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FACULTY OF NURSING

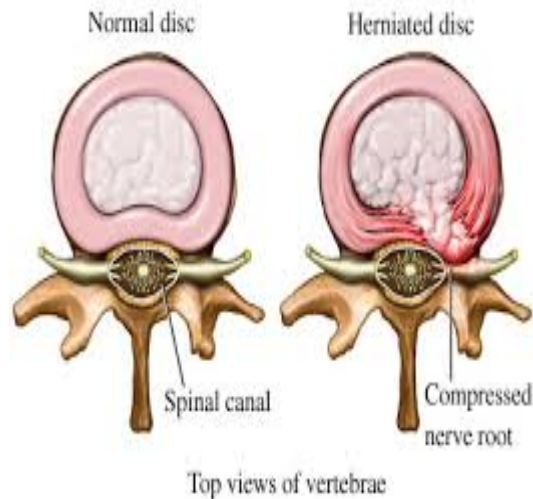


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INTERVERTEBRAL DISC PROLAPSE

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It can be the result of natural degeneration with age or repeated stress and trauma to the spine. The nucleus pulposus may rupture to cause acute injury and back pain common sites will be L4 – L5 and L5 – S1



INTERVERTEBRAL DISC PROLAPSE

Four stages to a disc herniation

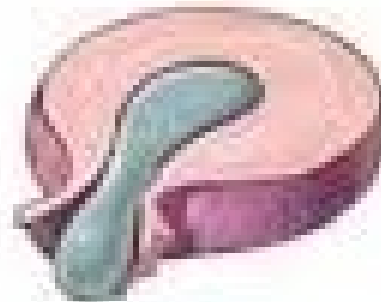
Degeneration



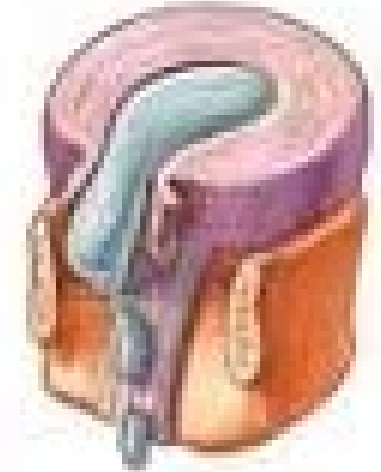
Prolapse



Extrusion

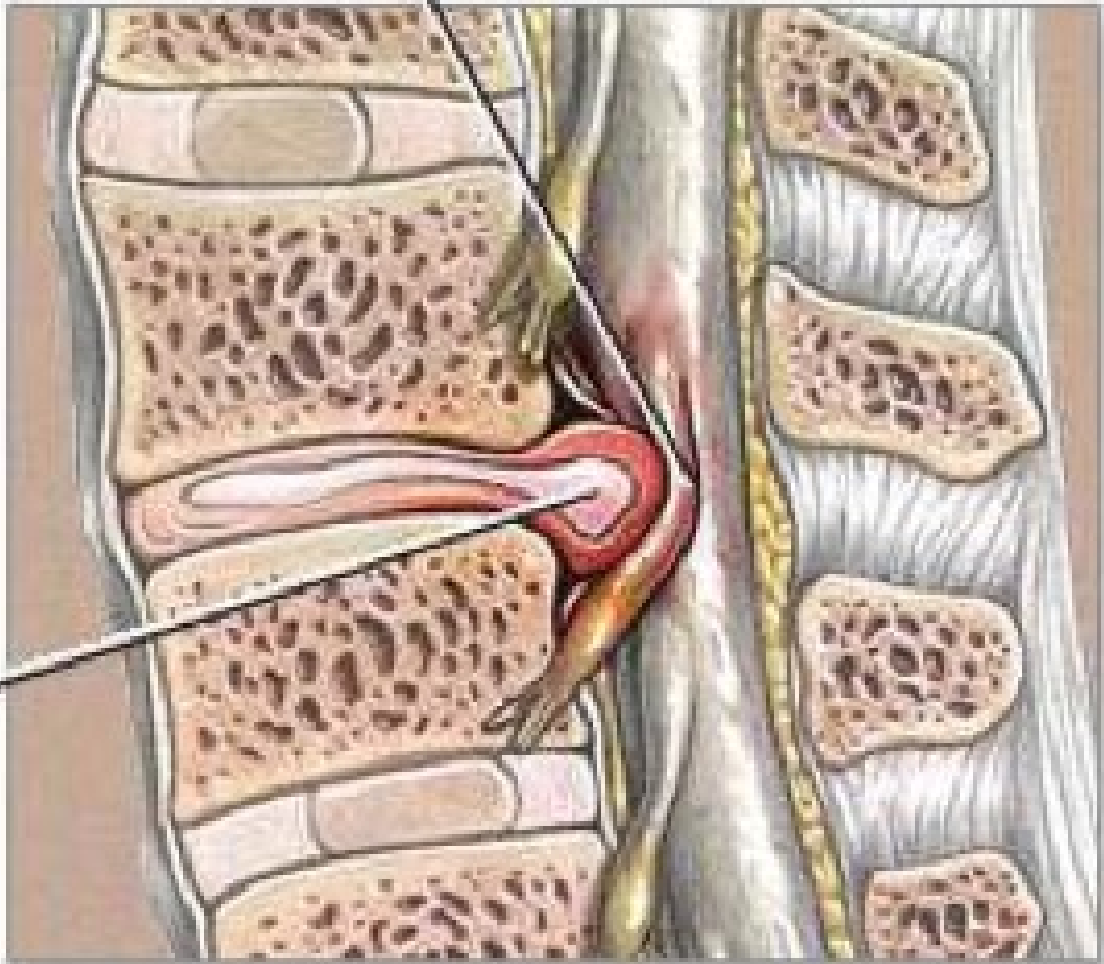


Sequestration



Compressed lumbar spinal nerve

Herniated disc



