

Cervical disc prolapse

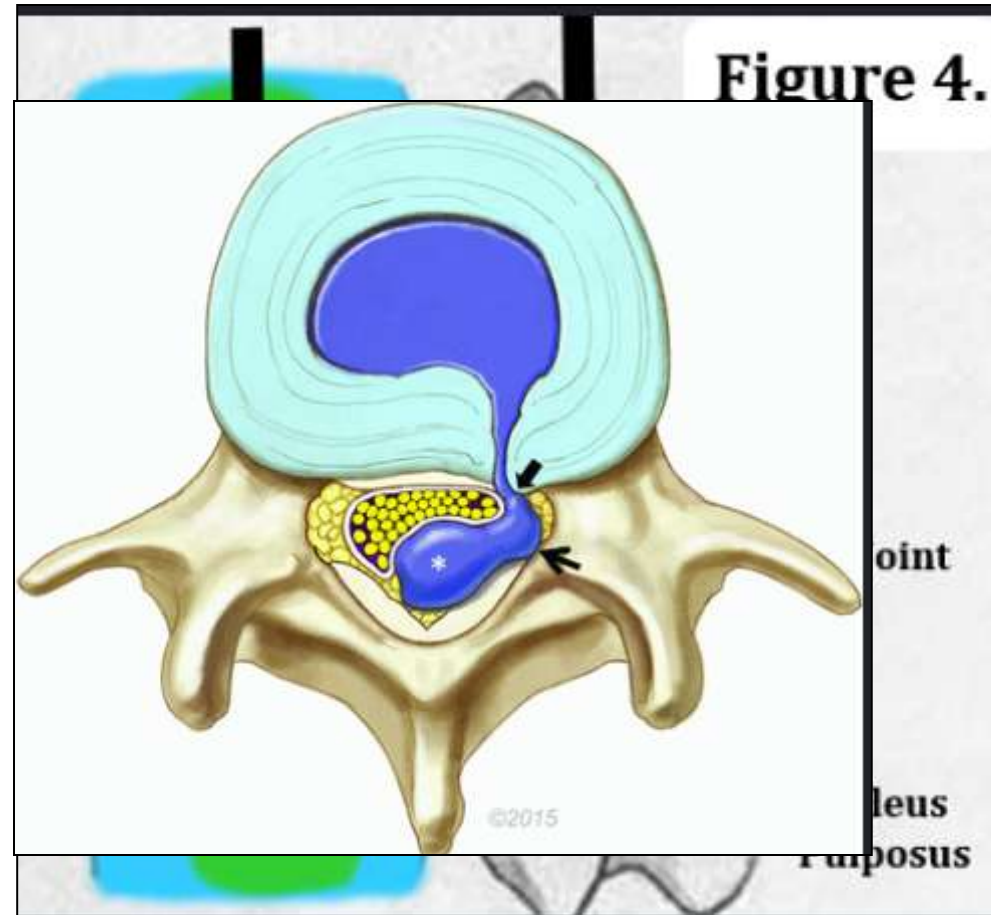
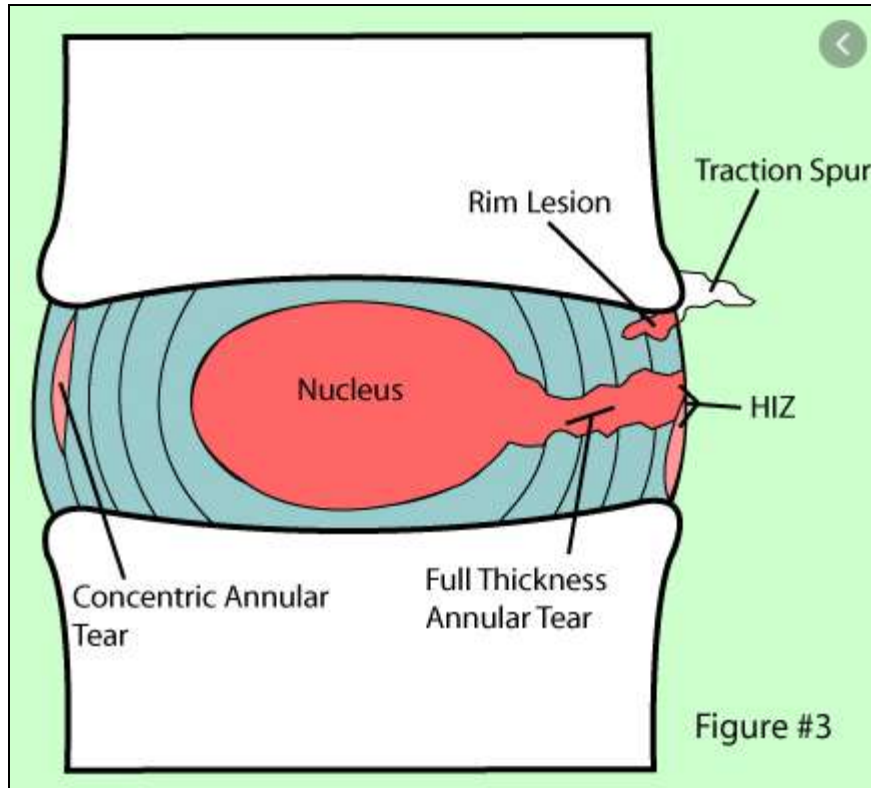


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Disc prolapse more common in lumbar & cervical spine



