

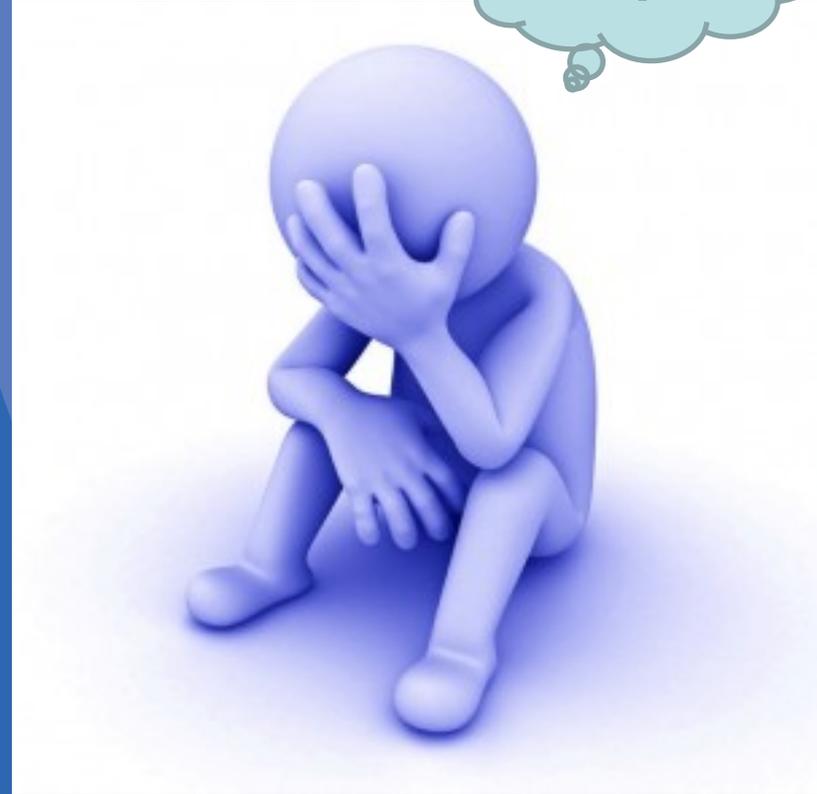
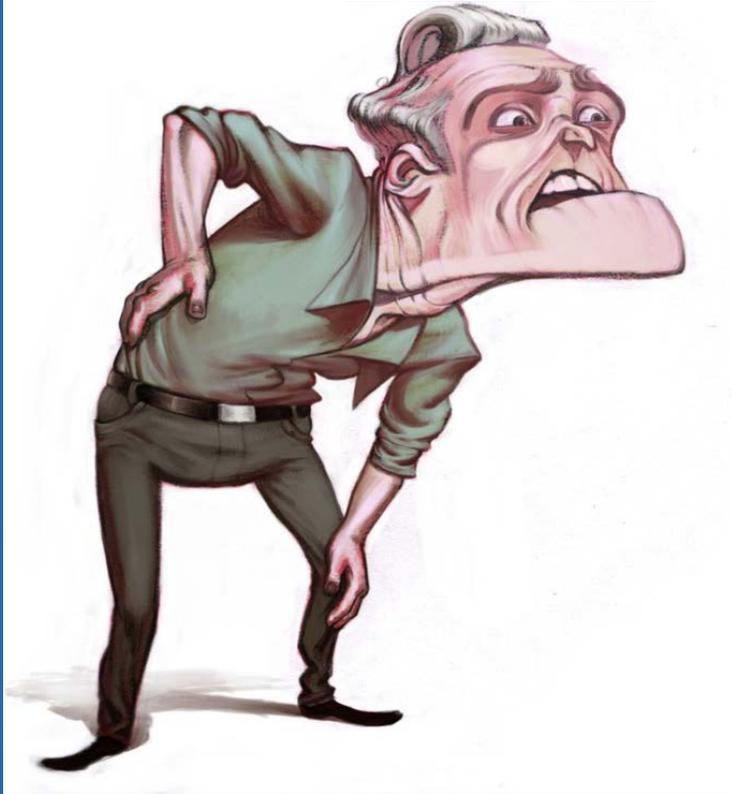
MANAGEMENT OF BACK PAIN

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Queen Elizabeth Hospital Birmingham





Objectives

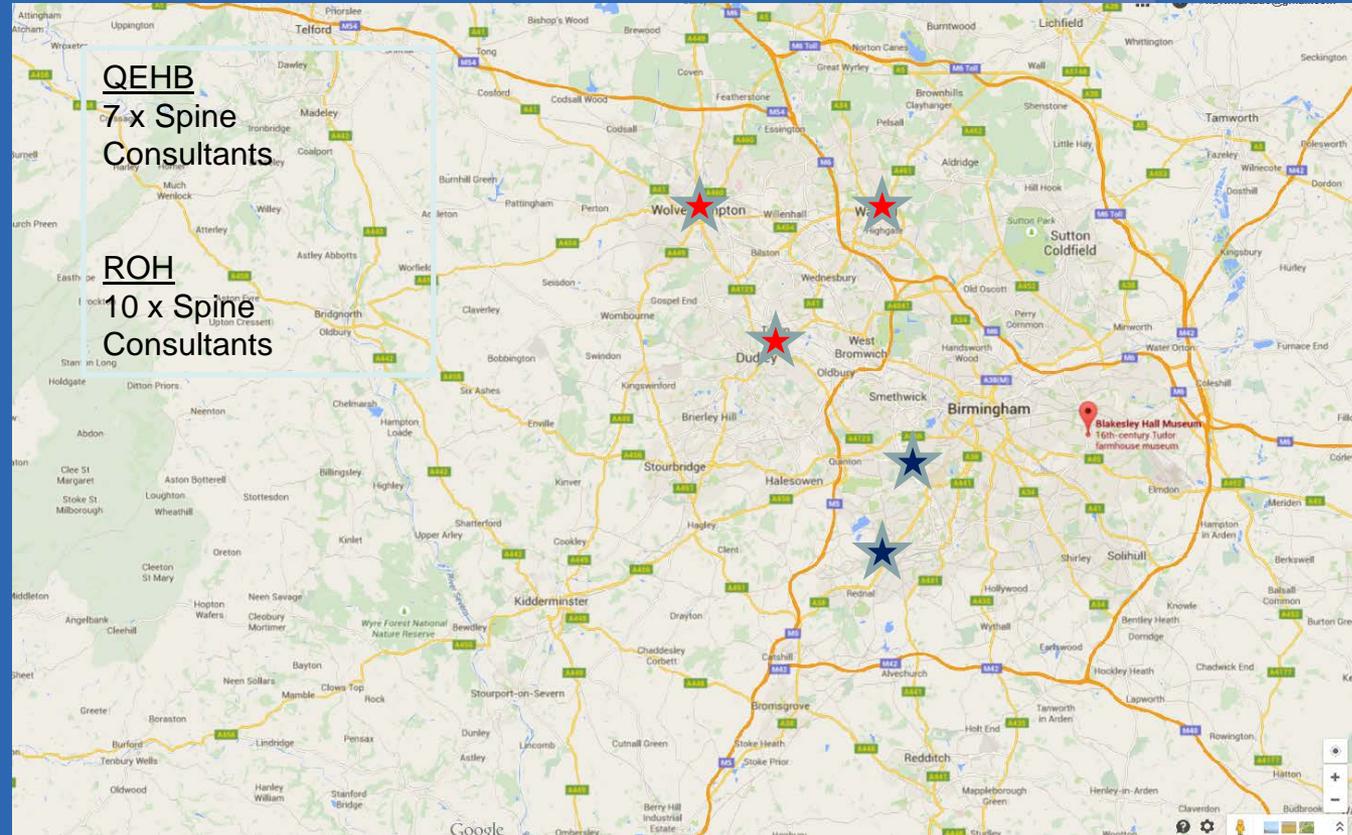
- Clinical Features
- Differential Diagnosis
- Management Pathways
- **NHS England Pathfinder Project**
 - National Pathway of Care for Low Back Pain and Radicular Pain (2014)
- Surgical causes and cases
- Physiotherapy/Triage & Treat Practitioner



Birmingham Spine Services

QEHB
7 x Spine
Consultants

ROH
10 x Spine
Consultants



Birmingham City

- 1,085,400 population
- Younger population
 - 45.7% < 30yrs
 - 12.9% > 65yrs
- Growing city - 1% per year from 2001

Birmingham Metropolitan Area ~ 4 million



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Epidemiology

- Low back pain without radicular pain
 - one of the most common musculo-skeletal conditions presenting to GPs
 - 80 % of all people will get back pain at some point in their life
 - access rates have increased from 231 to 295 per 1,000 (2005 to 2010)
 - Hospital Episode Statistics (HES) data for 2010/2011:
 - over 70,000 procedures for low back pain in England
 - around 67,000 facet joint injections
- Low back pain with radicular pain
 - access rates have risen from 74 to 121 per 100,000 population
 - Hospital Episode Statistics (HES) data for 2010/2011:
 - 76,304 interventional procedures were undertaken for lumbar radicular pain
 - 11,674 decompressions were carried out for spinal stenosis



Spinal Surgery in the Press



North Bristol halts spinal surgery referrals

15 OCTOBER, 2014 | BY NICK RENAUD-KOMIYA

PERFORMANCE: North Bristol Trust will refuse new referrals for spinal surgery after identifying scores of patients were waiting more than a year for procedures.

