

Disc Prolapse

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Spine Surgery & Joint Replacement

Terminology

- Prolapse
- Protrusion
- Rupture
- Herniation
- Extrusion
- Sequestration



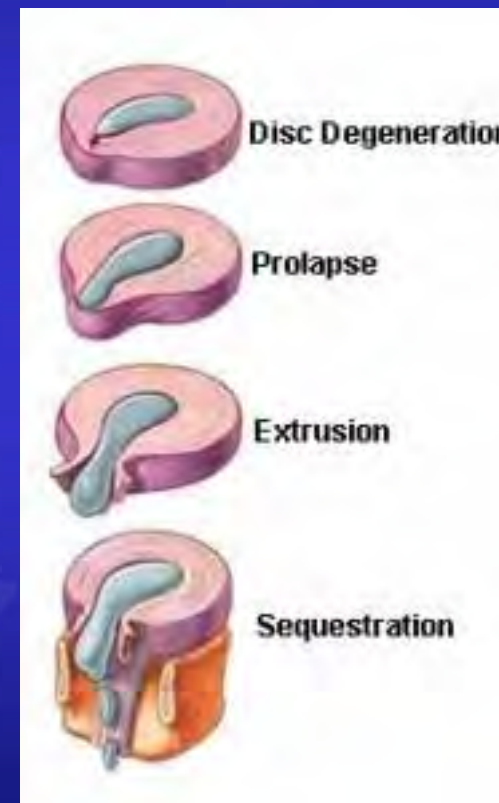
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Prevalence

- 1-3% and highest in 30-50 year old
- Male to Female ratio 2:1



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Prevalence

- 1-3% and highest in 30-50 year old
- Male to Female ratio 2:1
- Who has had a disc prolapse?



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A Typical Story

- A true story
- 33 yr old carpenter
- Lifts a compressor
- Feels “something go” in his back with “electric shock” down his leg
- Continues working, but back pain worse



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A typical Story

- Next morning – “can’t get out of bed”
- Thigh pain worse with bending
- Takes some tablets
- Drives to work – “can’t get out of car”
- Tries to work, but pain worse
- Numbness in his foot



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A Typical Story

- Quits work early
- Sees physio



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Physiotherapy + Psychology

- Often first port of call
- Trusted profession
- Care for body and mind



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A Typical Story

- Quits work early
- Sees physio
- Worried by pain
- Worried about future
- Progressive symptoms



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Physiotherapy + Psychology

- Often first port of call
- Trusted profession
- Care for body and mind
- Give physical relief
- Reassurance
- Prognosis is good



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Neurogenic Pain

- Progressive
 - Down arm
 - Down leg
 - Abnormal feelings
 - Worse with posture
- Constant like a toothache
- Debilitating

