velocity, depth and direction. This definition would include instrument adjusting, and about 50% of today's human chiropractors employ such methods. The HVLA thrust distinguishes the chiropractic adjustment from other forms of spinal therapy.

The terms chiropractic uses to define itself are further complicated by a historic lack of scientific evidence – the source of its battles with conventional medicine. Subluxation is medically defined as an incomplete or partial dislocation of a bone, visible on radiographs. Palmer defined it in similar terms, as a displacement, or misalignment, but the lack of radiographic confirmation for many palpable problems has led to less strictly anatomic definitions. Modern chiropractic defines a subluxation as any joint dysfunction, including anatomic, dynamic, or physiologic abnormalities. Since functional disturbances are much less obvious on radiographs, chiropractors have traditionally relied on primarily subjective means to identify their presence and evaluate response to treatment. (Techniques are available to measure indicators like skin temperature and electrical conductivity, but their validity in identifying subluxations needs more research.) And of particular controversy is the claim that subluxations can cause internal organ disease in addition to musculoskeletal dysfunction by disturbing autonomic nerve impulses. Scientific study relevant to these issues is still in its infancy. However, many clinical studies support the efficacy of chiropractic (both manual and by instrument), and advancements in the study of the spine and related structures are beginning to offer plausible explanations for the benefits observed.

The next chapter examines the science behind chiropractic, so you'll be learning a little anatomy and neurophysiology...just enough to provide an understanding of what modern chiropractic is all about.