Low back pain radiating down the buttock and below the knee, along the distribution of sciatic nerve (radiculopathy). The straight leg test may be positive indicating nerve root irritation, reflexes may be depressed or absent parasthesia or muscle weakness in the legs, feet or toes.

Clinical manifestations

History Collection

Physical Examination

CT Scan

MRI

EMG

Myelogram

Diskogram

Diagnostic Evaluation

Conservative:

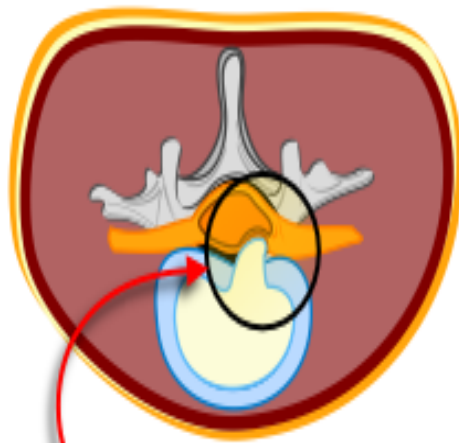
- Restricted Activity
- Medication
 - Analgesics - NSAIDs
 - Muscle Relaxants.
- Heat or cold compress therapy, Physical therapy

Management

Surgical:

- Laminectomy with or without spinal fusion
- Diskectomy
- Percutaneous laser Diskectomy
- Spinal fusion with or without instrumentation

Cont...



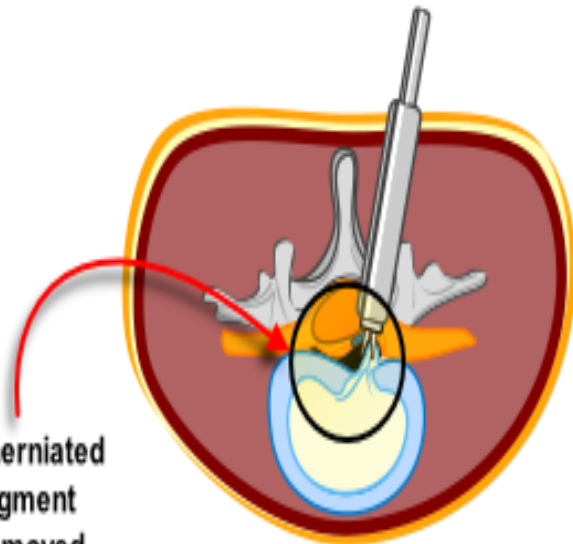
The herniated disk pushing on the nerve.



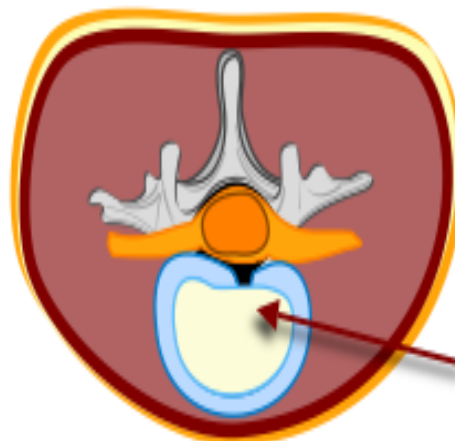
A looking channel is inserted through a small incision.