The restriction will be introduced through changes to the trust's GP referral criteria.

A number of non-urgent patients on North Bristol's waiting list are already being referred to the privately run BMI Ridgeway Hospital in Swindon, a spokesman for South Gloucestershire Clinical Commissioning Group confirmed.

The CCG has also asked another NHS hospital and a private hospital to perform non-urgent spinal surgery on new patients.

The trust said it aimed to restore full access to treatment within 18 months.

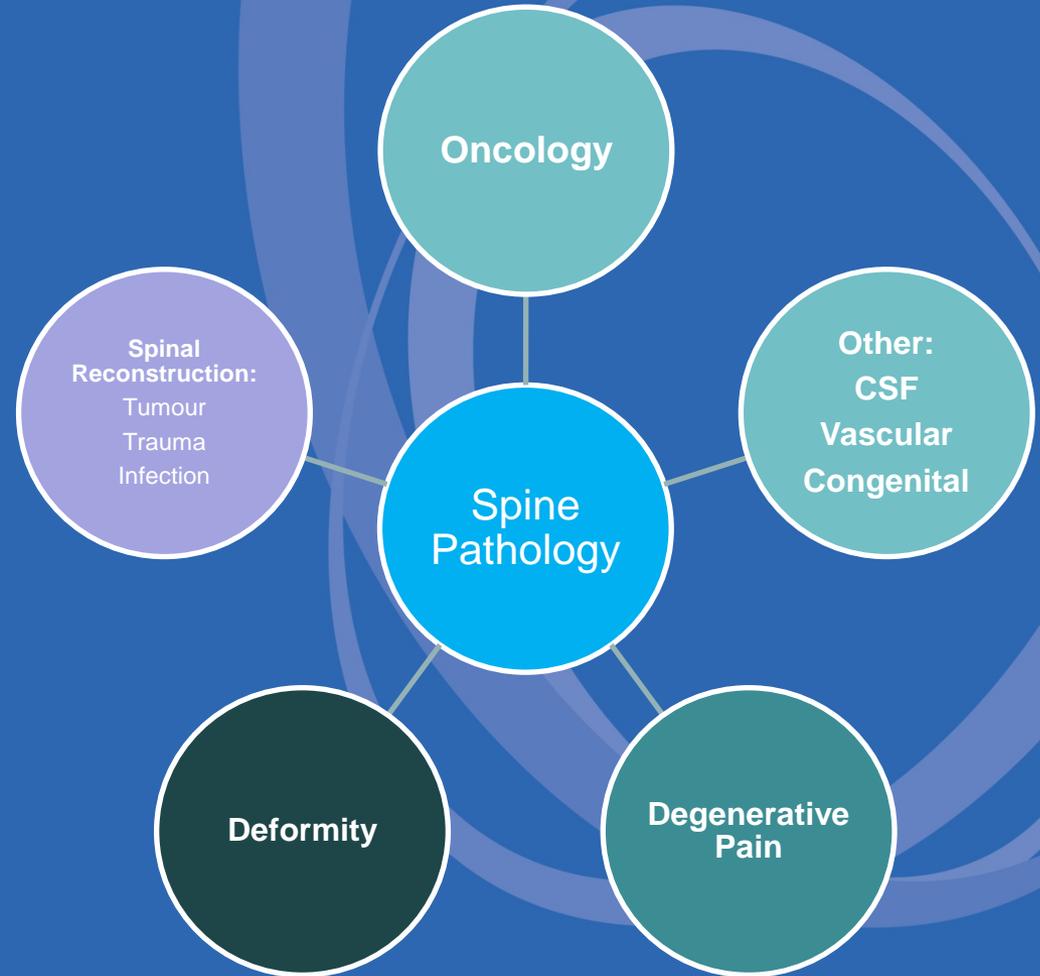
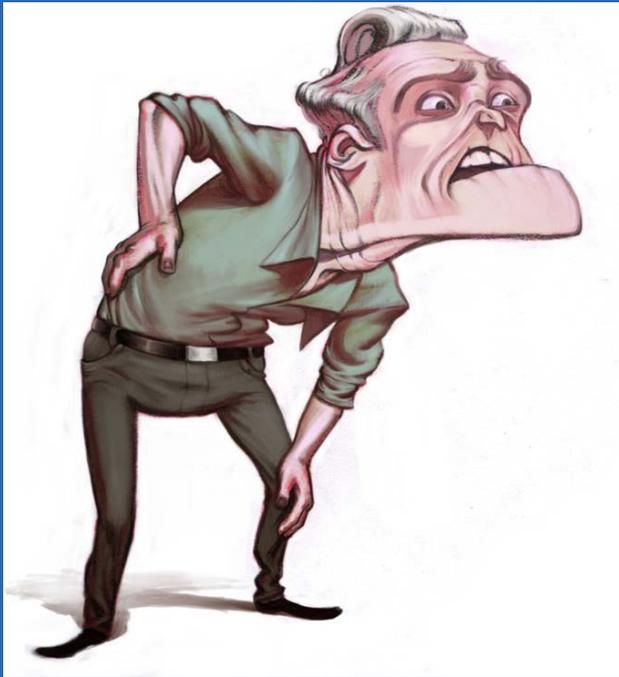


Definitions

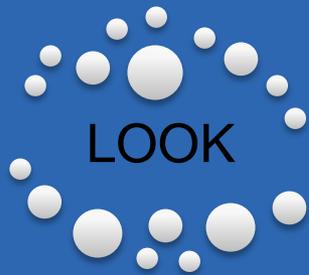
- **Radicular pain:**
 - pain radiating down the leg following a dermatomal distribution
 - the two most common causes of radicular pain are prolapsed intervertebral disc and spinal stenosis
- **Non-specific back pain:**
 - back pain but without nerve root involvement
- **Specific back pain:**
 - pain that may be amenable to treatment
- Symptoms defined as:
 - **Acute:** duration <6 weeks
 - **Persistent:** 6 weeks – 3 months
 - **Chronic:** duration >3 months



Differential Diagnosis



Clinical Examination of Lumbar Spine



FEEL



MOVE



Patient standing in neutral position:

- Inspect from front, sides and back
- Note:
 - Deformity
 - Soft tissue abnormalities e.g. hairy patch (spina bifida)
 - Surgical scars

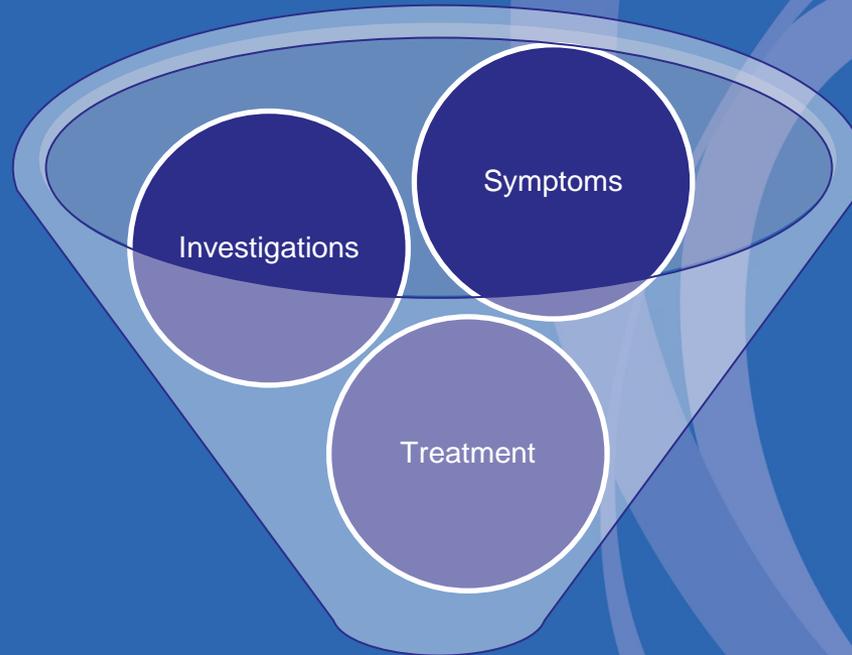
- Midline spinous processes
- Paraspinal soft tissues
- Note: alignment and focal tenderness

- Forward flexion
 - Touch toes – how far reached
 - Hip flexion plays a part
- Extension
 - 10 – 20°
- Lateral flexion
- Lateral rotation

+/- DRE



Treatment Objectives



Patient remains independent with return to previous activities and employment in the shortest time possible.