Disc prolapse

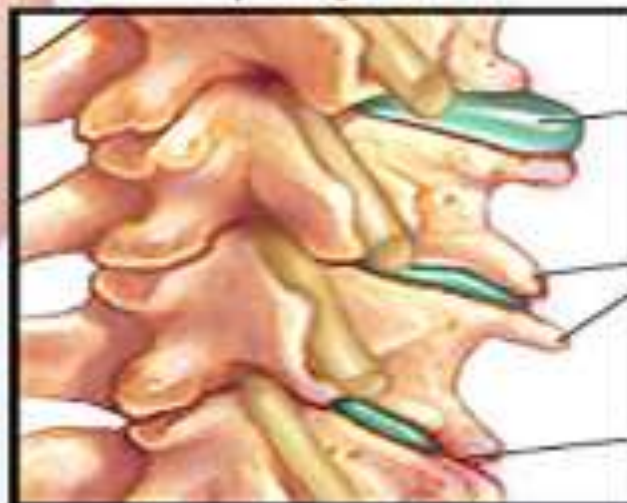




Normal cervical spine anatomy



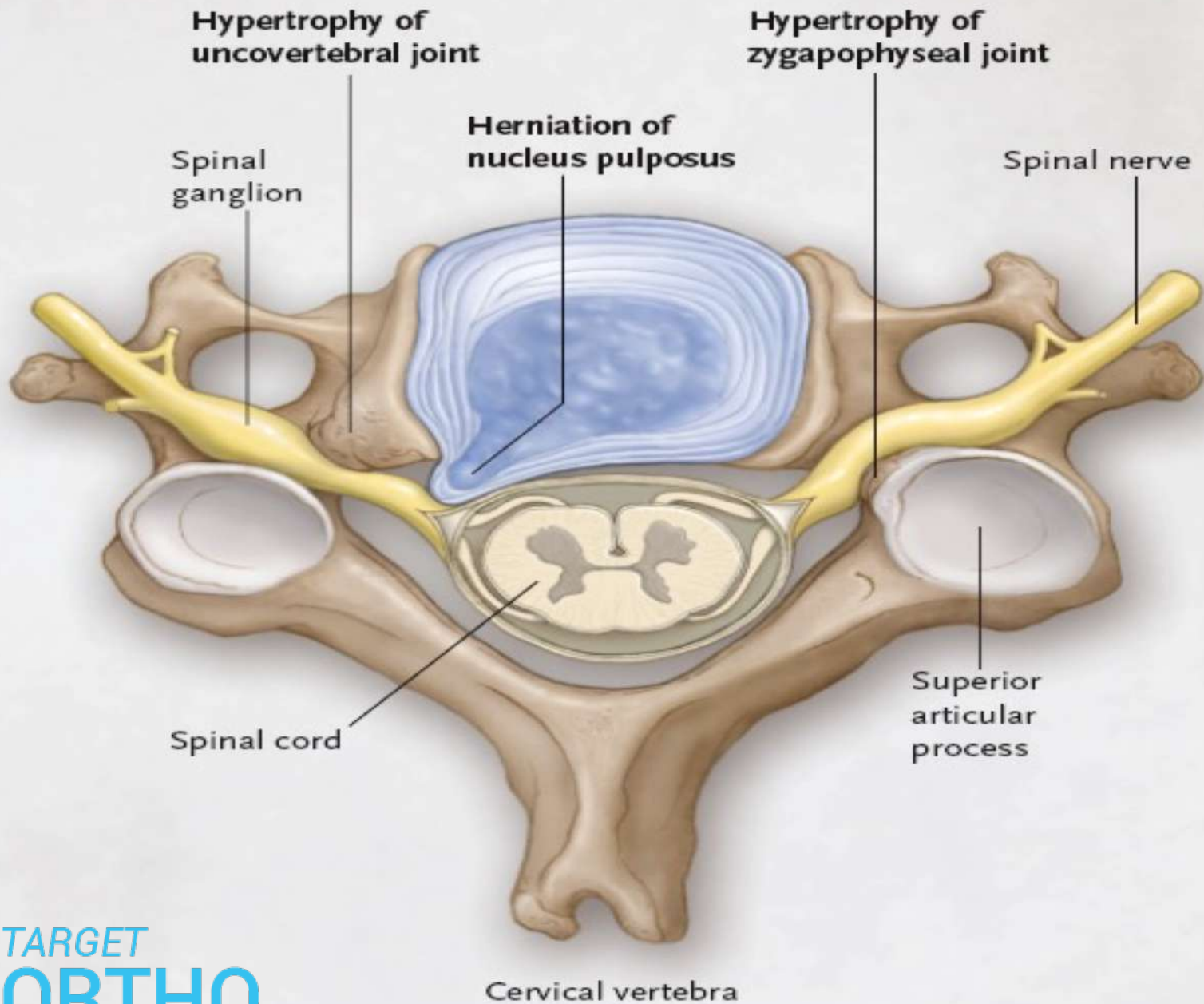
Spondylosis



Bulging disk

Bone spurs

Narrowed disk space

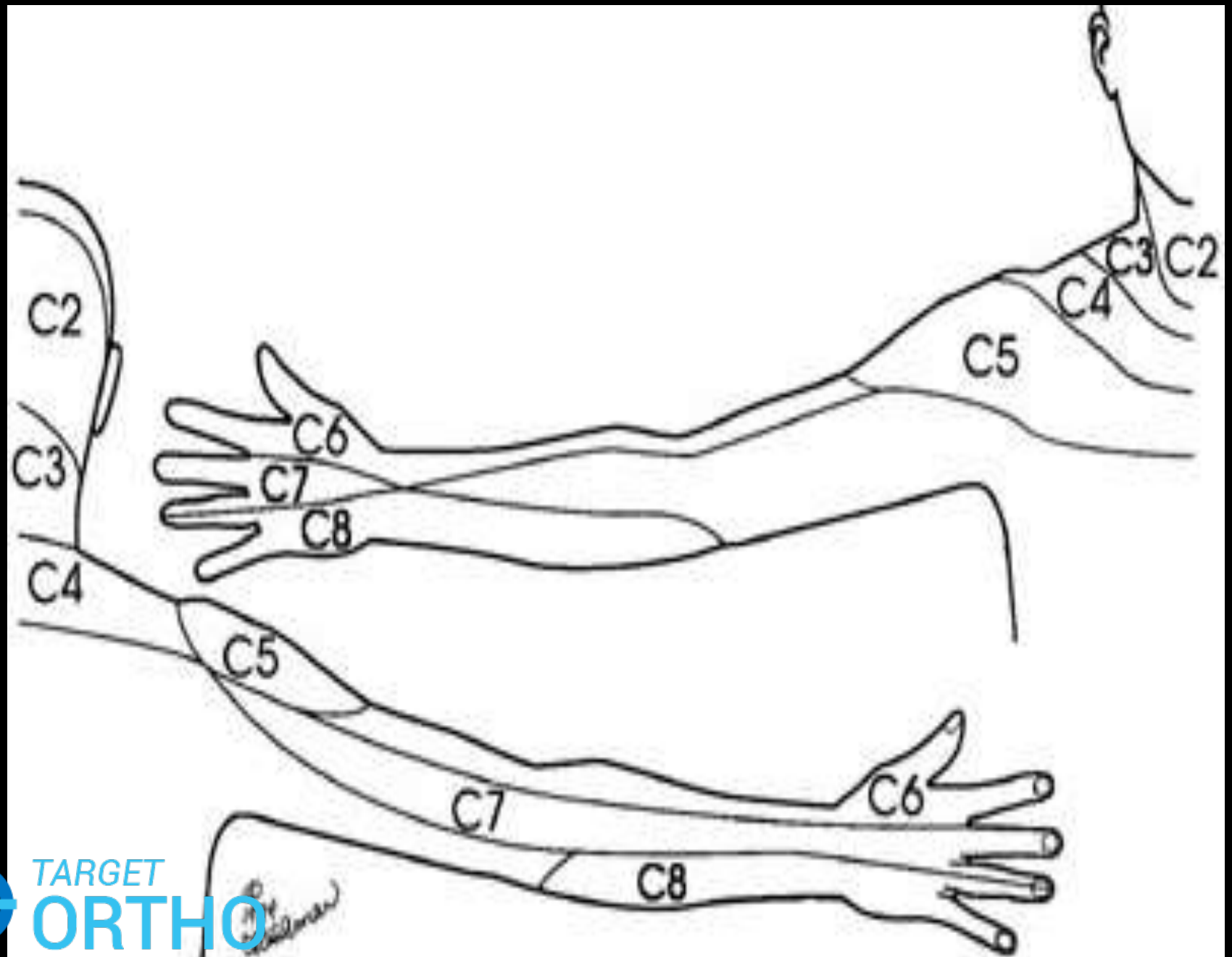


History & presentation

- **Acute cervical radiculopathy-** soft disc herniation in younger age group individuals.
- **Subacute radiculopathy-** preexisting cervical spondylosis- polyradicular in nature
- **Chronic radiculopathy.**

History & presentation

- **Radicular arm pain- restless arm**
- **Axial neck pain**
- **Motor weakness**



