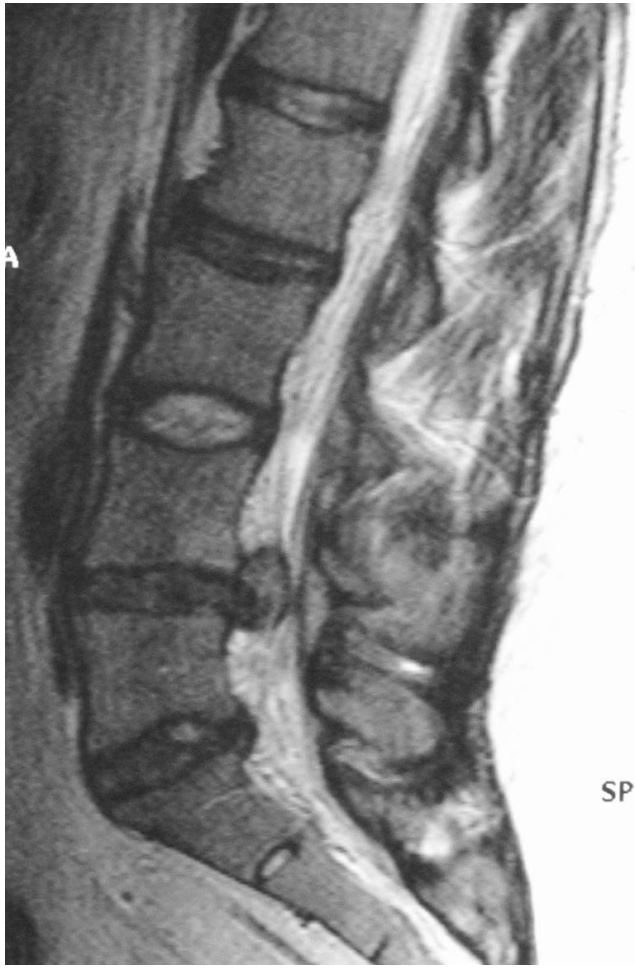
DR RALPH
STANFORD
ORTHOPAEDIC SPINE SURGEON

Lumbar disc herniation

Webinar for GPs:

21 February 2024 // 8am to 8.30am



Dr Ralph Stanford

ORTHOPAEDIC SPINE SURGEON

- Spinal surgeon with over 20 years' experience
- Head of Department of Orthopaedics and Supervisor of Training for Orthopaedic Trainees, Prince of Wales Hospital
- Conjoint Senior Lecturer at the University of New South Wales
- Honorary Senior Scientist at Neuroscience Research Australia (NeuRA) and a member of Spinal PFET.

Dedicated to lifelong learning and sharing my expertise with others, I attend spinal conferences worldwide and regularly consult with colleagues about successful treatments.

If you have any questions about a patient, please feel free to call me on 02 9650 4893. I will return your call and discuss how we can help.

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Sciatica is:

- Lower limb
- Unilateral
- Neuropathic
- Dermatomal
- One nerve root

- L4
- L5
- S1

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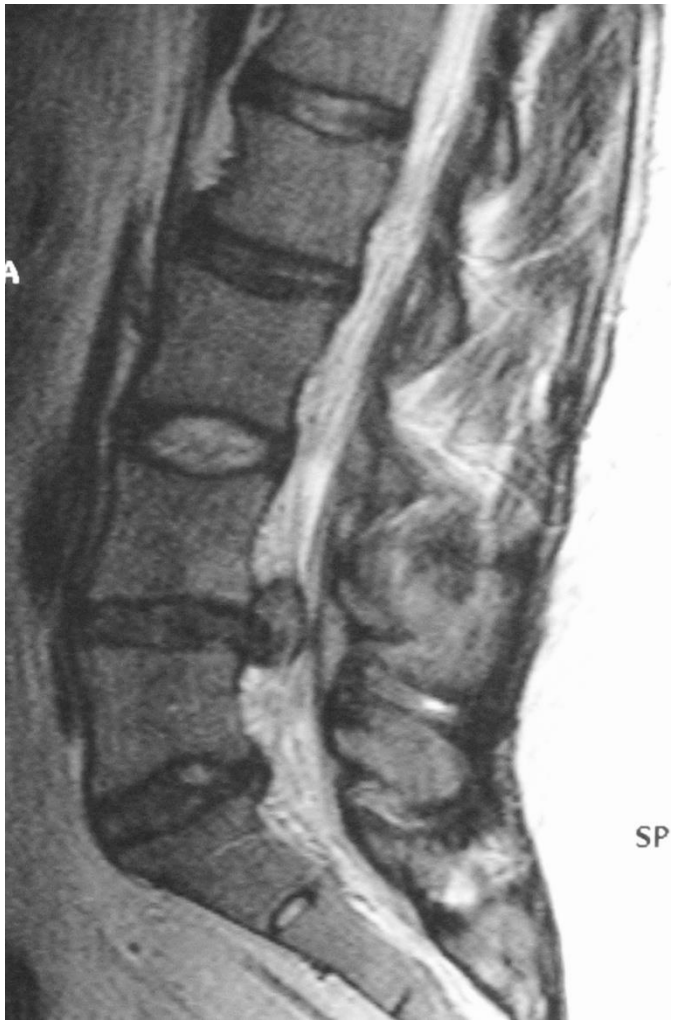
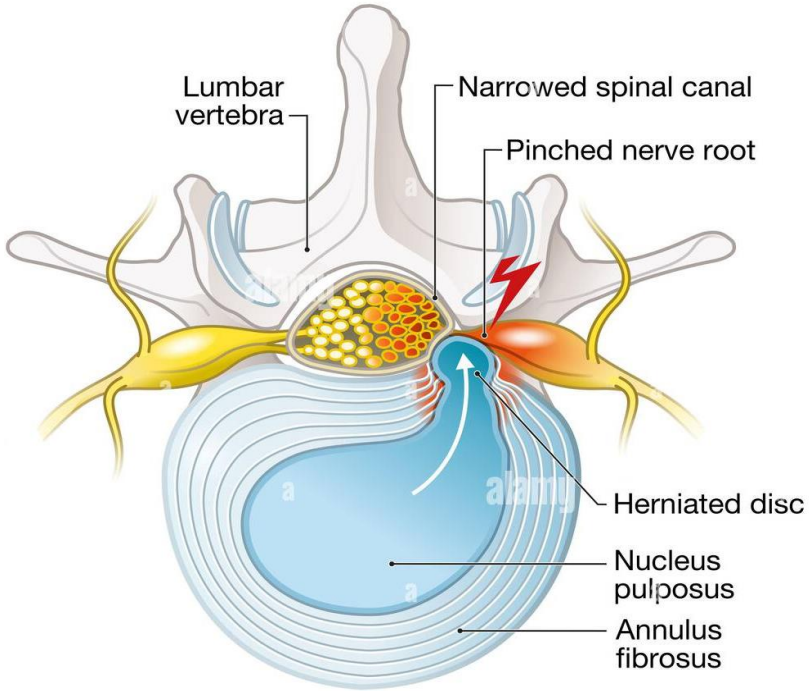
Disc herniation

- Abrupt onset
- Minor provocation
- Healthy
- Buttock pain
- Worse sitting
- Better walking
- Back pain variable
  - May have prodromal back pain



Pathology

- Tears in annulus fibrosus
- Nucleus pulposus material protrudes
- Result of chronic loading on disc
- Degeneration is inevitable in all
- Herniation is a random process
- Bending with twisting movements

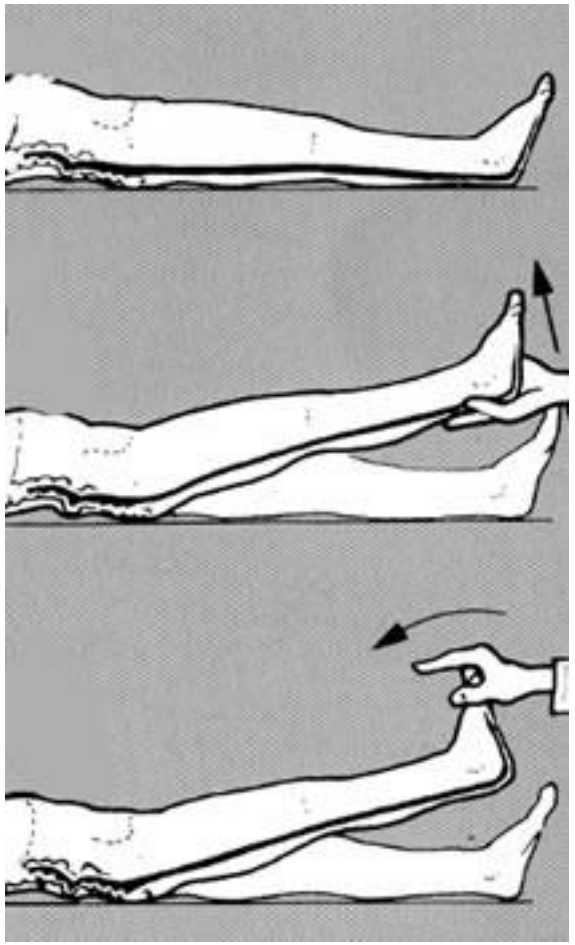


Examination

- Found standing in waiting room
- Can walk
- Neurological deficit varies, often mild
- Sciatic stretch test