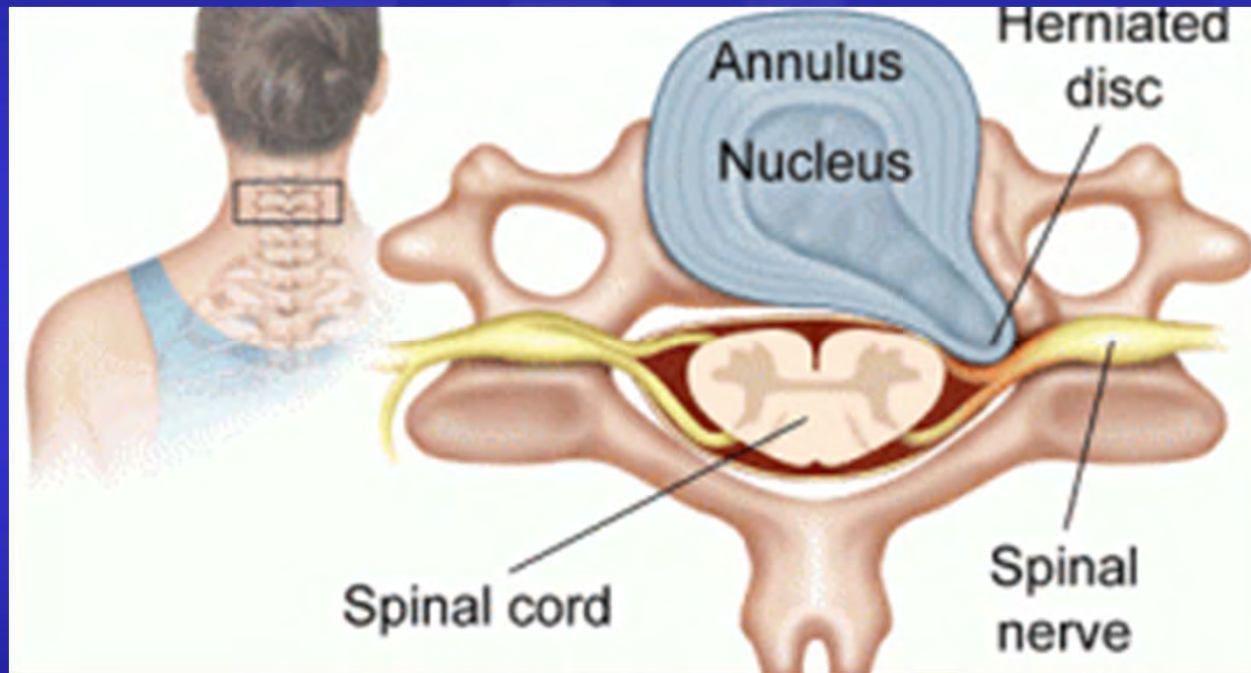


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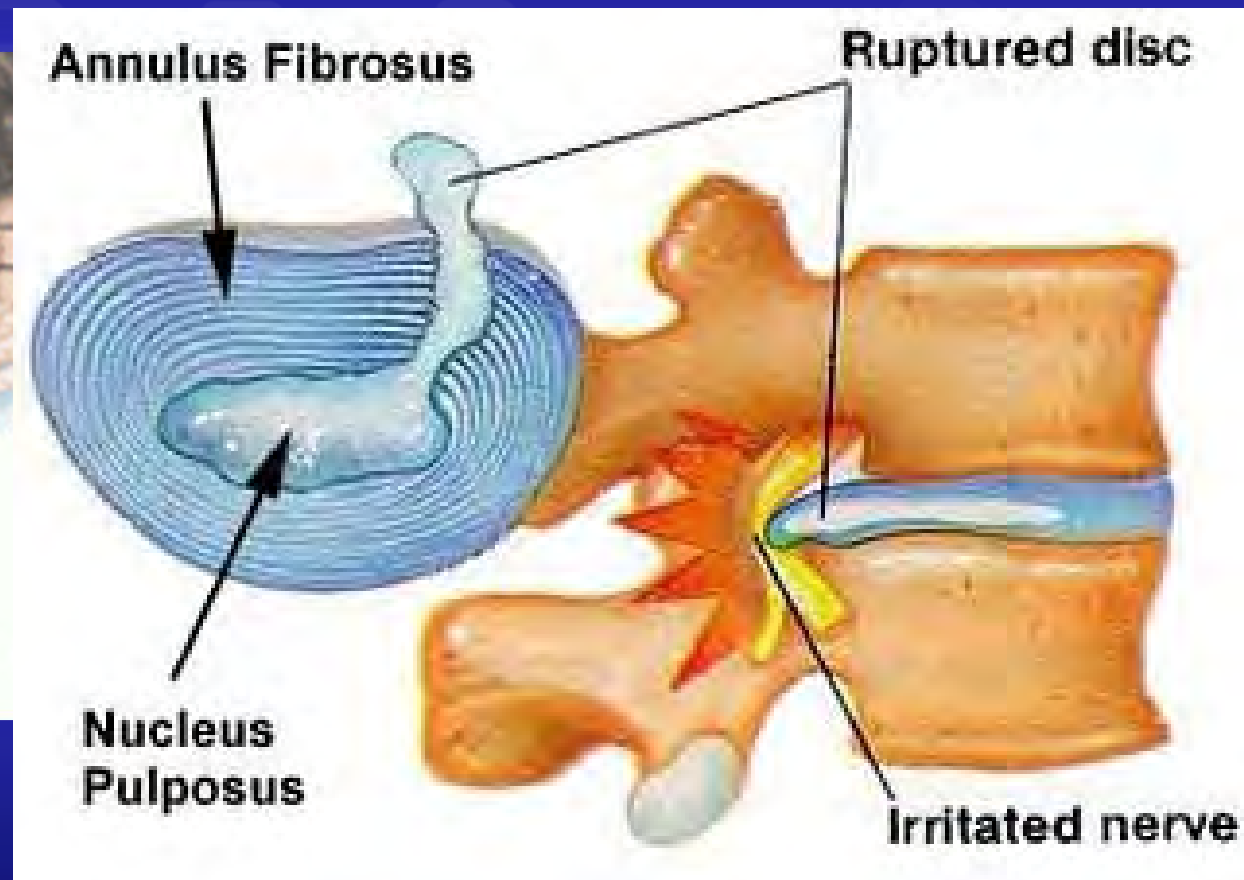
Neurogenic Pain