History & presentation



History & presentation



Spurlings test

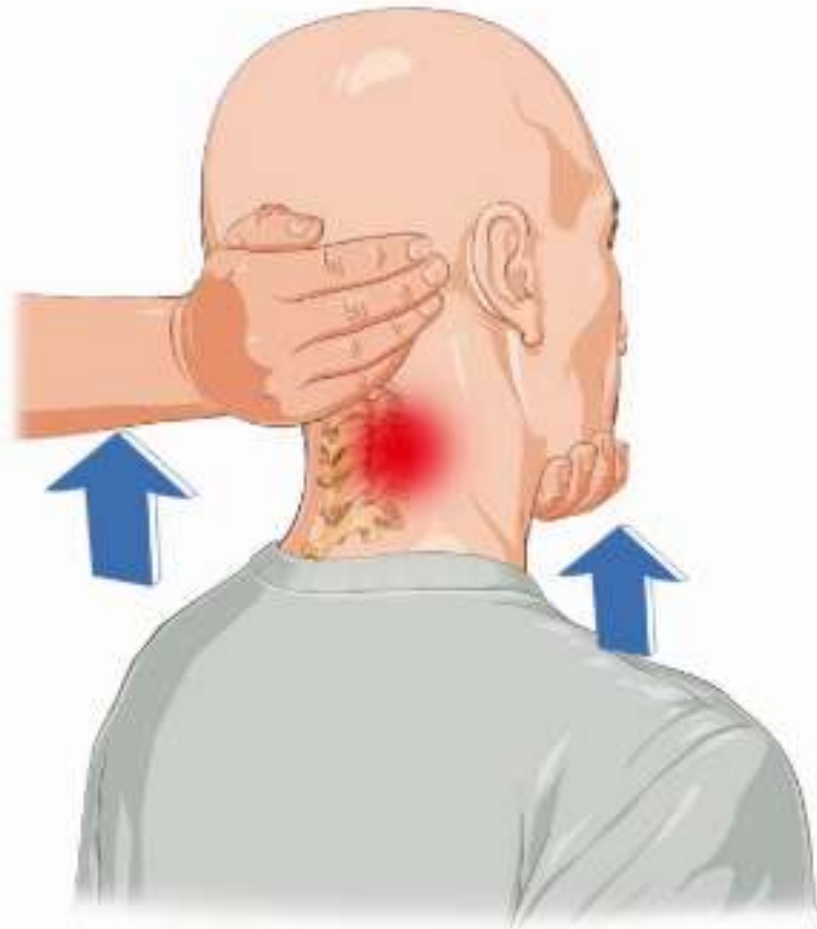


Axial Cervical Compression Test



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Cervical Distraction Test



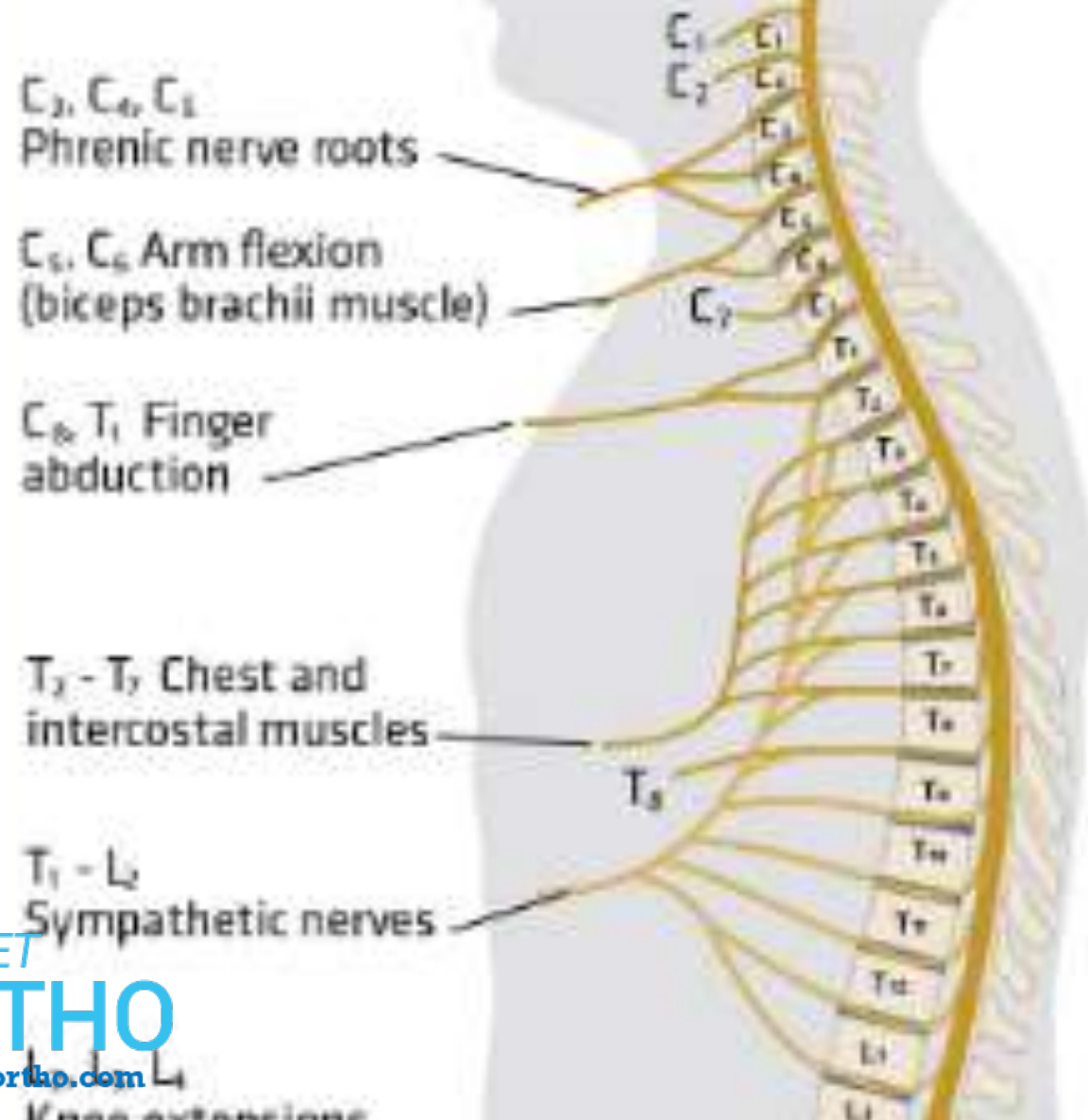
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Shoulder Abduction Sign

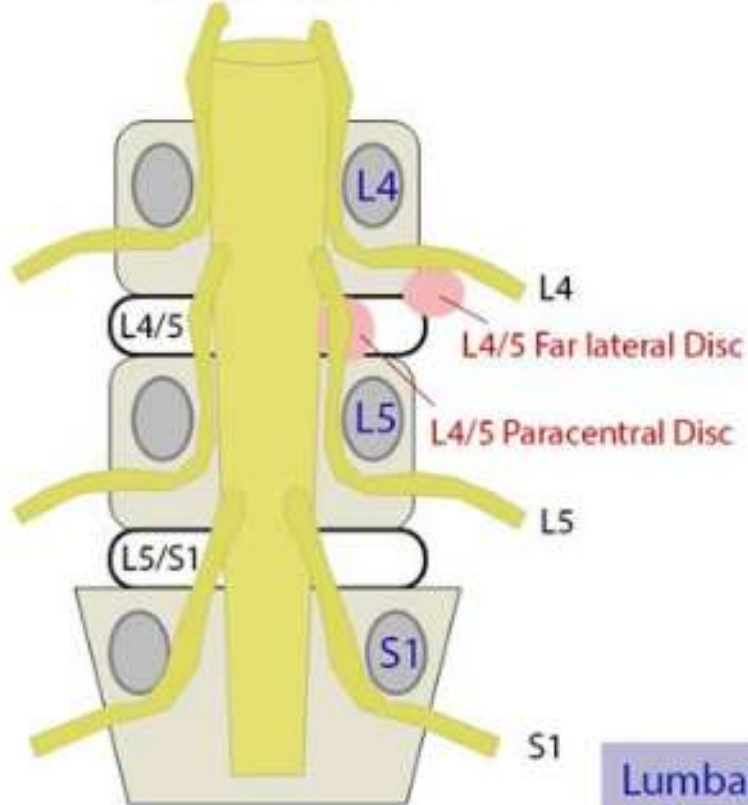


Assessment

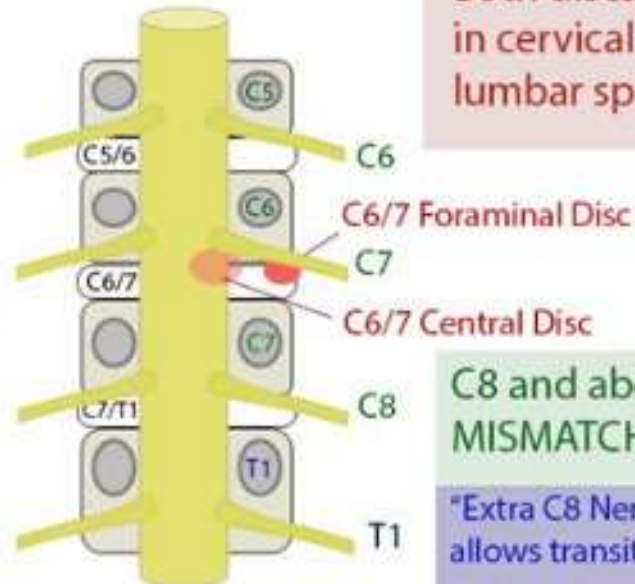
Figure 2: The lateral corticospinal tract