Straight leg raise test

- Sciatic stretch
- Passive test
- Positive only when radicular pain
- Note angle at which positive
- Back pain does not mean anything



Diagnosis

- Clinical
  - Sudden onset
  - Previously well
  - Radicular
  - No features of other pathology
  - Corresponding mono-radiculopathy on exam
- Do not need a scan
  - Unless major or progressive deficit

Cauda equina syndrome

- Retention of urine – difficulty passing urine
- Bilateral lower limb symptoms and signs
- Saddle numbness
- Reduced anal sensation and motor function
- Surgical emergency
- Immediate scan etc

Natural history sciatica

- 80% recovered by 3 months
- Long term outcome generally favourable
- And probably similar between surgical and non-operative care
- Minor motor deficits usually recover spontaneously
- Sensory deficits more likely to persist

- Most patients do not require surgery

Peul, Wilco C., et al. "Surgery versus prolonged conservative treatment for sciatica." New England Journal of Medicine 356.22 (2007): 2245-2256.

Major motor deficit

- MRC grade 3 or less
- Systematic review
  - Recovery with surgery 38%
  - Recovery without surgery 32%
- Time limit for surgery about 2 months
- Recovery time up to 2 years
- No firm conclusions can be made
- Anecdotes abound

Balaji, V. R., et al. "Recovery of severe motor deficit secondary to herniated lumbar disc prolapse: is surgical intervention important? A systematic review."*European Spine Journal* 23.9 (2014): 1968-1977.

Management in first 6 weeks

- Diagnosis without scan
- Appropriate advice and observation
- Short period of rest
- Encourage activity and work
- NSAIDs / COX2I
- Opioids for limited period?
- Pregabalin / gabapentin??

What therapies?

- No therapy has been shown to make a difference
- Patient can choose for themselves
- Time and pain management are key

- Trans-foraminal nerve root sleeve injection of cortisone can be helpful

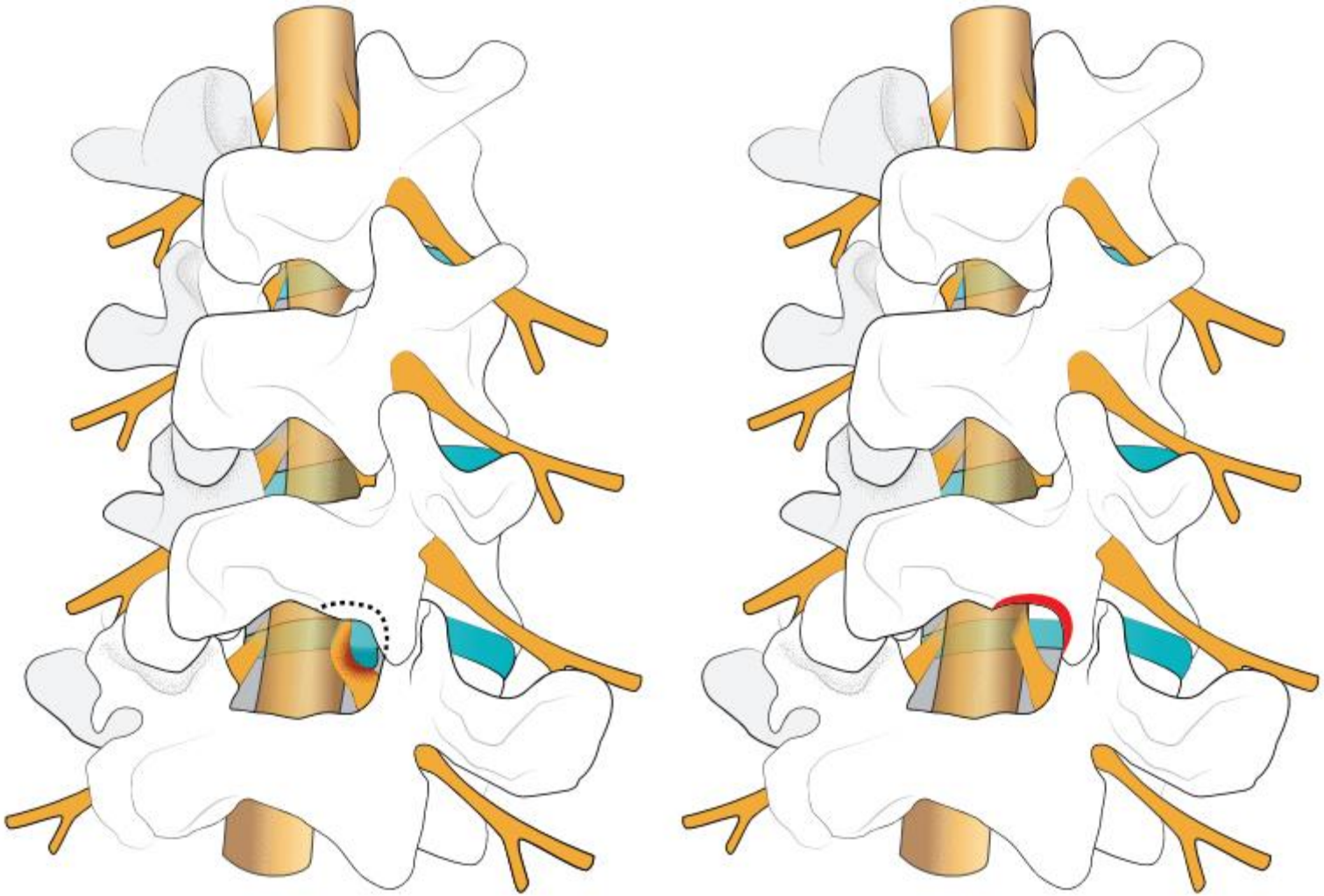
If pain is severe or persistent or major motor deficit