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Neurogenic Pain



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A typical Story

- Fortified with hot packs, gentle exercise, anti-inflammatories, reassurance
- Advised to rest
- Tries a day at work, but gives up
- Financial worries
- Will injections help?



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When to scan?

- Natural history favorable
- Beware of
 - Red flags – tumour and infection
 - Progressive weakness
 - Bladder and bowel dysfunction
- Failure to improve
- Severe pain



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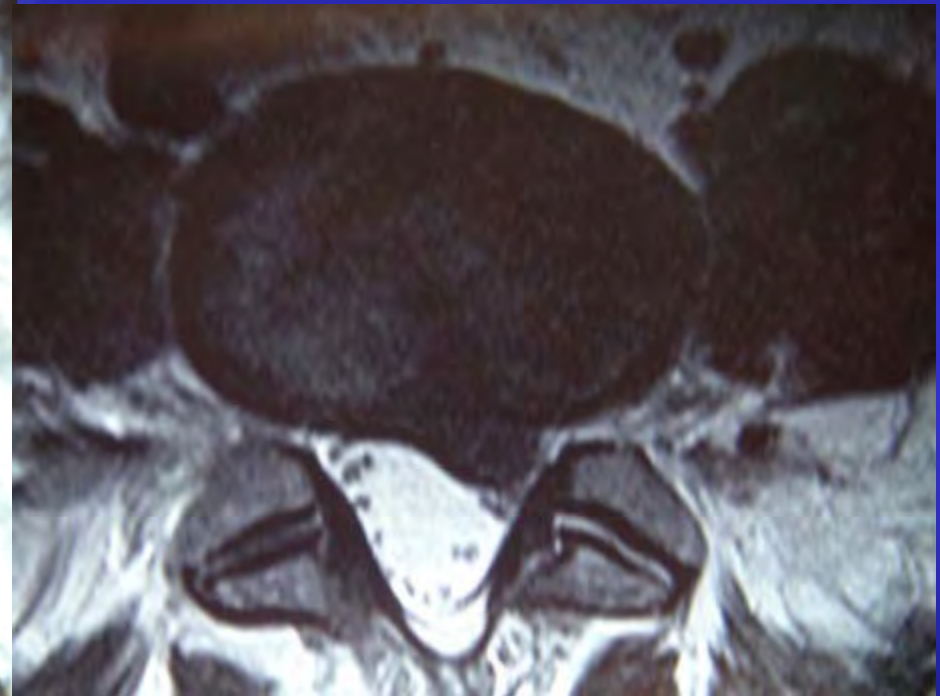
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MRI

- Gold standard
- Good for soft tissues
 - Discs and nerves
 - CSF – spare room
- No radiation
- But expensive and claustrophobic
- Occasionally not possible - implants