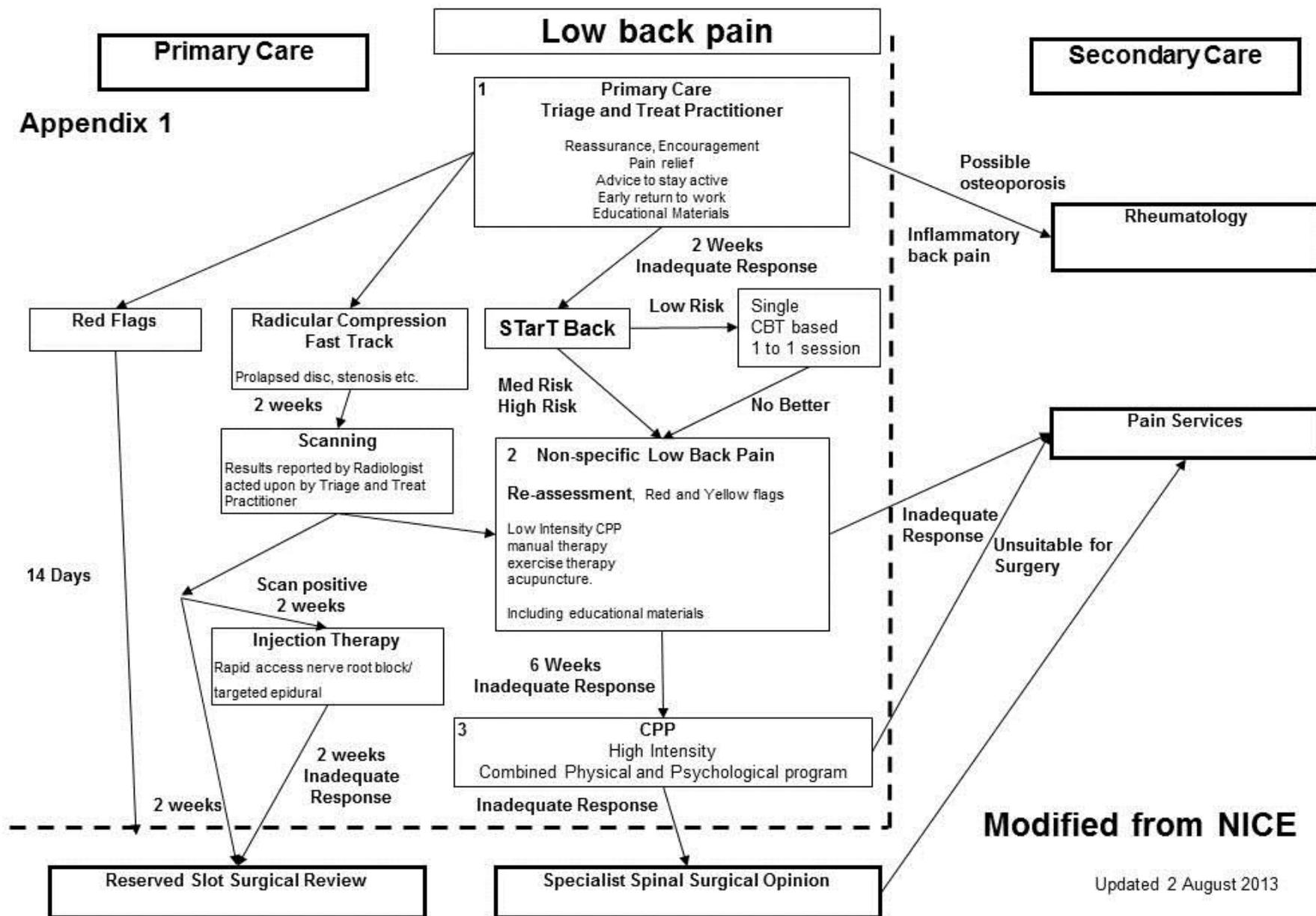


Low back pain

Primary Care

Secondary Care

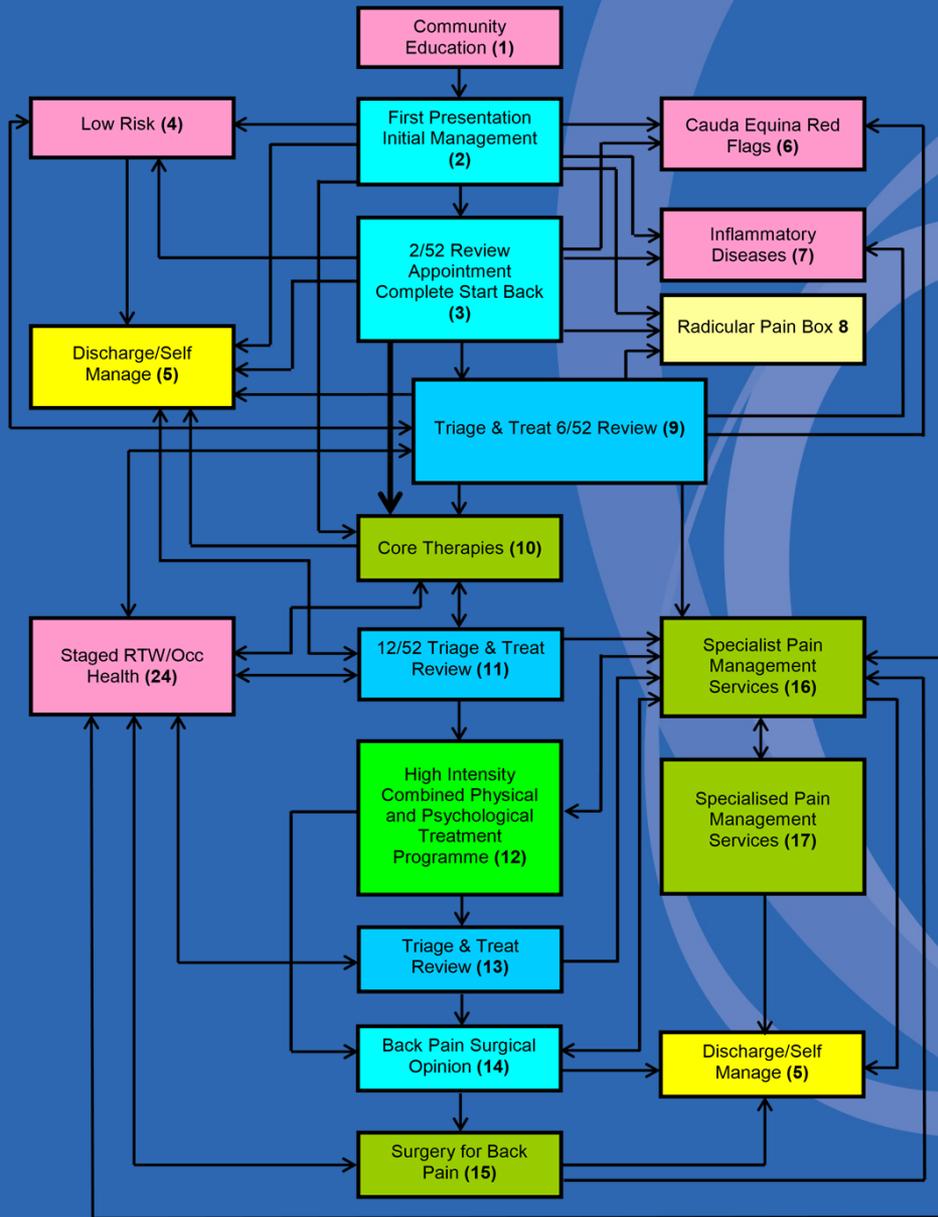
Appendix 1



Modified from NICE

Updated 2 August 2013





Pathfinder Project-
National Pathway of Care
for Low Back Pain and
Radicular Pain 2014



Red Flags

- Cauda Equina Syndrome and/or cord compression
 - History:
 - urinary retention/incontinence
 - Faecal incontinence
 - Altered perianal sensation
 - Limb weakness
 - Examination
 - Limb weakness
 - Generalised neurological deficit/gait disturbance
 - Hyper-reflexia, clonus, extensor plantar response
 - Saddle anaesthesia
 - Reduced anal tone/squeeze (if circumstances permit)
 - Urinary retention



Red Flags

- Suspicion of tumour or infection:
 - Past history of cancer (all patients should have been given an alert card about MSCC following their initial presentation)
 - Unexplained weight loss
 - Other symptoms suggestive of malignancy
 - Unwell/Fever
 - Raised inflammatory markers ESR>50, PCV < 30
 - Age <10 years or Age >60 years
 - Pain - Thoracic or persisting non-mechanical
 - Possible immunosuppression – IVDU, HIV, Chemotherapy, Steroids.



Yellow Flags

- Attitudes - towards the current problem. Does the patient feel that with appropriate help and self-management they will return to normal activities?
- Beliefs - the patient feels they have something serious causing their problem - usually cancer. 'Faulty' beliefs can lead to *catastrophisation*.
- Compensation - Is the patient awaiting payment for an accident/injury at work/RTA?
- Diagnosis - Inappropriate communication can lead to patients misunderstanding what is meant, the most common examples being 'your disc has popped out' or 'your spine is crumbling'.
- Emotions - Patients with other emotional difficulties such as on-going depression and/or anxiety states are at a high risk of developing chronic pain.
- Family - There tends to be two problems with families, either over bearing or under supportive.
- Work - The worse the relationship, the more likely they are to develop chronic LBP.



