

# Acute Low Back Pain

## *Common Causes and Management*



Most adults are likely to experience low back pain acutely at some point during their lifetime—some data suggests the rate is as high as 80%.

### **Causes of Low Back Pain:**

- **Muscle strain** may occur when the muscles of the low back are overworked or weak.
- Prolonged stress or sudden and forceful movement can lead to a **ligament strain**.
- **Poor posture** can cause muscle fatigue, joint compression and stress that will affect the discs.
- It is important to realize that **normal aging** of the bones can cause decreased bone density, strength and elasticity of the muscles and ligaments. These can lead to degenerative changes in both the discs and the facet joints.
- **Disc herniations or bulges** can then put pressure on the nerve sending radiation pain down the leg, and can respond well to strengthening—especially of the core muscles—and stretching programs and likely will not need surgery.
- There are also other medical causes which would need to be ruled out with a thorough history and physical that are not discussed here.

### **Treatment:**

- It is essential for the patient to remain active!
- Initially, avoiding specific activities that substantially increase the pain can be helpful - especially radicular pain - but bed rest or a significant decrease in overall activity can be counter-productive, therefore alternative options should be explored to keep the patient active. As the patient improves, they should be instructed to gradually return to previous activities.
- Gentle exercises for mobility and stretching can help decrease the severity, duration and recurrence but the patient should be instructed to stop if radicular pain increases.
- Heat in acute injury should be avoided for 48 hours. Instead, ice application for 15 minutes every 1-2 hours can be beneficial. NSAID's may be prescribed or taken to help with the pain.
- Modifications in sleeping position can help alleviate the low back pain.
- Prevention is very important to prevent recurrence. Once the severity of pain has decreased it is important to attempt to strengthen the hip, pelvic, abdominal and back muscles. Making sure posture is maintained and that the spine stays in a neutral position is also important as are proper lifting techniques, diet and smoking cessation.