MRI – L4/5 Disc



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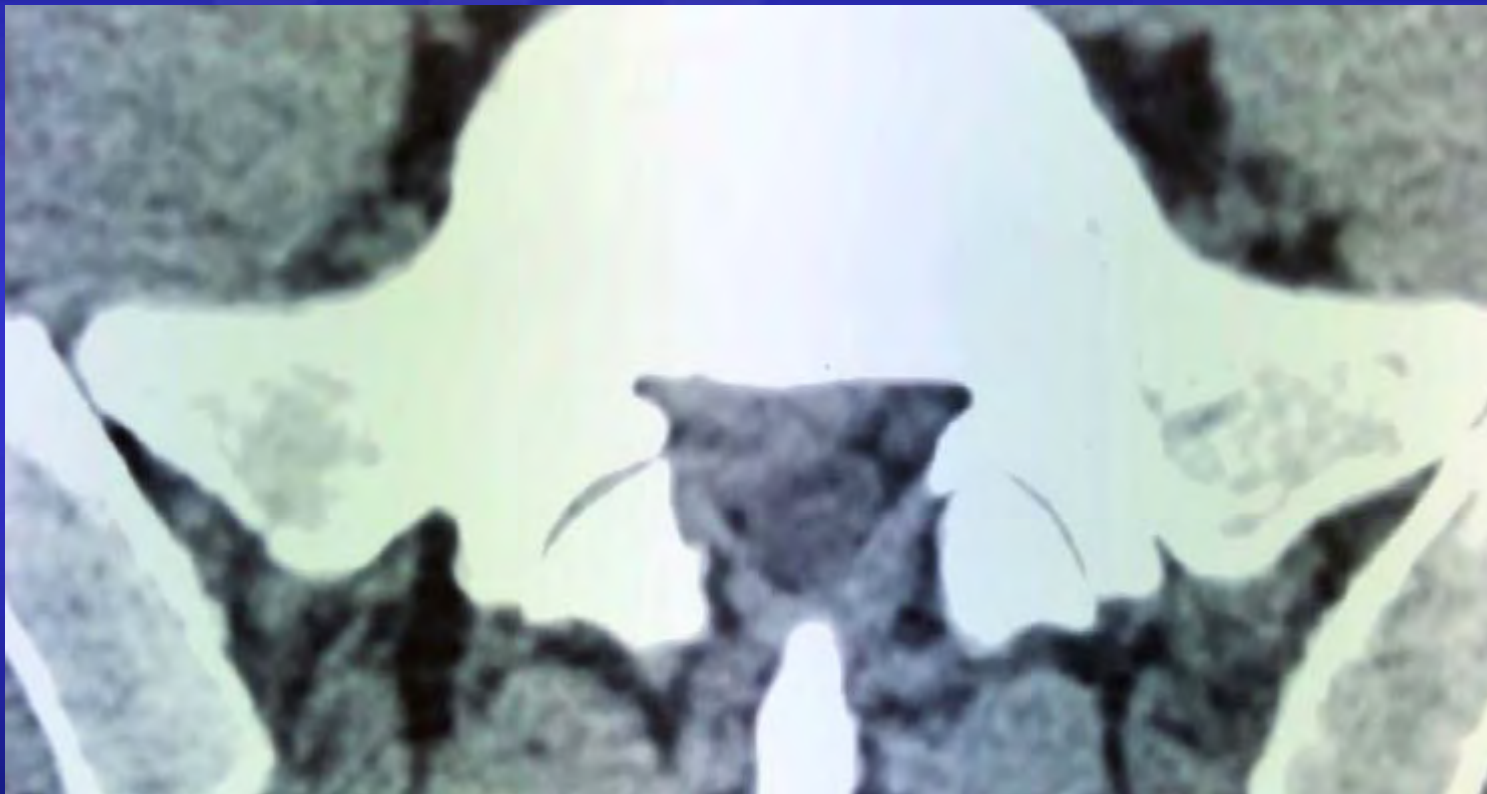
MRI – 2 Discs