- Consider surgical intervention
- MRI
  - CT scan is a physical injury when done for sciatica
- Concordant disc protrusion
- ***Must have specific symptoms, signs and imaging***

Indications for surgery

- Patient perception of pain and disability
- Patient perception of deficit
- Patients self-select
- However
  - Can operate with confidence because surgery effective for pain relief

Surgery: all techniques are equivalent



Post-op recovery

- Sciatic pain relief usually immediate
- Motor recovery variable time frame
- Sensory symptoms resolve last and may be permanent

- Home day after surgery

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Recovery

- Back to sedentary work 2 weeks
- Physical work 6 weeks
- Encourage light exercise, walking is best
- After 6 weeks can do as wish

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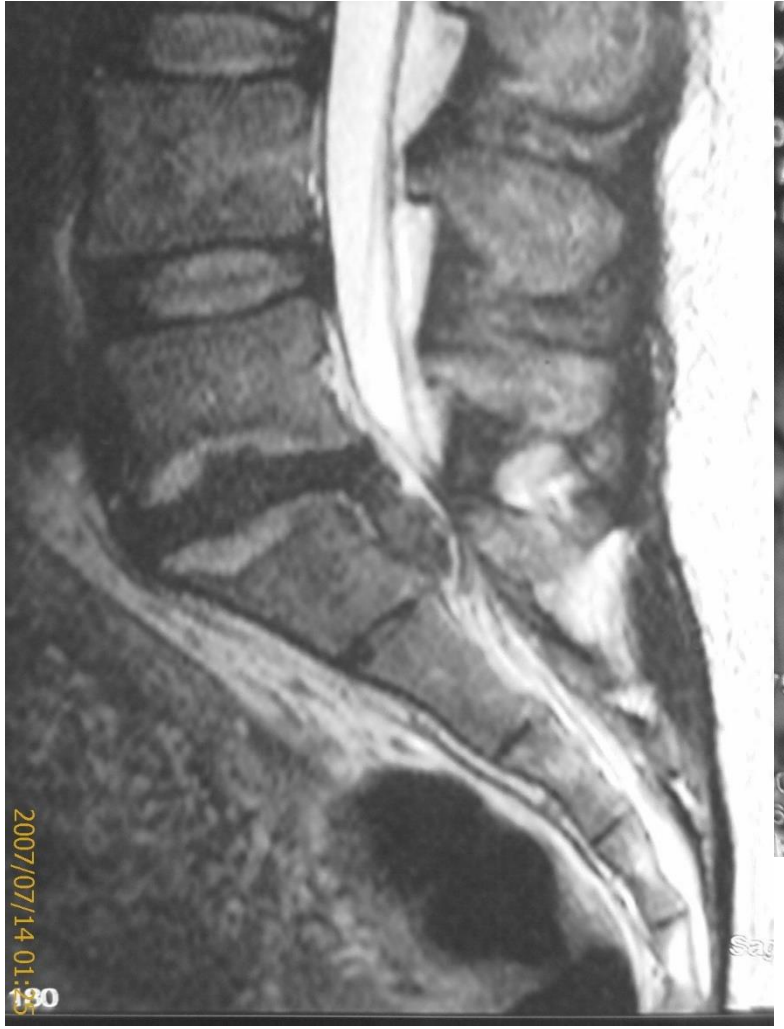