LUMBAR SPINE



CERVICAL SPINE



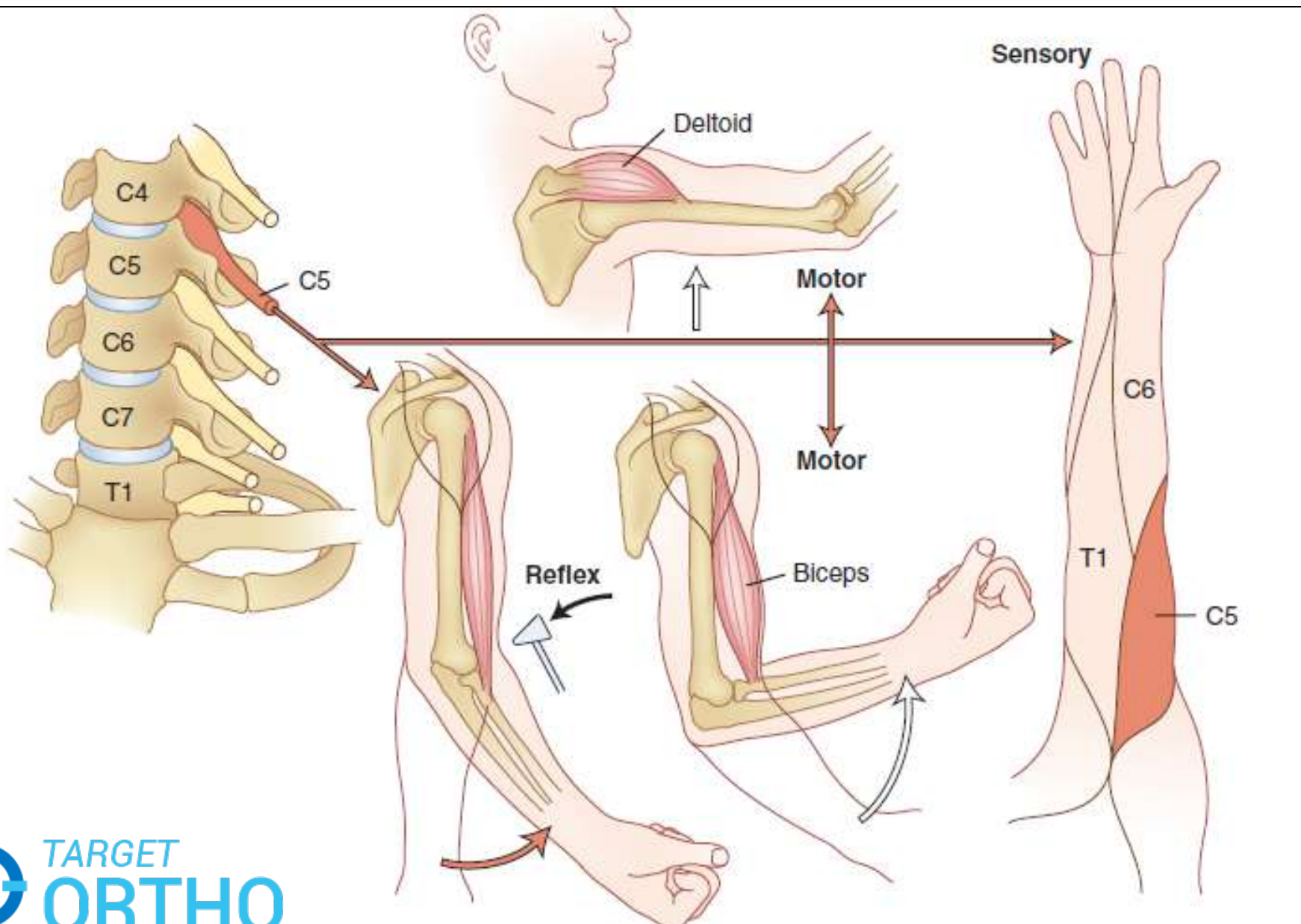
Both discs affect same nerve root in cervical spine, different than lumbar spine

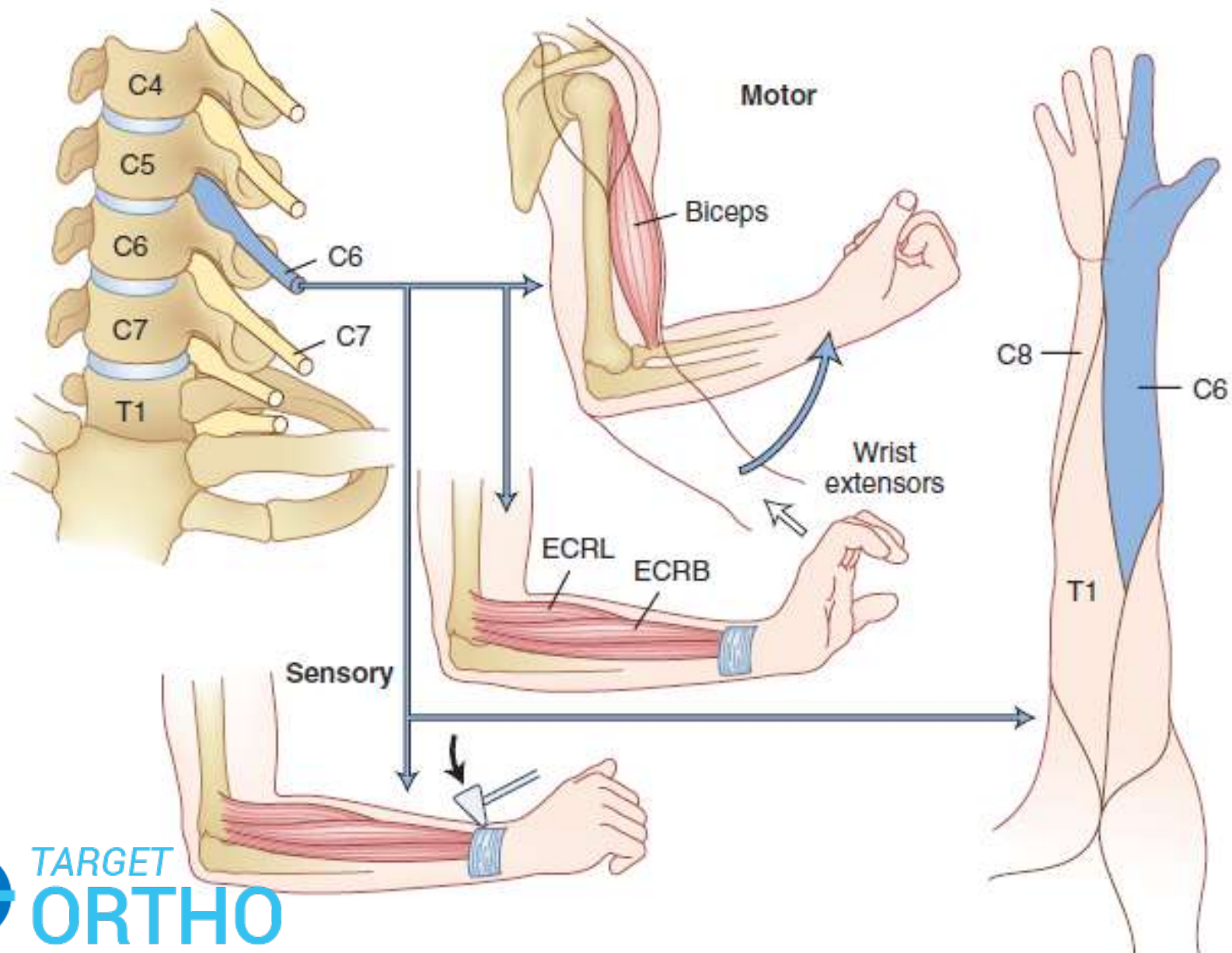
C8 and above Pedicle / Nerve Root MISMATCH

