

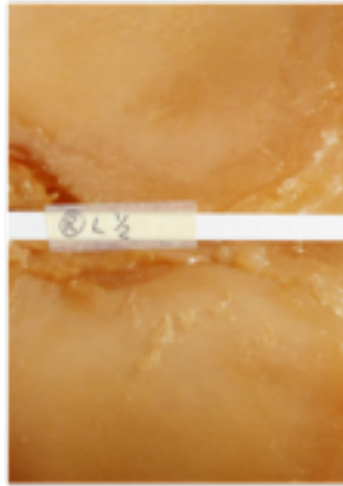
What is the Intent of Spinal Manipulation and what is the Biomechanical Effect



Third Botswana
Spine Care Conference
Gaborone May 2018

Dr Willem Boshoff DC., MSc Med

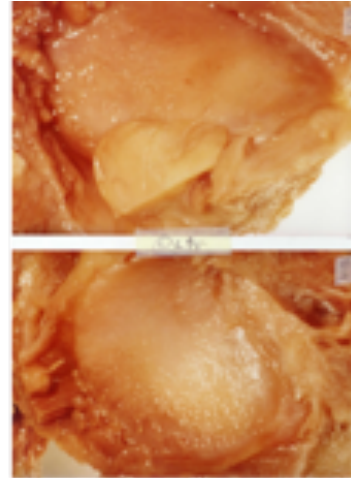
There should be reproducible Science behind finding the Spinal Aberration



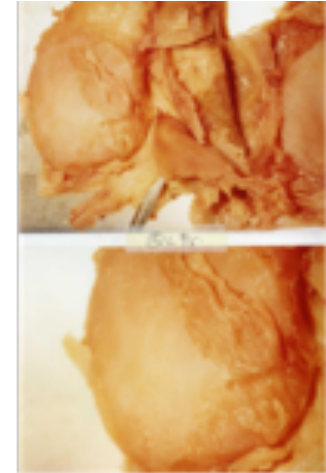
Normal



Cartilage erosion



Prolapse



Fibrous calcification

- ✓ Knowledge of the anatomy and pathology is imperative
- ✓ It must be Clinically Reproducible
- ✓ It forms the basis for determining the corrective procedure that needs to be employed

Comparison Rhino and Human Atlas



The Synovial Joint

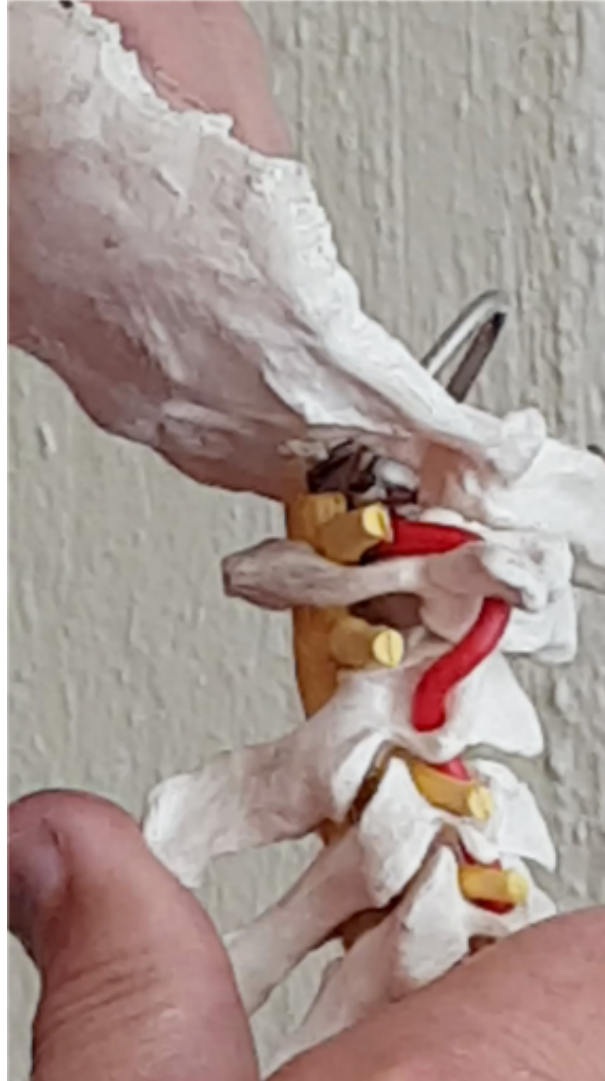
- ▶ Movement Flushes the Joint
- ▶ End Range Movement Stimulates the synovial capsule

The Viscosity depends upon the Polymerization of Hyaluronic Acid in the fluid. Normal fluid is highly viscous.

In an Inflammatory condition (pathology/trauma)

- ❖ The fluid volume increases
 - ❖ The viscosity decreases
 - ❖ The hyaluronic acid becomes diluted caused by the process of depolymerization
 - ❖ The nourishment/lubrication of the joint is disturbed leading to surface cell degeneration.
-
- ▶ Excess fluid in a joint (synovial cavity) may occur in an arthropathy from **ANY CAUSE**

Occipito Atlantal Articulation



Atlanto Axial Articulation



Cervical Spine Movement



Thoracic Spine Movement



Thoraco Lumbar Transition



Lumbar Facet Inclination



Lumbar Facet Movement (1)



Lumbar Facet Movement (2)



History

- ▶ Greco Roman
- ▶ Bone setters
- ▶ Orthopedics
- ▶ Osteopaths
- ▶ Chiropractors
- ▶ Modern day Manipulative procedures



Artist unknown

The Dilemma

- Nobody owns manipulation
- The process is sparsely regulated
- Claims of success are clinical observations and lack regulatory guidelines in reproducibility



The Solution

- Manipulation needs to become a needed role player in primary spine care
- The registered practitioners of Manipulation should be the gate keepers in spinal aberrations
- The profession that takes on and develops this responsibility will become the owners of the process



Thank You



**“I already diagnosed myself on the Internet.
I’m only here for a second opinion.”**