Waddell's Signs



Acute Pain Management

- Patients with acute low back pain:
 - self-manage with simple analgesia
 - minimal bed rest (up to a maximum of 48 hours) depending on the severity of pain followed by progressive resumption of their normal activity
- Majority of patients will improve naturally assisted by good primary care management including physiotherapy/ hands on manipulation
- For those that do not respond:
 - an early risk assessment should be conducted
 - should be actively managed by the appropriate therapists



Keele STarT Back Screening Tool

The Keele STarT Back Screening Tool

Patient name: _____ Date: _____

Thinking about the last 2 weeks tick your response to the following questions:

	Disagree 0	Agree 1
1 My back pain has spread down my leg(s) at some time in the last 2 weeks	<input type="checkbox"/>	<input type="checkbox"/>
2 I have had pain in the shoulder or neck at some time in the last 2 weeks	<input type="checkbox"/>	<input type="checkbox"/>
3 I have only walked short distances because of my back pain	<input type="checkbox"/>	<input type="checkbox"/>
4 In the last 2 weeks, I have dressed more slowly than usual because of back pain	<input type="checkbox"/>	<input type="checkbox"/>
5 It's not really safe for a person with a condition like mine to be physically active	<input type="checkbox"/>	<input type="checkbox"/>
6 Worrying thoughts have been going through my mind a lot of the time	<input type="checkbox"/>	<input type="checkbox"/>
7 I feel that my back pain is terrible and it's never going to get any better	<input type="checkbox"/>	<input type="checkbox"/>
8 In general I have not enjoyed all the things I used to enjoy	<input type="checkbox"/>	<input type="checkbox"/>

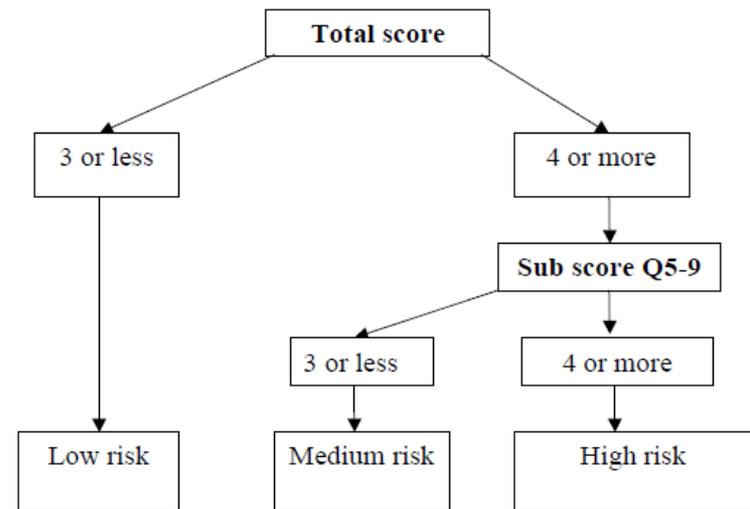
9. Overall, how bothersome has your back pain been in the last 2 weeks?

Not at all	Slightly	Moderately	Very much	Extremely
<input type="checkbox"/>				
0	0	0	1	1

Total score (all 9): _____ Sub Score (Q5-9): _____

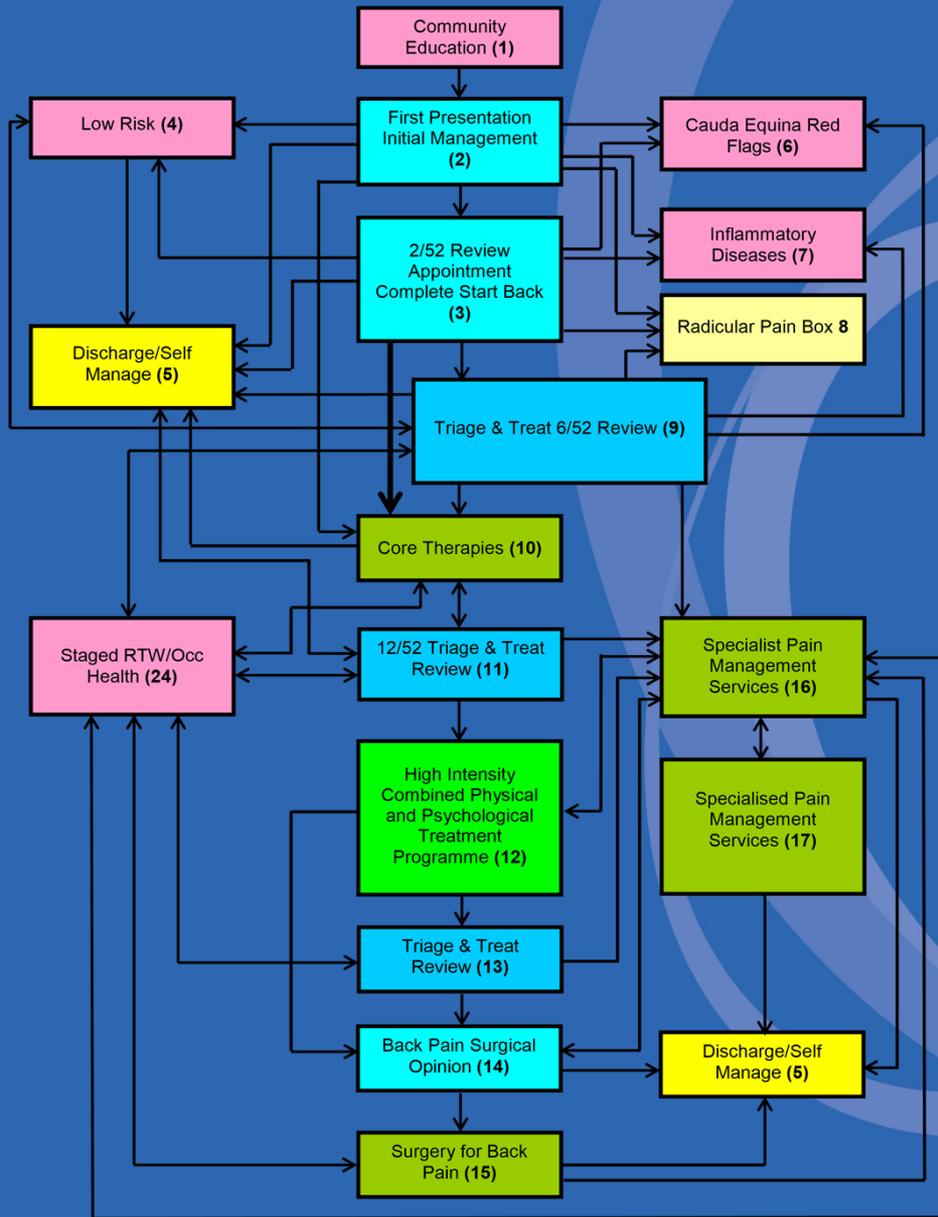
© Keele University 01/08/07
Funded by Arthritis Research UK