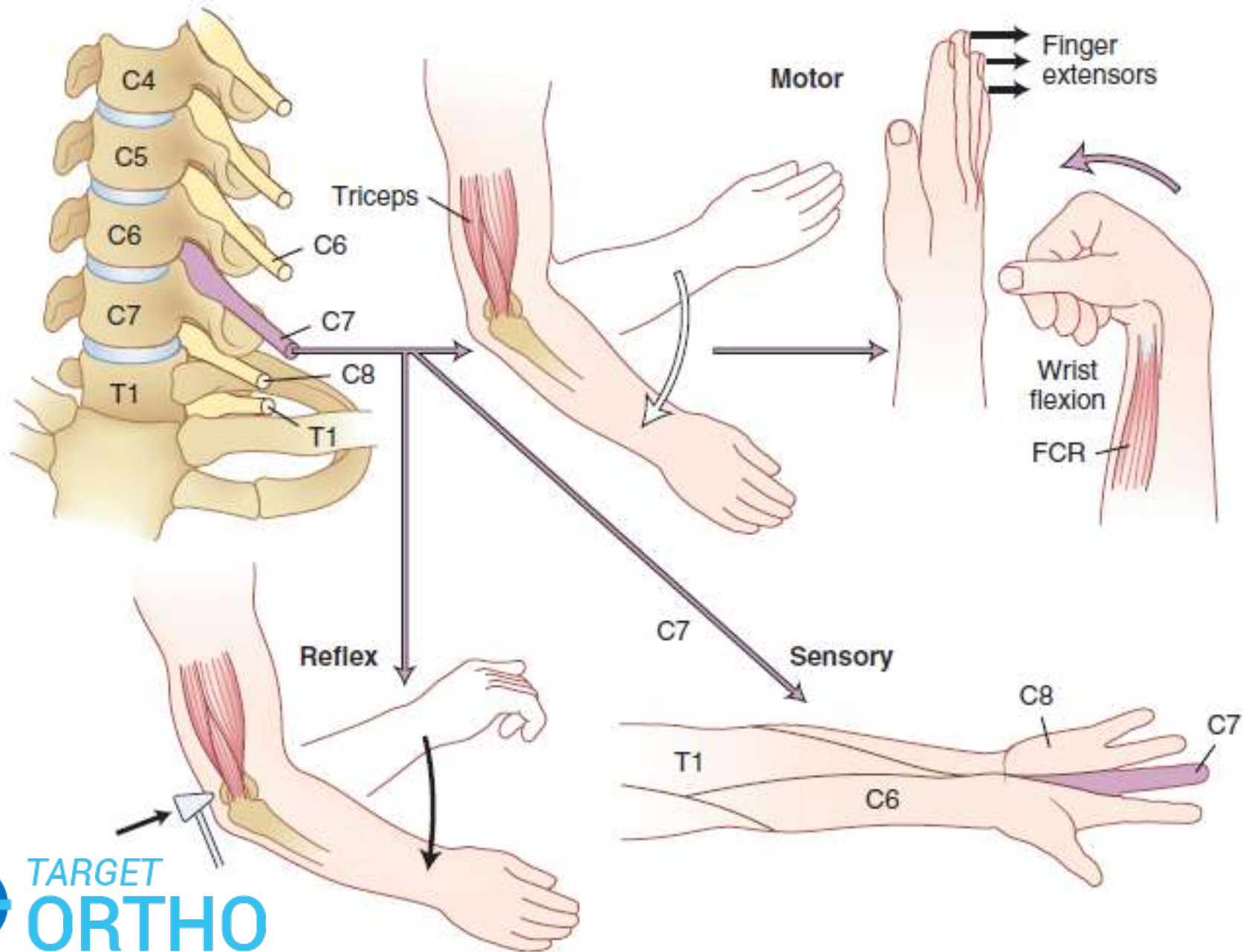
"Extra C8 Nerve Root (without C8 pedicle) allows transition from MISMATCH to MATCH
T1 and below Pedicle / Nerve Root MATCH

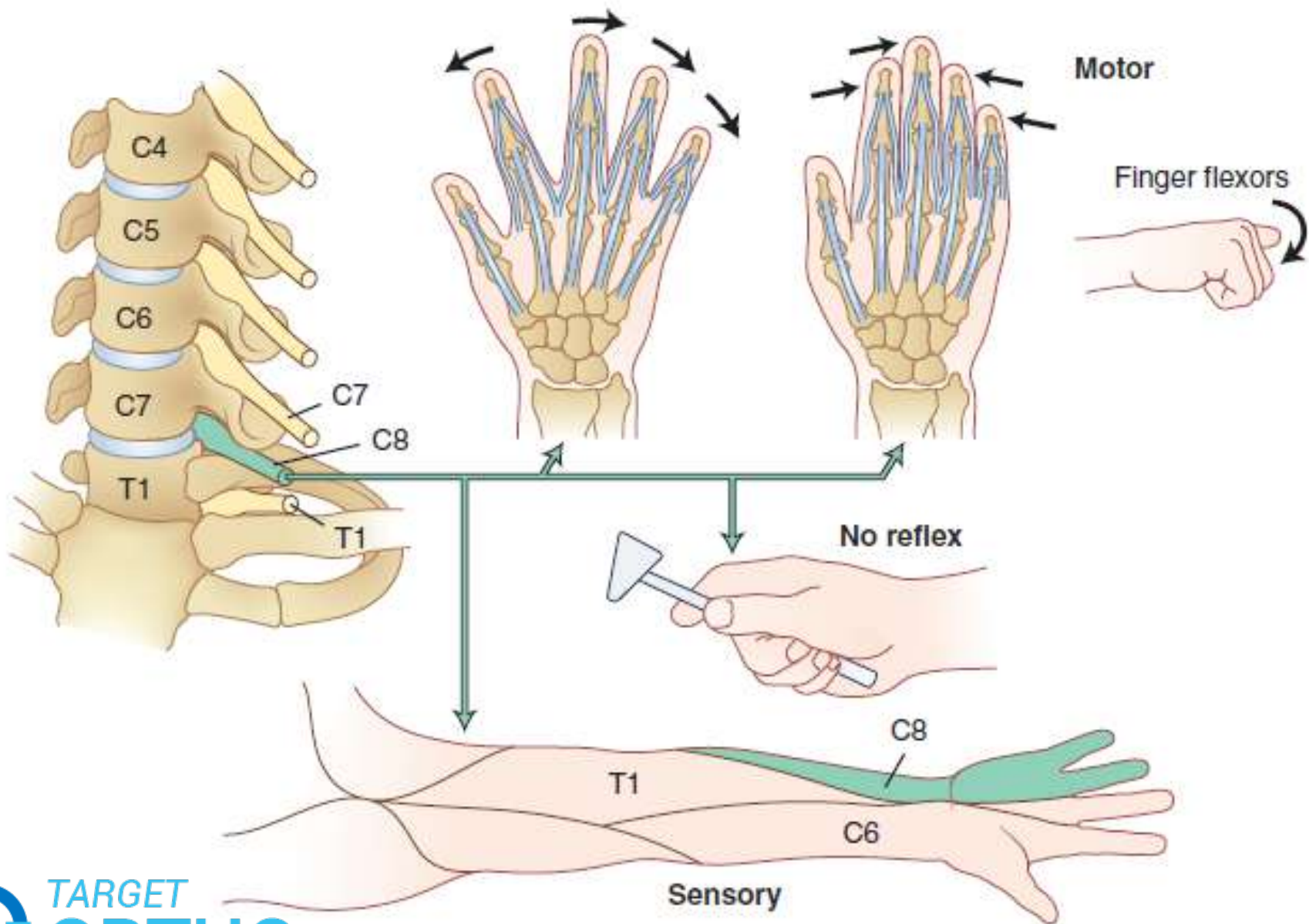
Lumbar Spine Pedicle/nerve Root MATCH



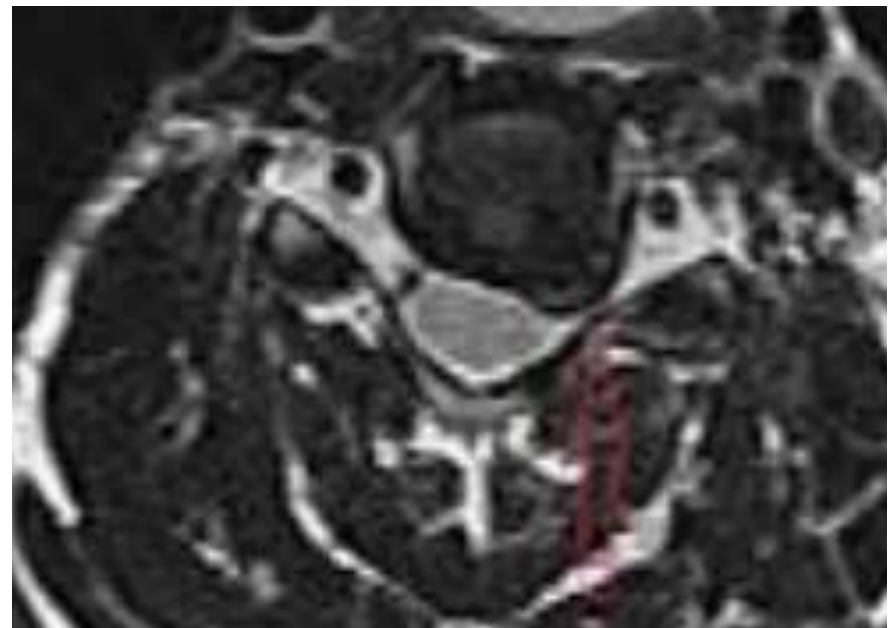
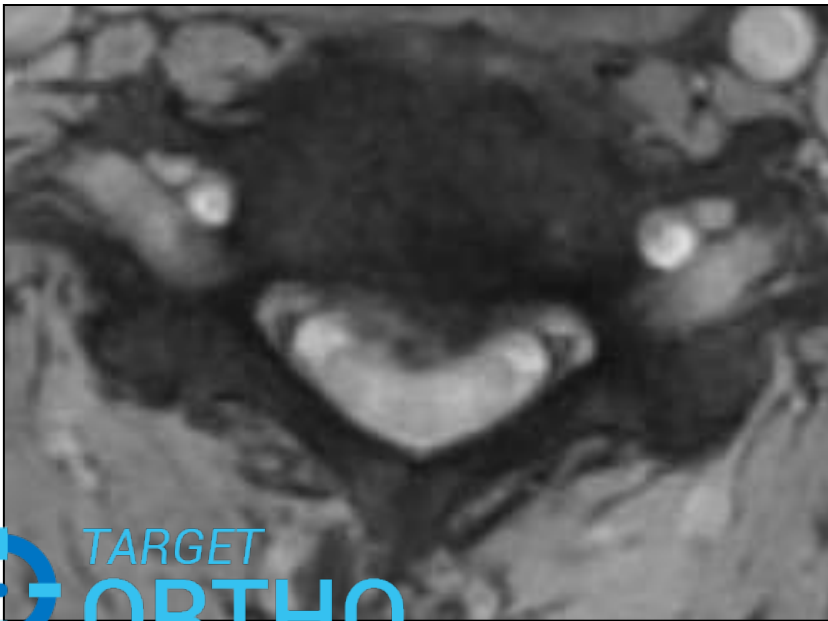








