

Low Back Pain

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Incidence

- Affects up to 85% of adults
- Leading cause of disability ages 19-45
- **Risk factors**
 - Smoking
 - Obesity
 - Older age
 - Strenuous or sedentary work
 - Psychological factors (anxiety, depression, etc)

Course

- By 6 weeks
 - 65% of patients have recovered
- By 12 weeks
 - 85% of patients are improved
- **After 12 weeks**
 - **Recovery is less likely**

Causes

- **Trauma**
 - Disc herniation
 - Strains (of muscle) & Sprains (ligaments)
 - Fractures
- **Tumor** (vertebrae or spinal cord)
- **Inflammation** (Spondylodiscitis & Rheumtoid arthritis)
- **Instability** (Spodylolysis & Spondylolethesis)
- **Degenerative disorders** (Spondylosis)
- **Other causes outside the spine**
 - Sacroiliac joint dysfunction
 - Nerve injury (sciatic n. or nerve root)
 - Hip joint affection & pelvic or abdominal mass
 - Gynecological (adhesions, fibroids, endometriosis)

C/P

- **History**

- Evidence of systemic disease
- Evidence of neurologic compromise
- Social or psychological issues
- Risk factors
- Mechanism of injury
- Red flags (neoplasms, cauda equina)

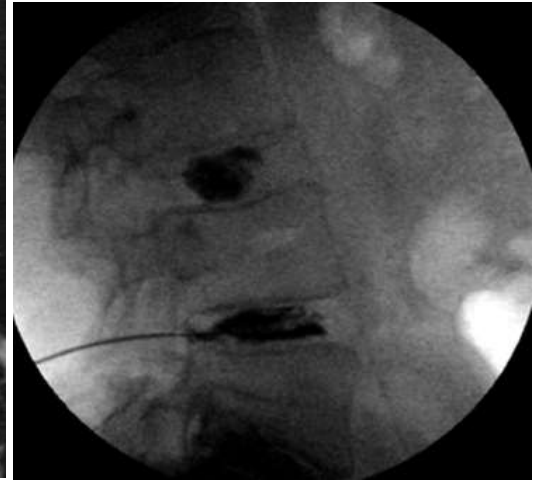
- **Symptoms**

- Low back Pain & muscle spasm
- Hip, buttock, or groin pain
- Sciatica
- Neurogenic claudication, motor and sensory disturbance

C/P

- **Signs**

- Tenderness
- Limited range of motion
- +ve straight leg raising test
- Neurological exam
- Evaluation for malignancy
- Psychological assessment



- **Investigations**

- X-rays
- CT
- MRI
- EMG/NCS
- Discography



Herniated Disc

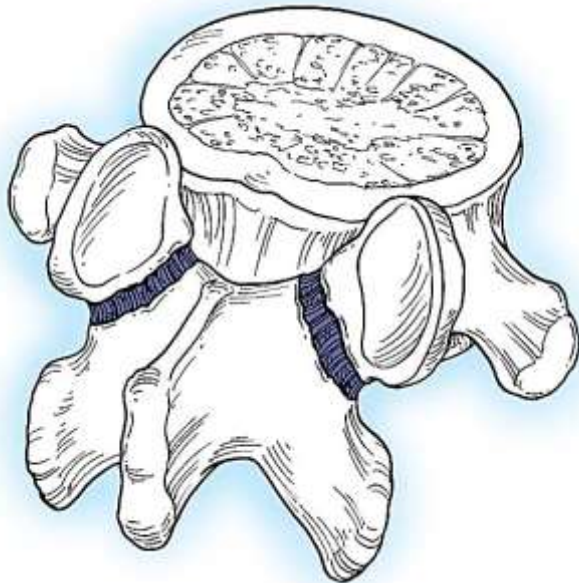
- Sciatica
- Back pain and muscle spasm
- Neurological symptoms



Spondylolysis & Spondylolesthesis

- **Spondylolysis**

- Defect in the pars interarticularis



- **Spondylolesthesis**

- Anterior vertebral slippage
- Mostly due to pars defect



Spondylosis (degenerative disc disease)

- Symptoms are centrally located
- May involve buttock or proximal leg pain
- Exacerbated by obesity and inactivity

- Spondylosis is a degenerative condition
- Spondylosis is a degenerative condition



Treatment

- **Medications**
 - NSAIDs and other analgesics
 - Muscle relaxants
 - Neuropathic medications
- **Physiotherapy**
- **Injections**
 - Trigger point ,epidural or facet injections
- **Other methods**
 - Radiofrequency ablation
 - Spinal cord stimulation
- **Surgical Treatment**

Summary

- Back pain is the 2nd most common reason for medical visits.
- Focused history and examination
- Variety of causes for low back pain
- Physician must identify and treat the cause
- **Conservative treatment**
- Surgery is the last option

**No amount of
regret can change
the past.**

**No amount of
anxiety can change
the future.**