The STarT Back Tool Scoring System



© Keele University 01/08/07
Funded by Arthritis Research UK

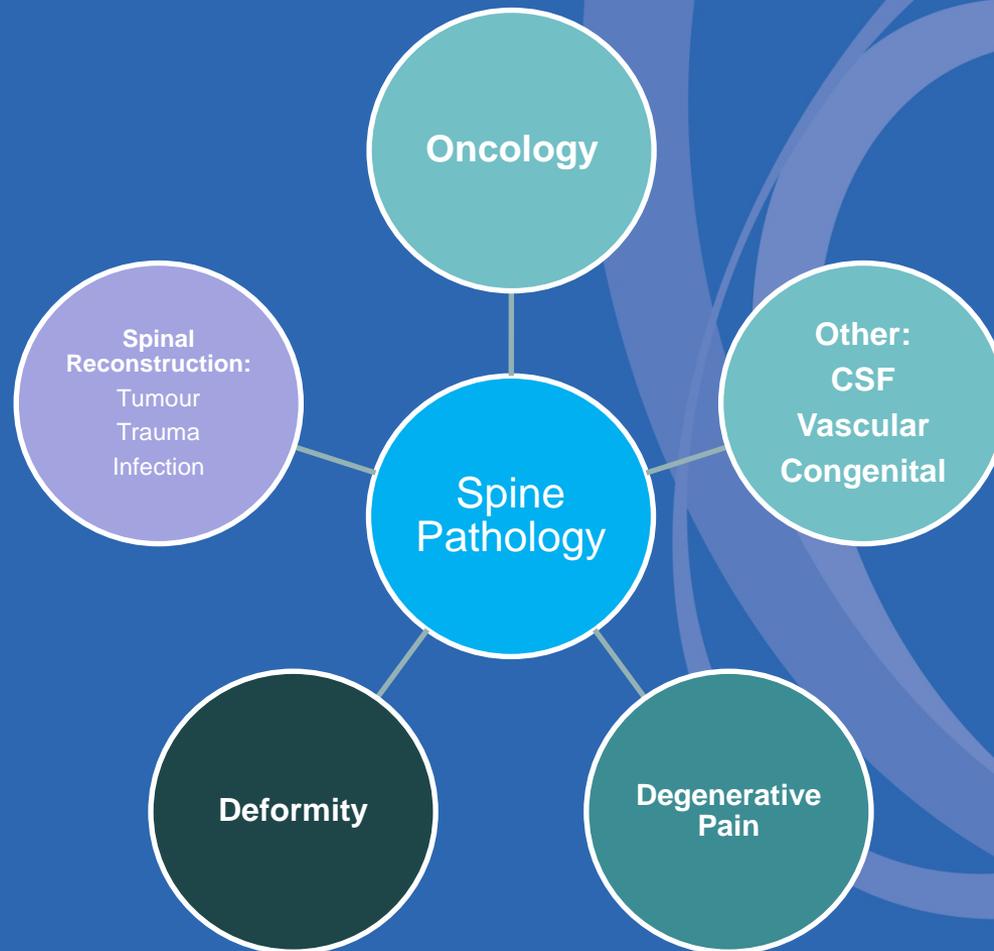




Pathfinder Project-
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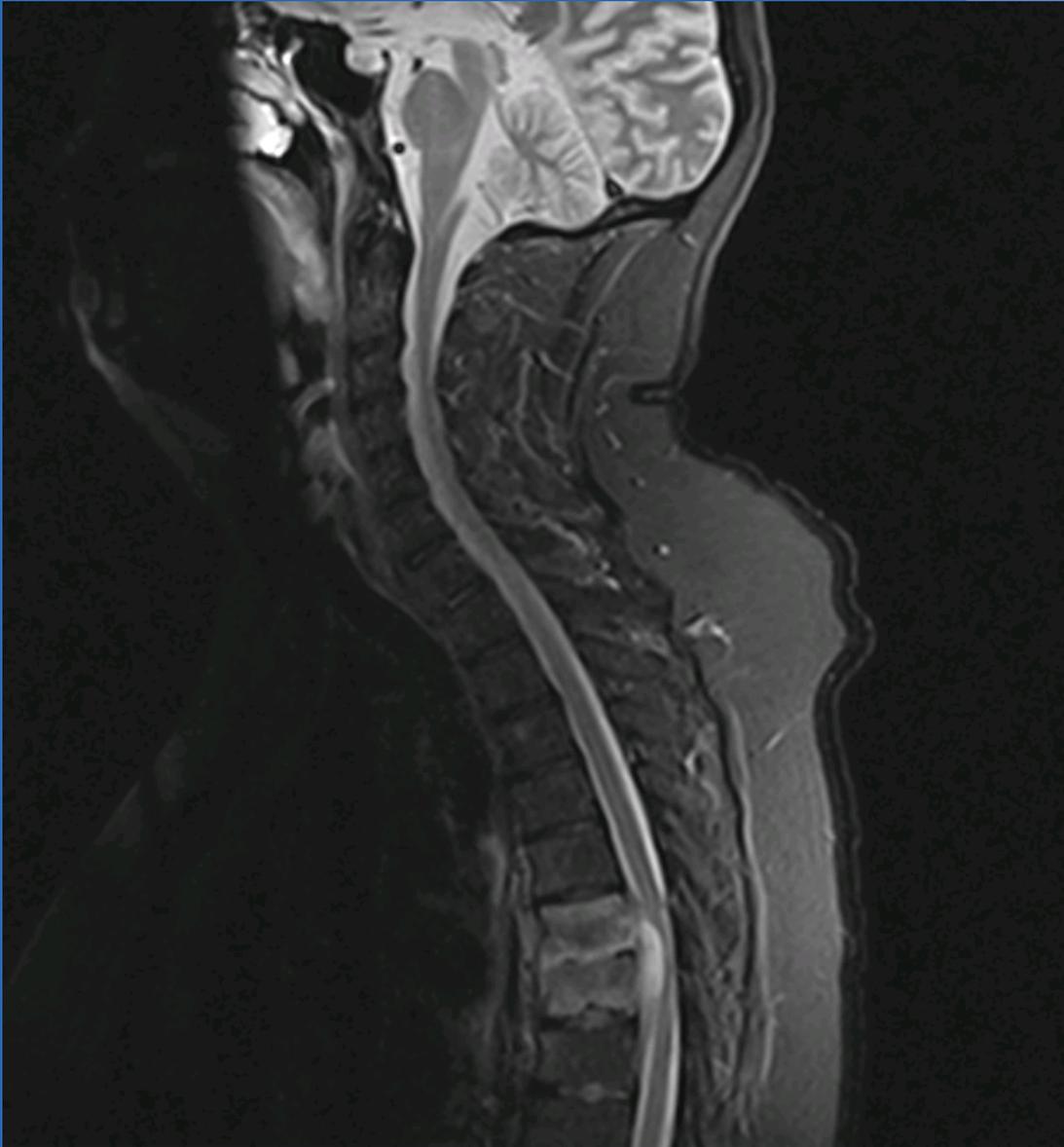
Surgical Causes of Back Pain



Symptoms need to correlate with imaging!

- Boden *et al* (1990)
 - The most cited paper in lumbar spine surgery
 - MRI findings in 67 individuals without back pain, sciatica, and neurogenic claudication.
 - Study showed that common indications for surgery (*e.g.* , *herniated discs, spinal stenosis*) can be incidentally found when scanning patients without neurological symptoms.
 - The study also showed that as patients aged, these incidental findings increased in frequency.
 - The study implied correctly that to recommend surgery for a patient, there should be a clear correlation of symptoms and radiographical findings and certainly should not be based on radiographical findings alone.
- Indications should be clear and unambiguous prior to surgery





Spinal Infection

Osteomyelitis

Discitis

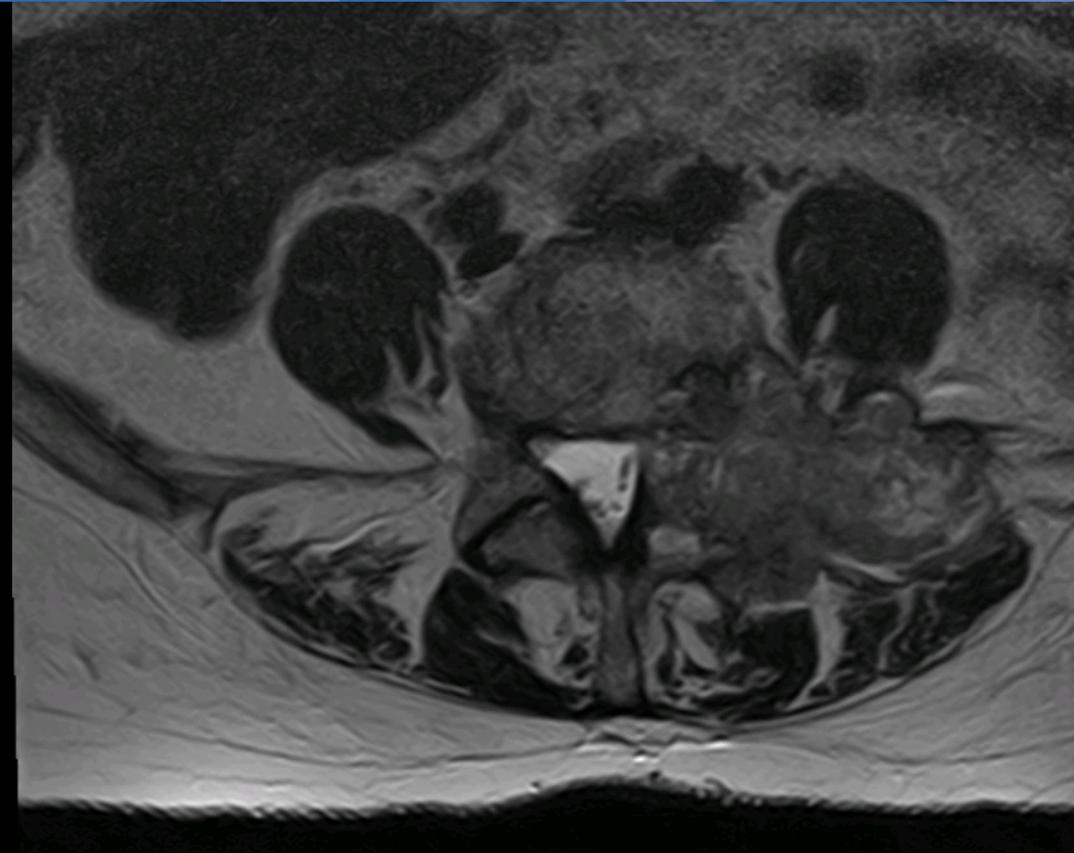
Epidural Abscess





- Spinal Tumour
 - Extradural
 - Intradural
 - Extra-medullary
 - Intra-medullary