- **Upper cervical radiculopathy-** occipital pain and shoulder/ scapular pain
- Exaggerated DTR- think about myelopathy



X-ray

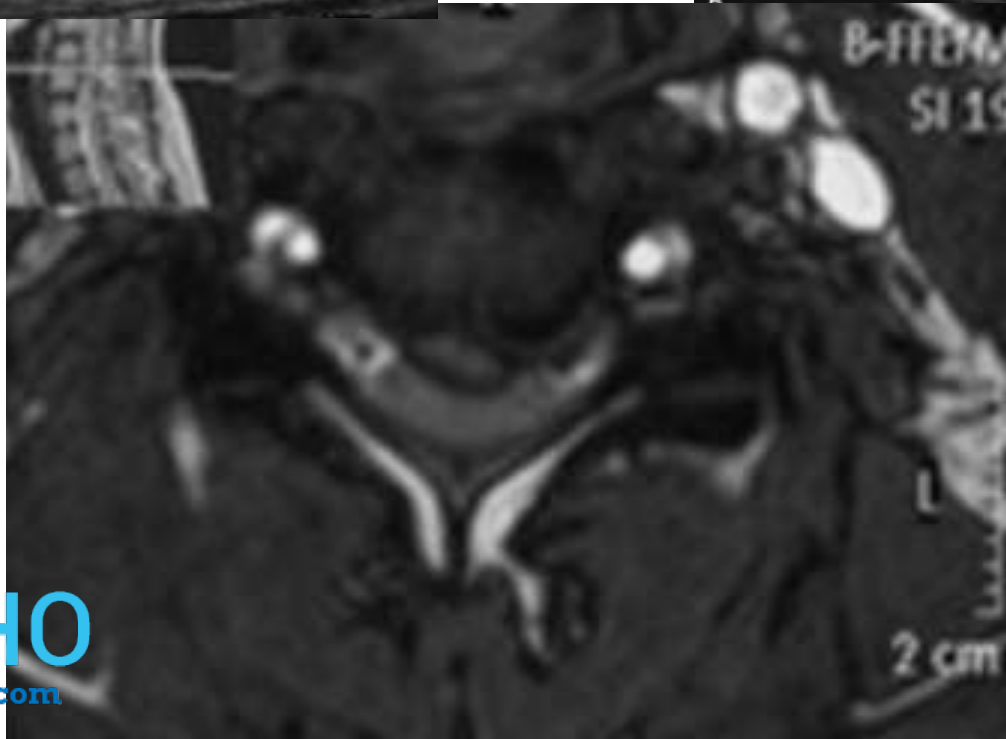
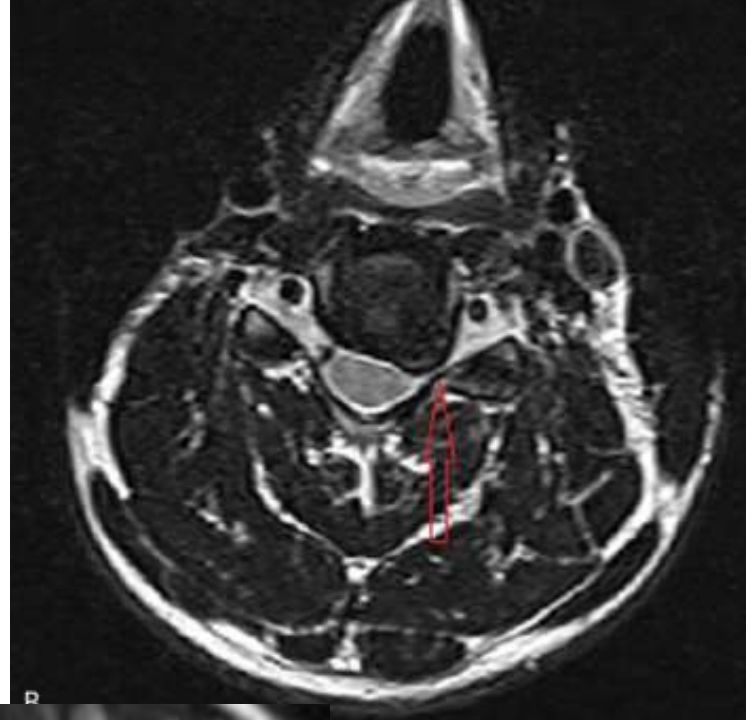
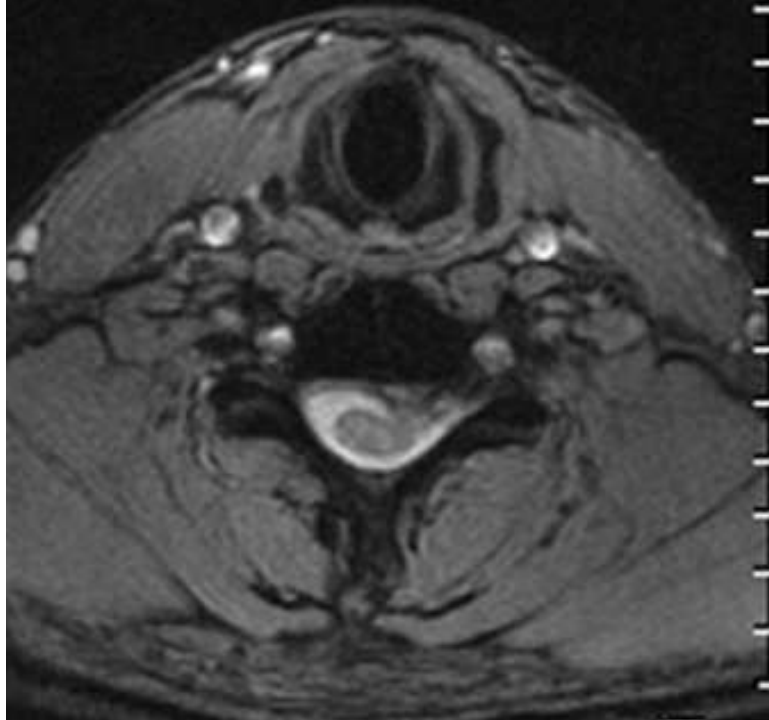