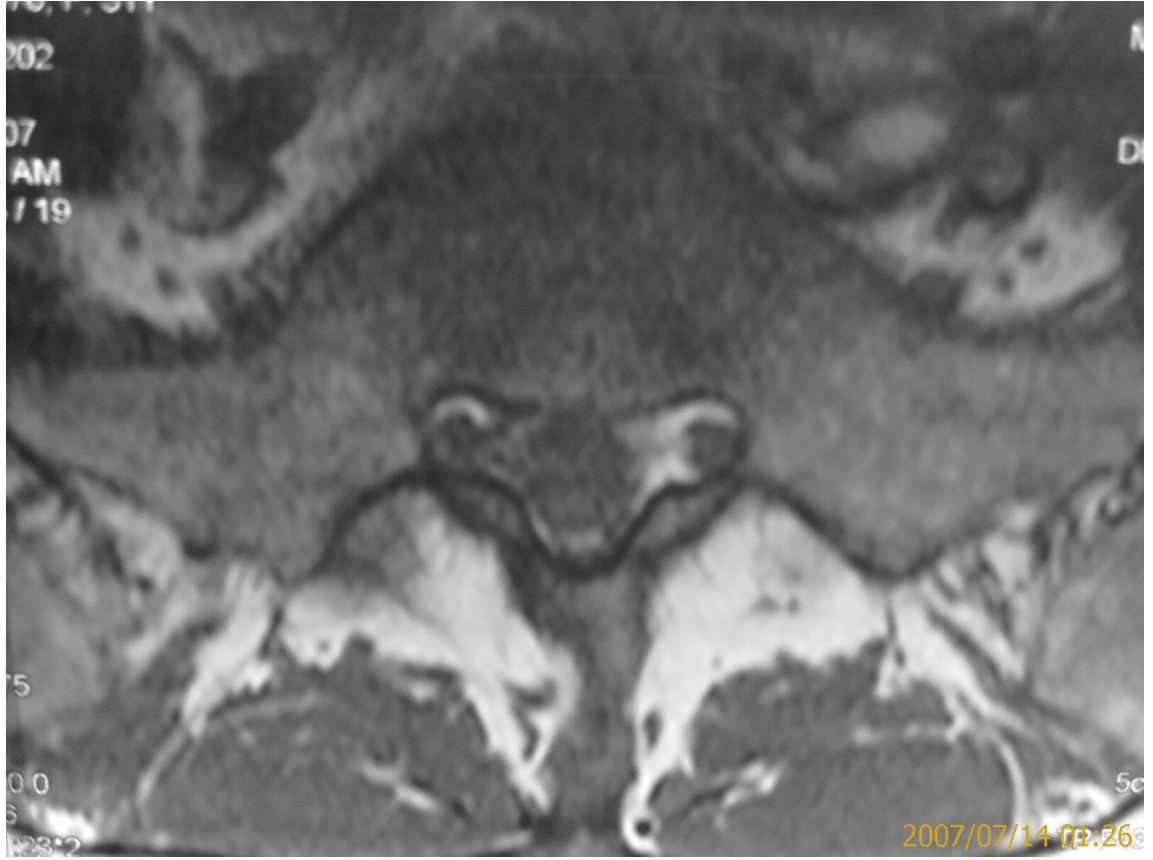
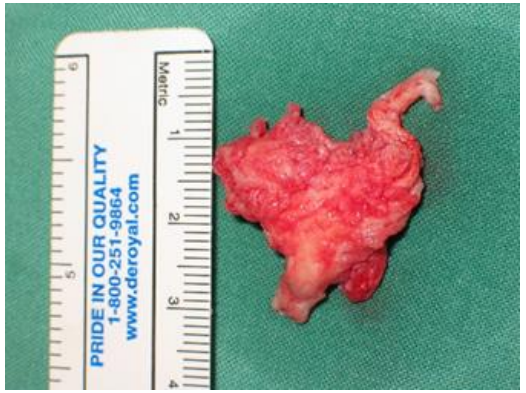
Recurrence

- Re-herniation at same site 10%
- Same with or without surgical discectomy
- No known prevention, so carry on as usual







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Q & A

- A **recording** of the webinar will be available on my website
- **Further resources for GPs** are available at https://spinalsurgeonsydney.com.au/for-referrers
- **To receive future resources via email,** send your name and email address to info@powspine.com.au

As always if you have any questions about a patient, please feel free to call me on 02 9650 4893.
I will return your call and discuss how we can help.

You can also reach me via ralphstanford@powspine.com.au.

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