A

Low Back Pain

Biomechanical Components
- Limited motion
  - Shortened tissues
  - Adhesions
- Instability
  - Disc degeneration
  - Spondylolisthesis

Neurophysiological Components
- Central sensitization
- Altered sensorimotor function
  - Interference from pain
  - Altered neuromuscular control
    - Directly due to pain
    - Adaptation to pain

- Abnormal inter-segmental motion
- Abnormal trunk muscle activity

B

Spinal Manipulation

Biomechanical Mechanisms
- Elongate shortened tissues
- Disrupt intra- and/or extra-articular adhesive tissues

- Increase in inter-segmental motion
- Improved trunk muscle activity

Neurophysiological Mechanisms
- Induce hypoalgesia
- Improve sensorimotor integration
- Improve neuromuscular control