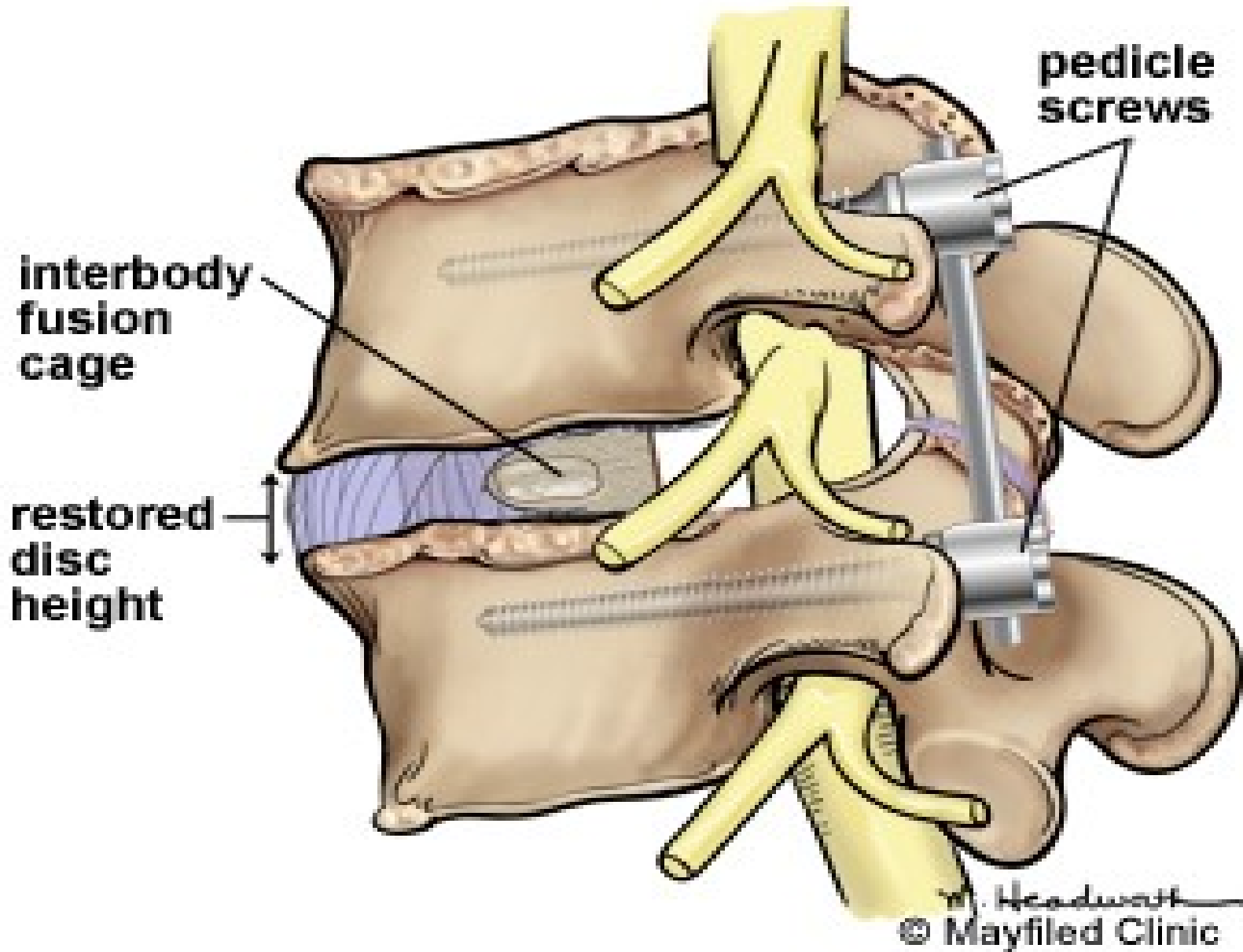
A retractor is placed through the channel to move the nerve



The herniated fragment is removed.



When the procedure is completed there is no more pressure on the



LOW BACK PAIN



It is common and has probably affected about 80% of adults. It is most common problem in lumbar region because (i) It bears most of the weight of the body (ii) It is the flexible region of spinal column (iii) It contains nerve roots that are vulnerable to injury (iv) inherently poor biomechanical structure.

LOW BACK PAIN

- Acute lumbosacral strain
- Instability of lumbosacral bony mechanism
- Osteo arthritis of the lumbosacral vertebrae
- Intervertebral disc degeneration
- Herniation of Intervertebral disc

Causes

- Lack of muscle tone
- Excess body weight
- Poor posture
- Cigarette Smoking
- Stress
- Jobs that require repetitive heavy working

Risk factors

Classification

- Acute Low Back Pain
- Chronic Low Back Pain

Acute Low Back Pain

It lasts for 4 weeks or less. It is usually associated with some type of activity that causes undue stress on the tissues of lower back.

- Analgesics – NSAIDs,
- Muscle Relaxants
- Massage and back manipulation
- The alternate usage of heat and cold compresses
- A brief period of rest at home is necessary
- Invasive treatment such as implanted epidural corticosteroids are helpful in relieving pain

Management

Chronic Low Back Pain

It lasts for more than 3 months or is a repeated incapacitating episode.

- Degenerative disk disease
- Lack of physical exercise
- Prior injury
- Obesity
- Structural and postural abnormalities
- Systemic diseases

Causes

- Reduction of pain with NSAIDs
- Daily activities
- Weight reduction
- Sufficient rest periods
- Local heat or cold compress
- Exercise and activity

Management

- Maintain healthy weight
- Do not sleep in prone position
- Avoid cigarette smoking
- Obtain regular physical activity
- Use proper body mechanism
- Sleep on sides with knee bend and pillows between the knees

Prevention