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CT Scan



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CT Myelogram



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Synovial Cyst



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Epidural Abscess



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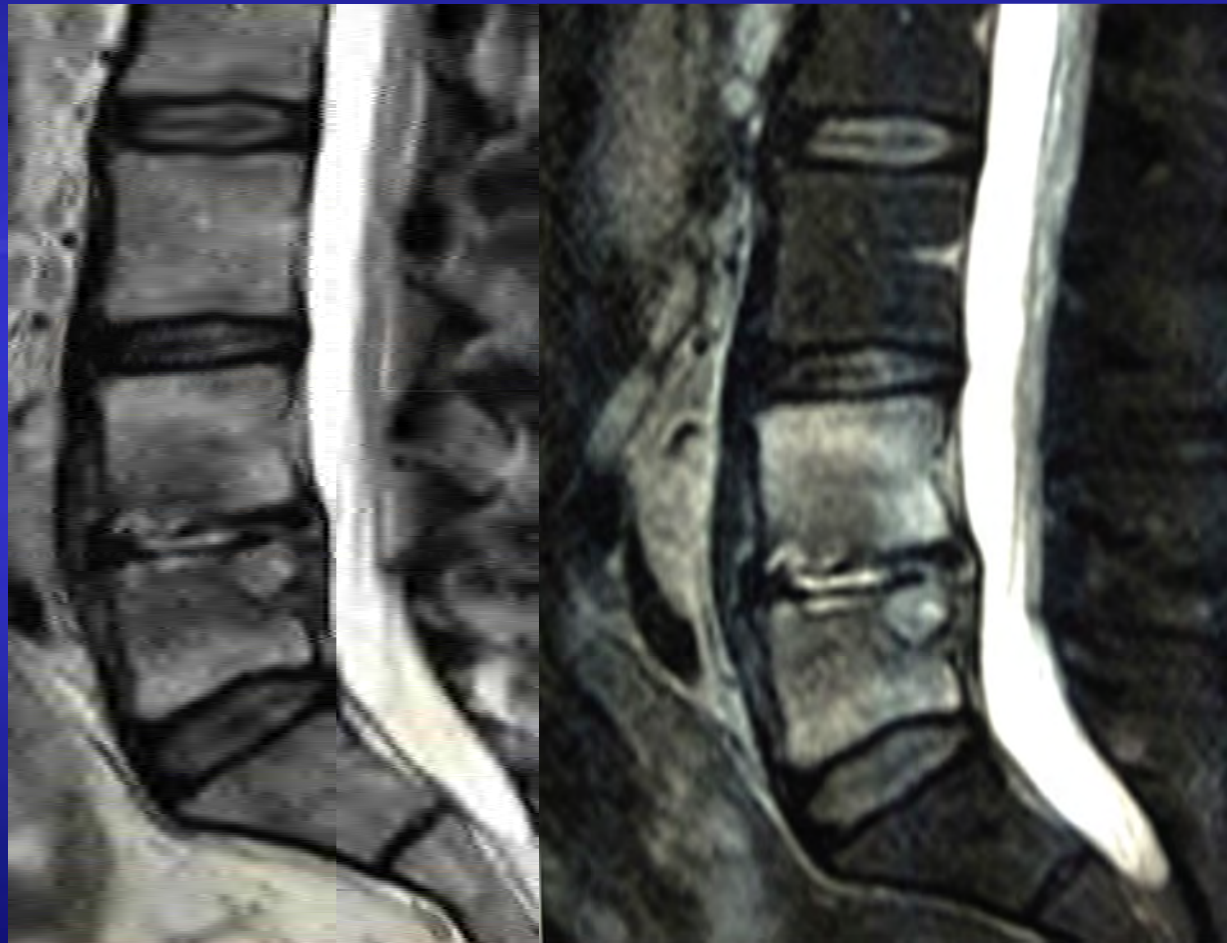
Spinal Stenosis



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Discitis



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Injections

- Steroids with LA
- Diagnostic and therapeutic
- Short term relief
- Severe pain
- Can be repeated 2-3x
- CT guided – epidural or trans-foraminal