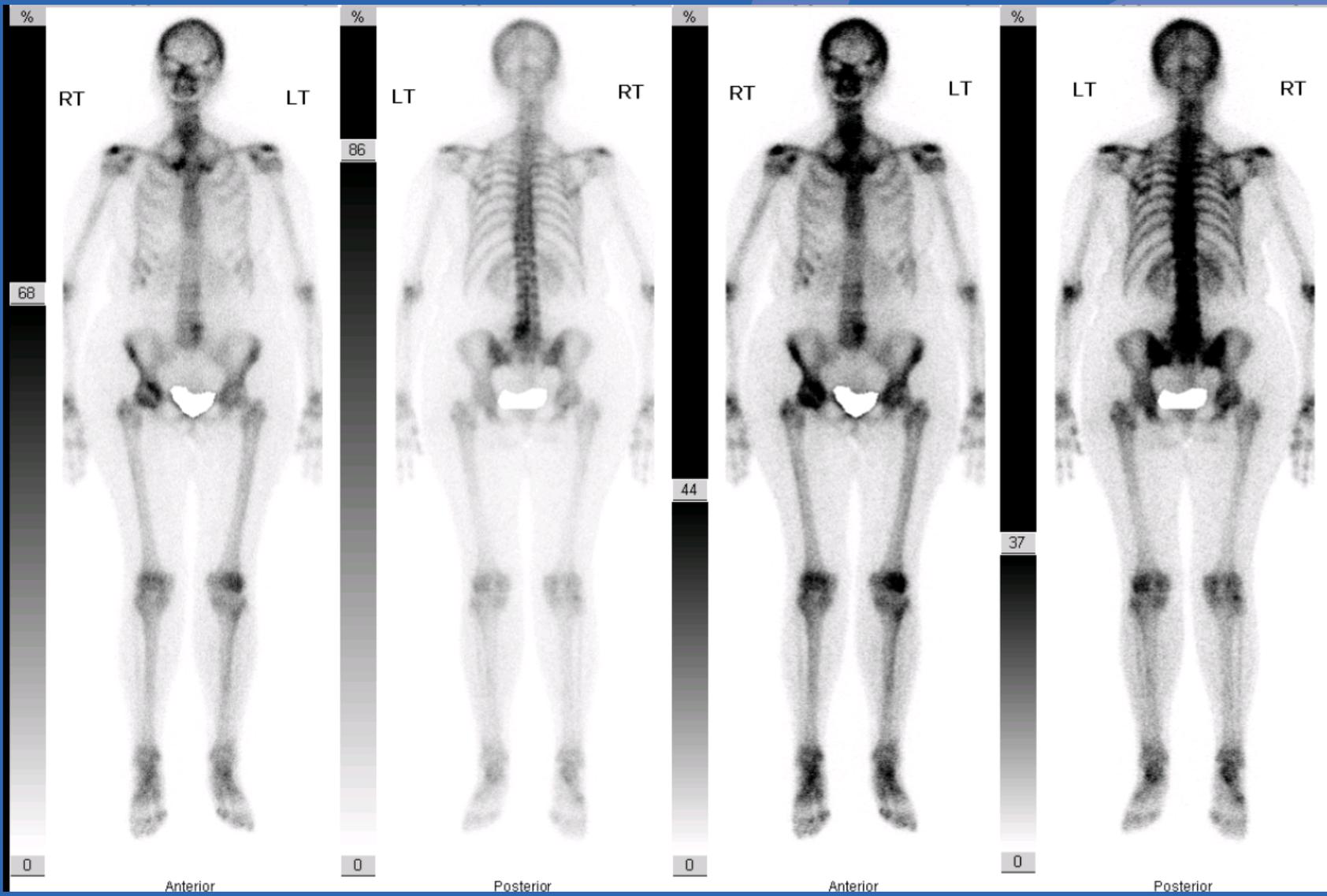




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Spinal Tumour



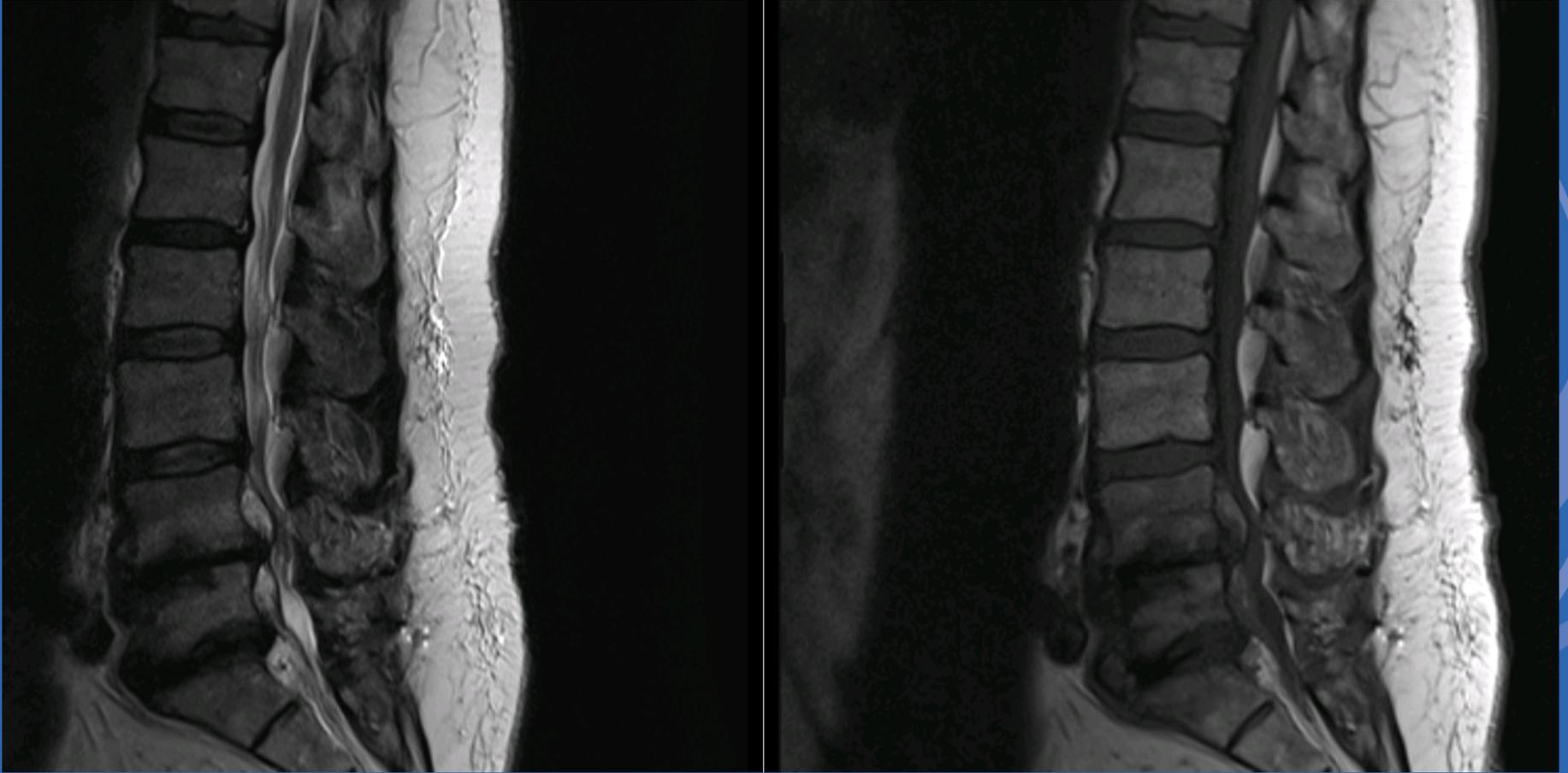


- Spinal Tumour
- Intradural
 - Extra-medullary



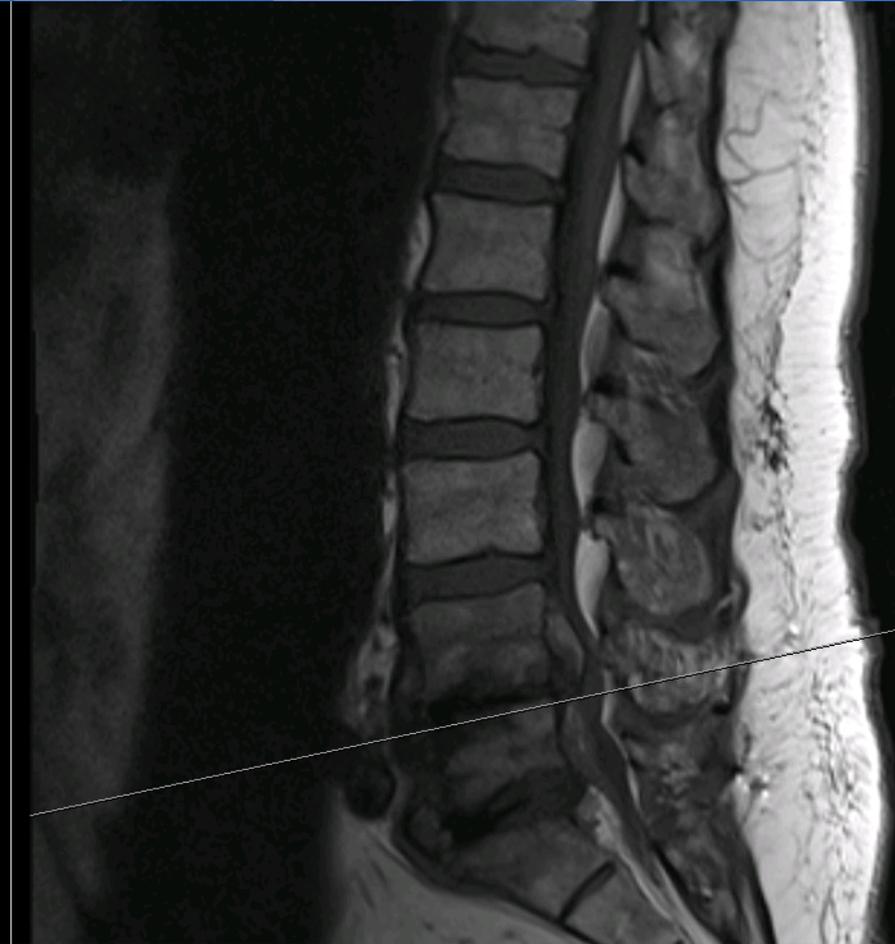
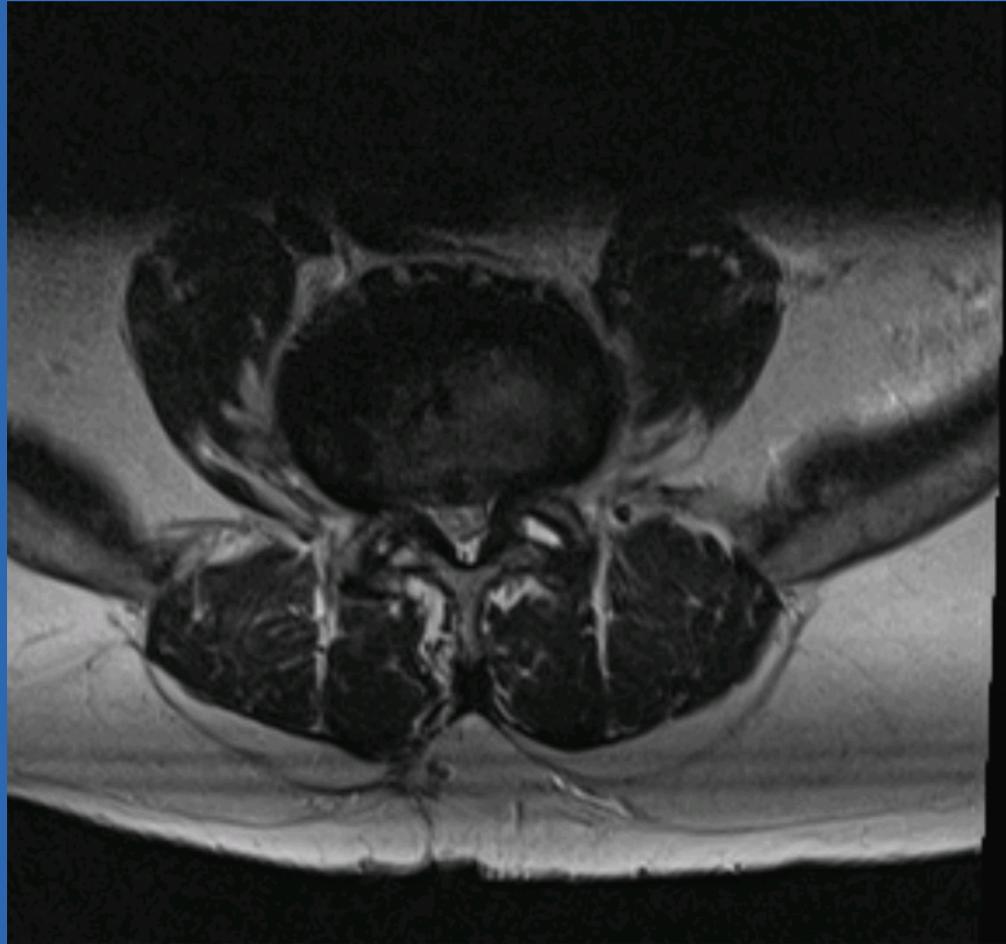
Degenerative Pain

