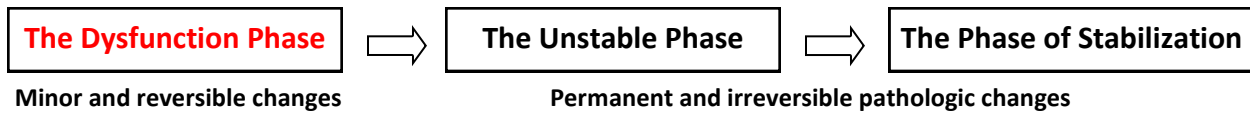


# Spinal Degeneration (Arthritis)

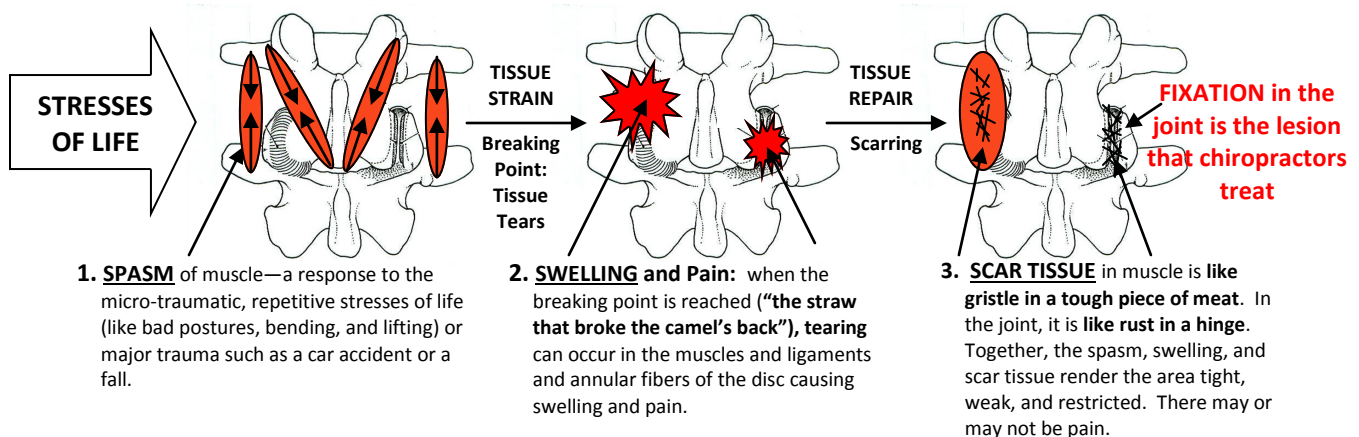
by James G. Halvorson, DC, DACAN

This is the **Medical Model of Degeneration** from Dr. Kirkaldy-Willis (K-W), orthopedic surgeon, medical school professor, researcher and author of "Managing Low Back Pain." Dr. K-W divided the degenerative arthritic process into 3 phases: **The Dysfunction Phase, the Unstable Phase, and the Phase of Stabilization.**

## The 3 Phases of Degenerative Arthritis:



## The Dysfunction Phase—Spasm, Swelling and Scar Tissue (the 3 S's) can cause Fixation in the Joint



### SPINAL JOINT FIXATION:

- Most chiropractors call the tight, tender and restricted areas of the spine, “subluxations.” Osteopaths refer to them as Somatic Dysfunction.
- Joint fixation is **not a visible lesion** and therefore, is not seen on an x-ray or MRI. **It is a palpable lesion**—one that is found by feeling with the hands.
- **The fixation is like a “thorn in the foot”**—an irritant unto itself perpetuating more spasm, swelling, pain and scar tissue. This vicious cycle can only be broken and healing can finally begin by pulling out the thorn.
- Normal joint motion causes a pumping effect that brings nutrients into the cartilage cells and pumps waste products out. **With fixation of the joint, the pumping effect is lost. The result is a loss of nutrients and a build up of waste products. This leads to cartilage cell destruction and death and eventually, progression into the next phase of arthritis.**

### SPINAL MANIPULATION:

- Chiropractors call the act of manipulating the spine, “an adjustment.” It is a gentle thrust into the area of fixation—a brief, low-amplitude and carefully administered impulsion. Often, there is an audible “crack” or “pop” which is due to the release of joint gases.
- Manipulation breaks up scar tissue and muscle spasm, restoring joint motion. The pumping action helps decrease inflammation which, in turn, decreases pain.
- The motion from manipulation also enhances the synovial and disc fluid dynamics—increasing the influx of nutrients into the cartilage cells and helping with the elimination of waste products. As a result, **cartilage cell death may be prevented and the progression of arthritis may be decreased.**
- **Spinal manipulation is one treatment that can effect all 3 S’s—the spasm, swelling and scar tissue—that make up the pathologic changes found in the dysfunctional phase of arthritis. MANIPULATION OF THE FIXED JOINT IS LIKE PULLING THE THORN OUT OF THE FOOT.**
- **Evidence-based guidelines recommend that spinal manipulation be implemented within the first month of the onset of symptoms.**