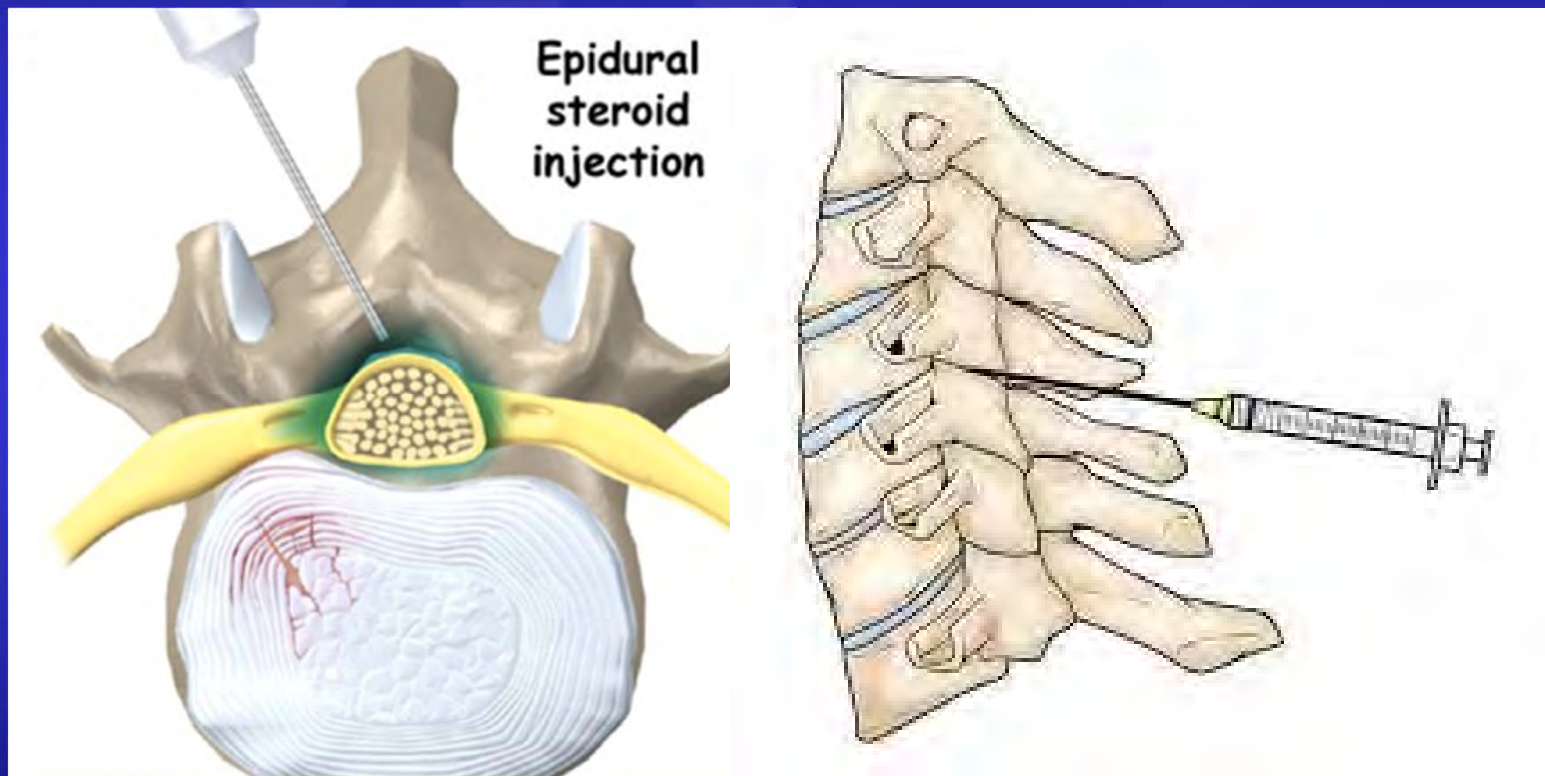


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Injections



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A Not So Typical Story

- After 3 weeks our man is no better
- Frustrated and a little angry
- Debts increasing
- MRI L4/5 disc prolapse
- When to see a surgeon?



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Surgery

- Cauda equina syndrome
- Progressive weakness
- Persistent severe pain
- After 4-6 weeks of non-operative care
- When symptoms, signs, and scan correlate
- When the patient decides



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Discectomy

- 3-4cm incision
- Check level with x-ray
- Magnification
- Laminotomy
- Remove prominent disc material
- Decompress nerve



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Discectomy

- 1-2 ml
- 10-20%
- Firm fibrous
- Fragmented



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Discectomy

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Discectomy



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Discectomy

- 1 hour
- Most stay overnight
- Cautiously active 1-2 weeks
- Post-op physio
 - Core strengthening
 - ROM
 - Gradual increase



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Our Story

- Our patient opted to have surgery
- At 5 weeks
- Simple discectomy and L5 decompression
- Leg pain was instantly relieved
- One night in hospital
- Two weeks off work
- Resumed normal duties



Unusual Challenge

- Tattoo



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Prognosis

- Generally very good
- Occasional back pain
- Most return to work and sports
- Recurrence 5-10%
- Rarely progressive degeneration



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Prognosis – Cervical discs

- Better, but slower
- Often take 2-3 months to settle
- Can be debilitating
- Occasionally a collar helps
- Cervical surgery more complex and risky



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Core Strengthening

- Post op exercises
- Pilates
- Swimming
- Gym based strengthening
- Caution
- Improved posture and work practices



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Chronic Pain

- “Window of opportunity”
- 6 weeks to 6 months
- Thereafter risk of chronic pain
- Depression
- Analgesic dependence
- Social disintegration



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Cervical and Lumbar Discs

- Frequently injured
- An emotional organ
- Fear and misunderstandings
- The wheelchair paranoia
- Mostly an excellent prognosis
- Well managed with physio and time



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