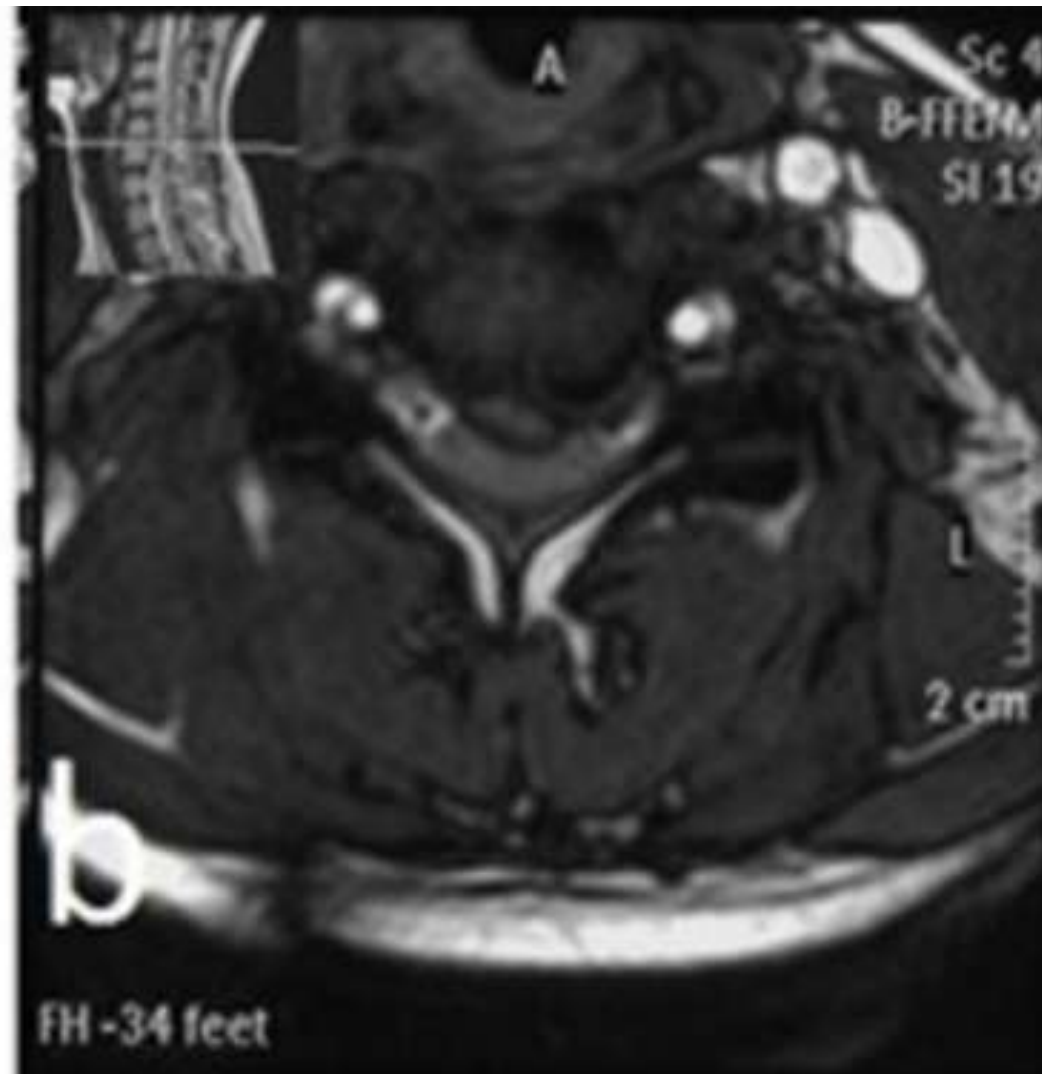
MRI – indications

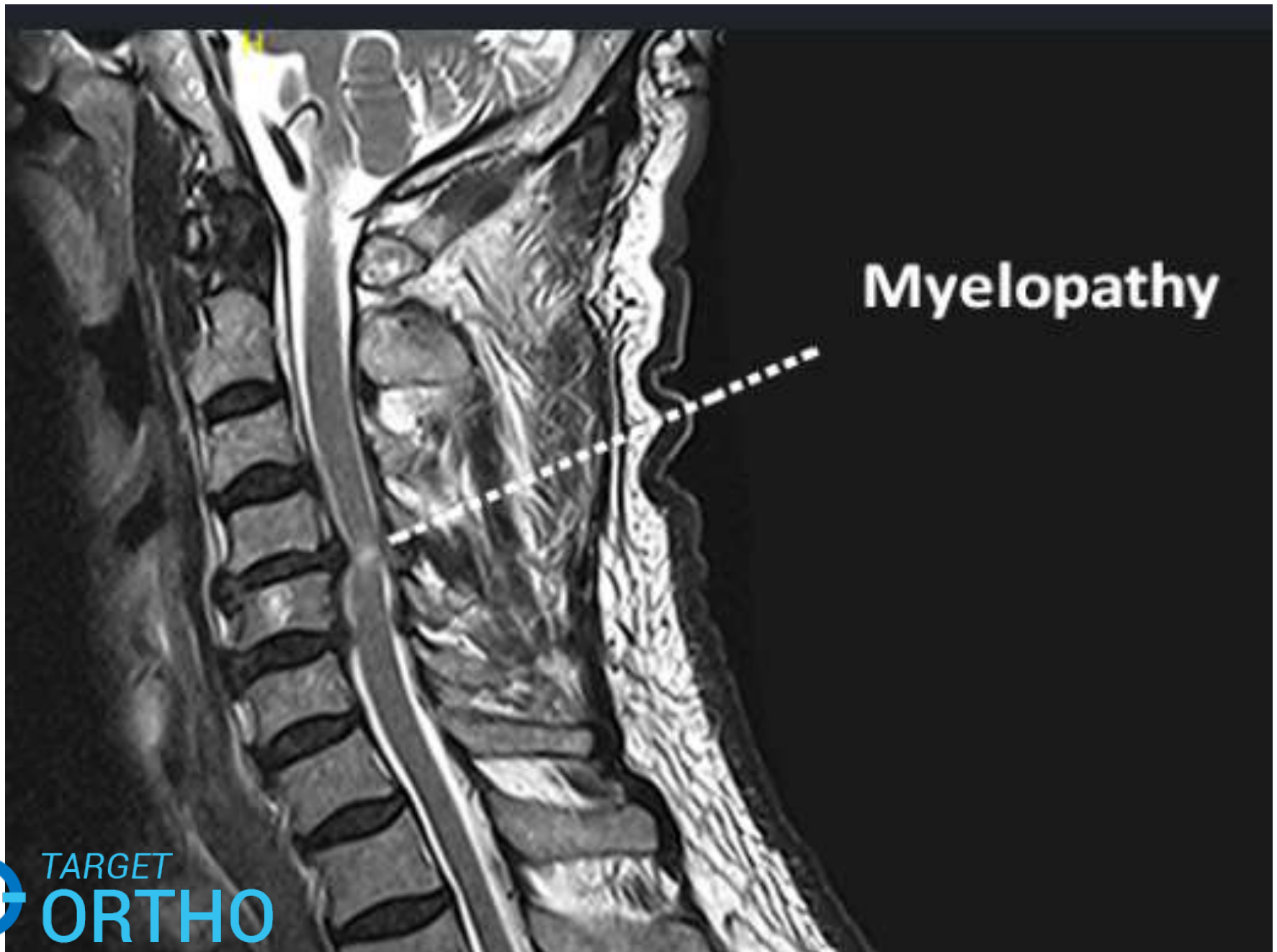
- Persistent symptoms
- Constitutional symptoms- fever/ chills
- H/o malignancy
- Neurological deficit
- Gait disturbance











Myelopathy



Differential diagnosis

Differential diagnosis	Nerve root mimicked	Differentiating feature of the condition
Rotator cuff tear and other shoulder affections	C5	Shoulder abduction might be weak other muscle groups(biceps) supplied by C5 root not involved. - Tenderness of shoulder joint with restricted movements.

Acute brachial plexus neuritis

C5,C6

1. Severe pain followed by marked weakness in C5 and C6 myotome within few days to weeks.

2. In cervical radiculopathy pain and neurological findings occur simultaneously.

3. Nerve conduction study

Thoracic outlet syndrome

C8,T1

Reproduction of symptoms with rotation of the neck to the contralateral side and tilting of the head to the contralateral side , in contrast to (Spurlings test).

Hyperabducting the arm to 180° aggravating the symptoms of thoracic outlet obstruction. While in cervical radiculopathy hyperabduction relieves the pain (Davidsons test).