- Disc Disease
- Lumbar Spondylosis
- Spinal Stenosis



Degenerative Pain

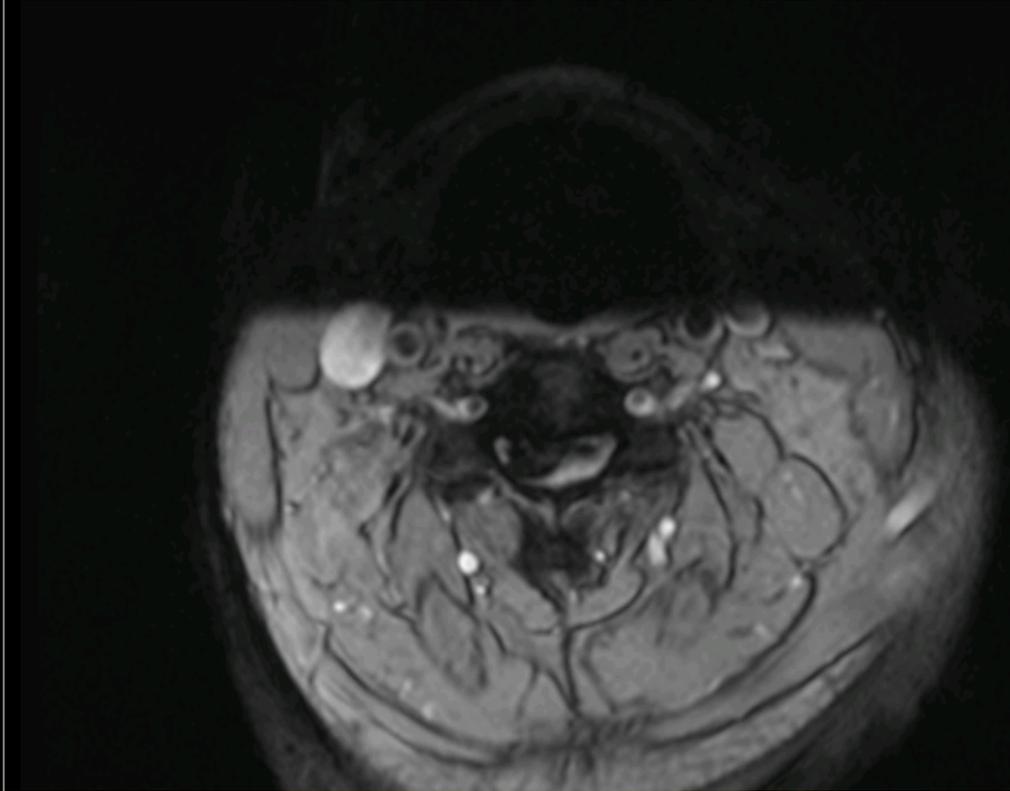
- Disc Disease
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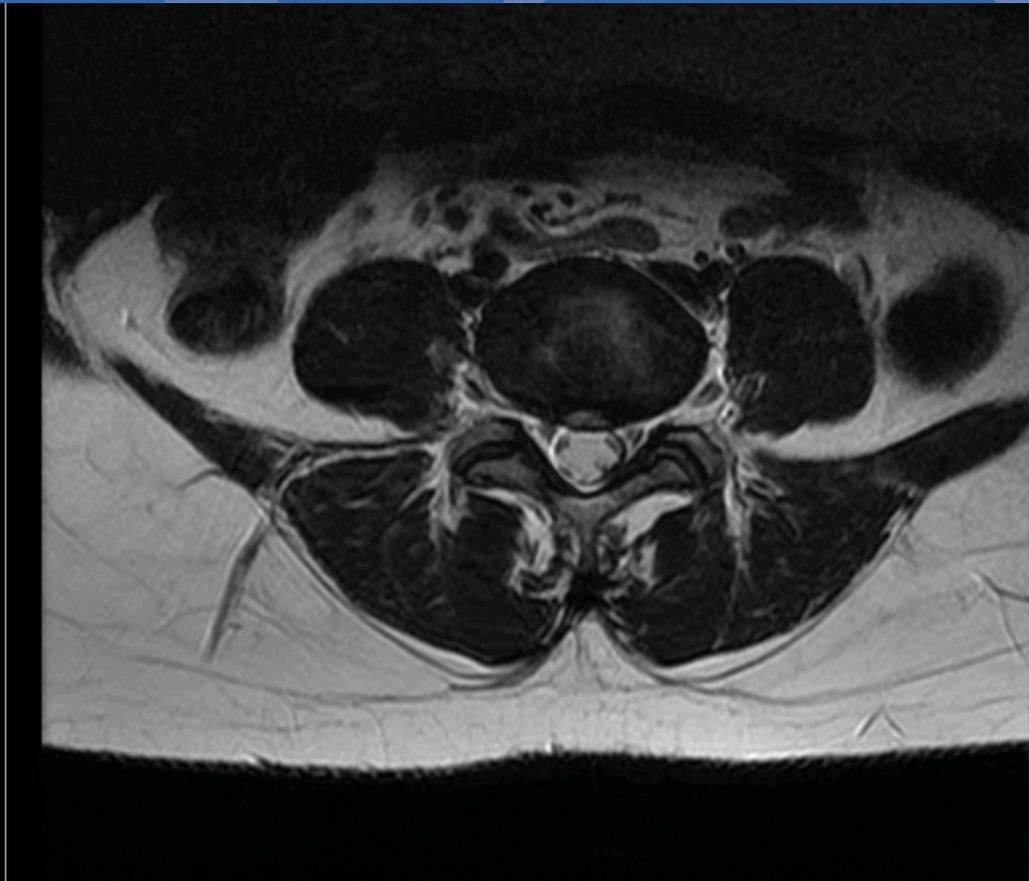
Degenerative Pain – Lumbar canal stenosis?



Degenerative Pain – Severe cervical myelopathy!



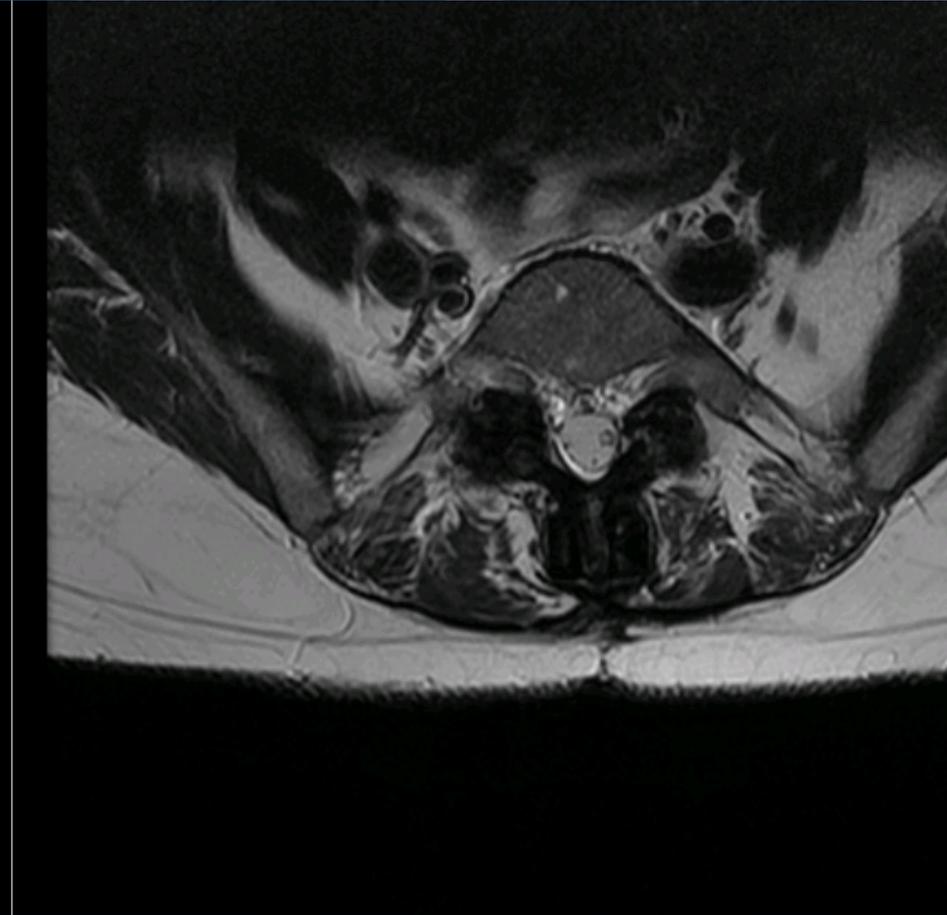
Non-specific Low Back Pain – Non-surgical



Non-specific Low Back Pain - Non-surgical



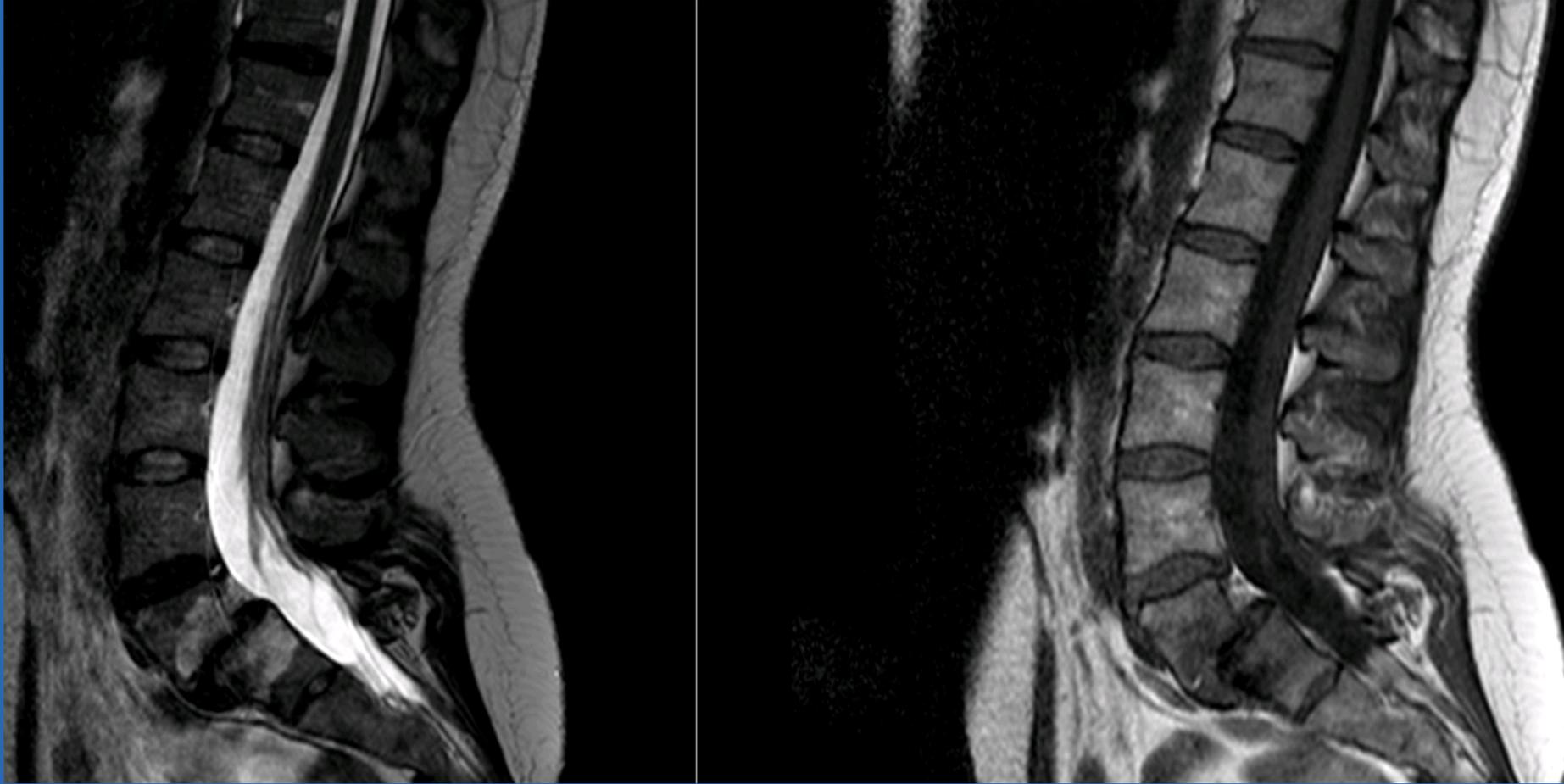
Specific Low Back Pain



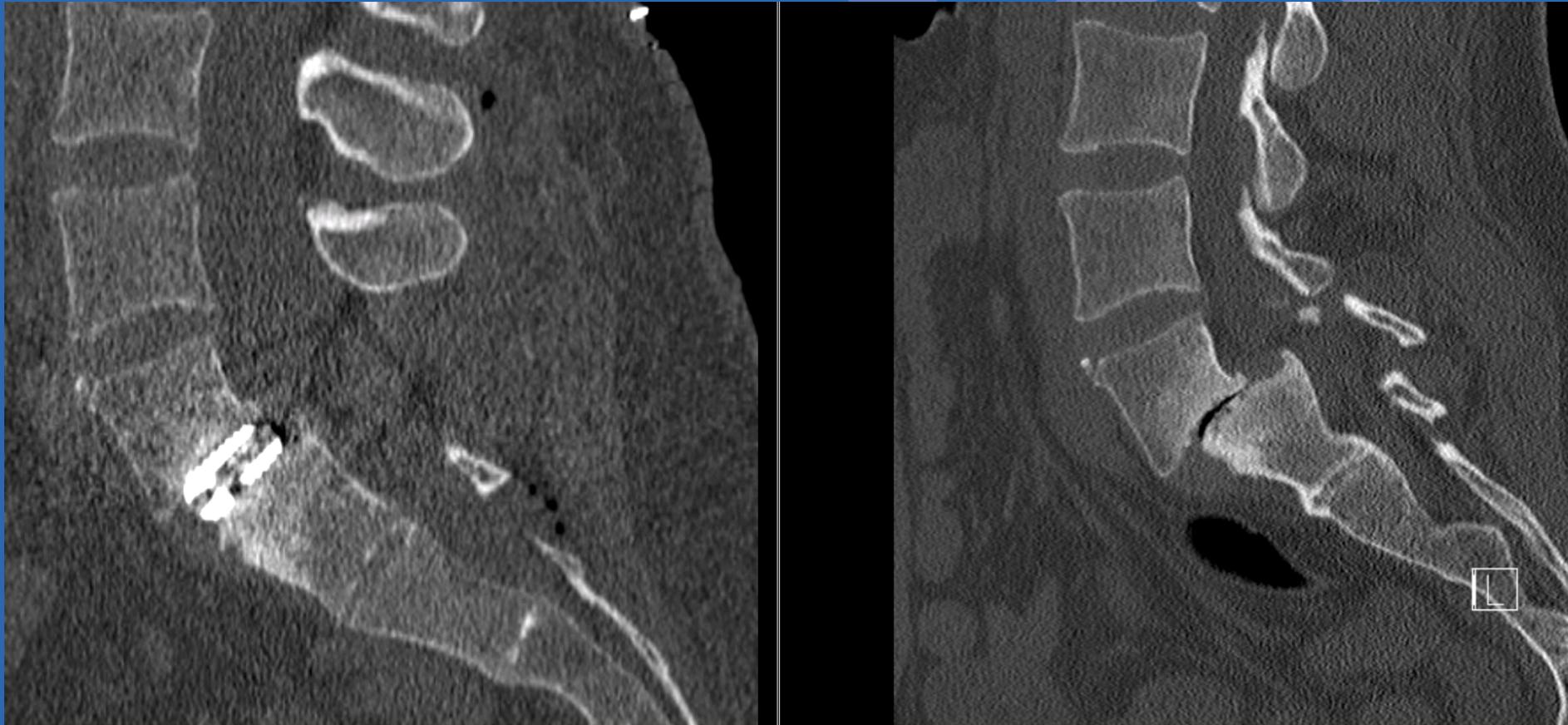
Specific Low Back Pain



Specific Low Back Pain - Spondylolisthesis



Specific Low Back Pain - Spondylolisthesis



Adult Degenerative Deformity



QUESTIONS?



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