Conservative treatment

Non invasive	Invasive
• Medications	1.Cervical epidural steroid
• Rest/immobilisation	2.Selective nerve root block
• Traction	
• Ice /heat therapy	
• Exercise and physical therapy	



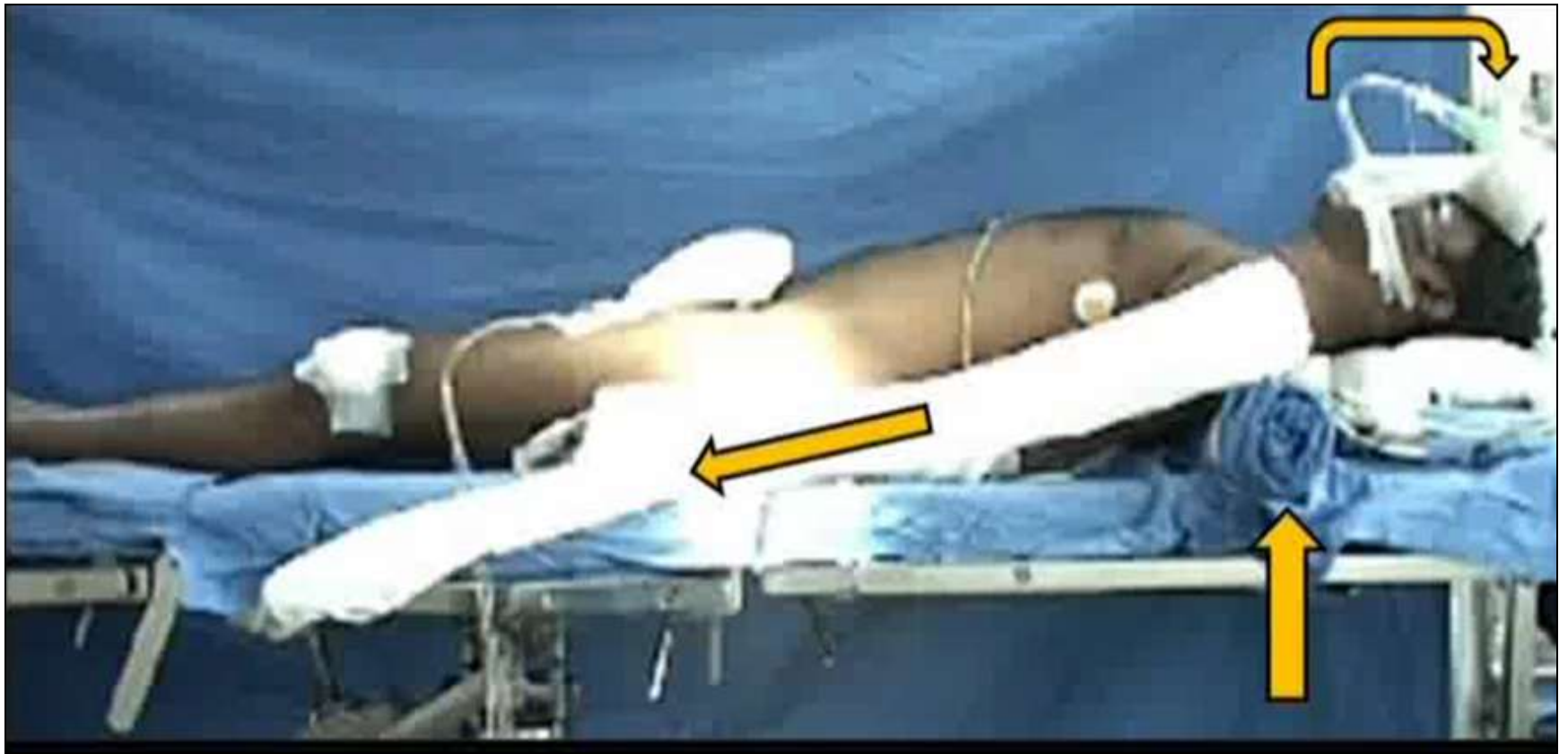
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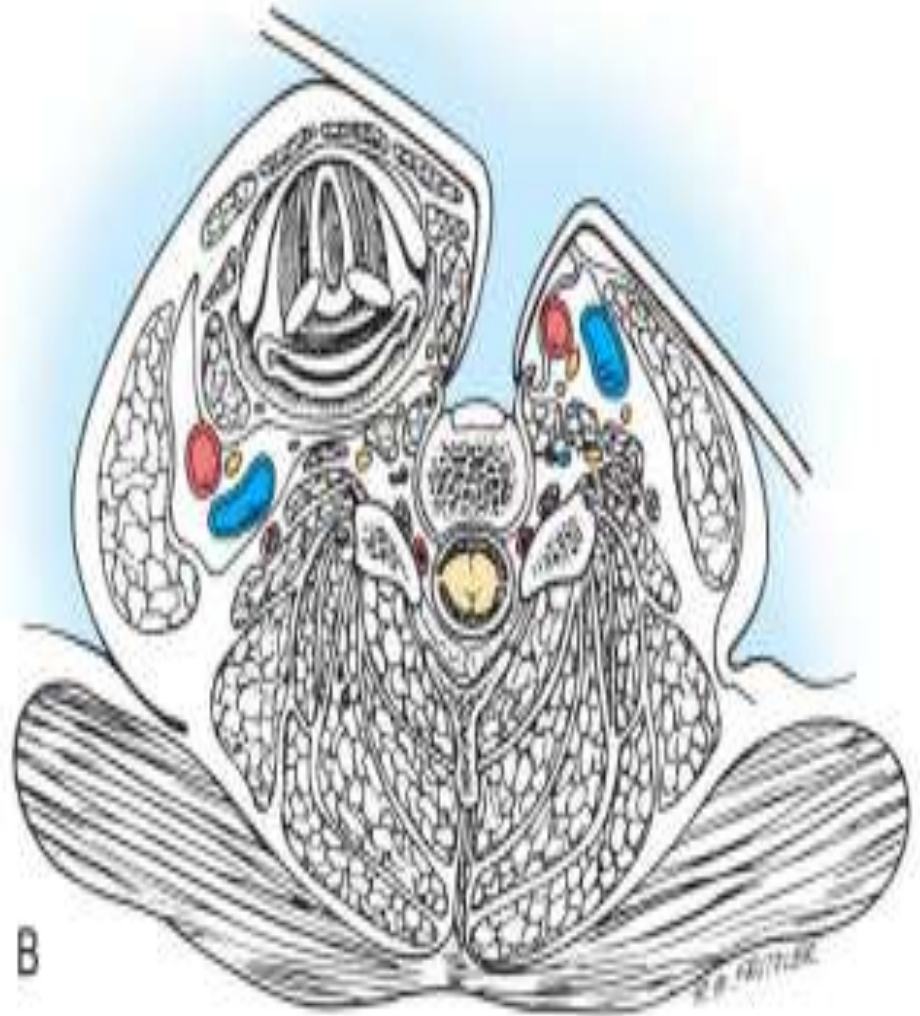
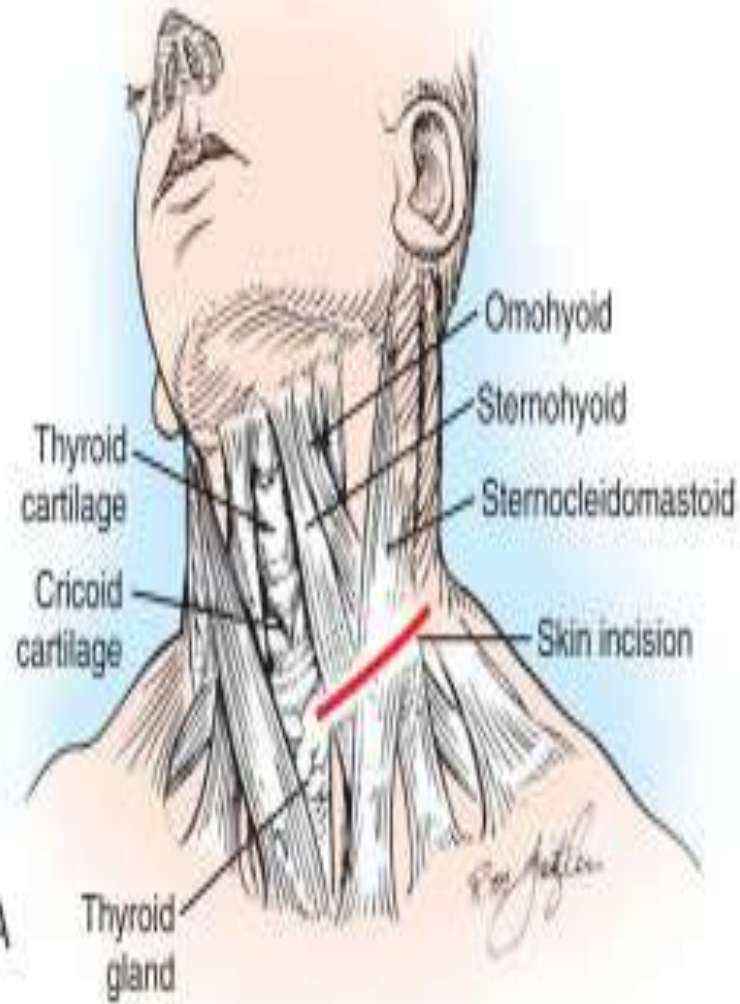
How I treat ?

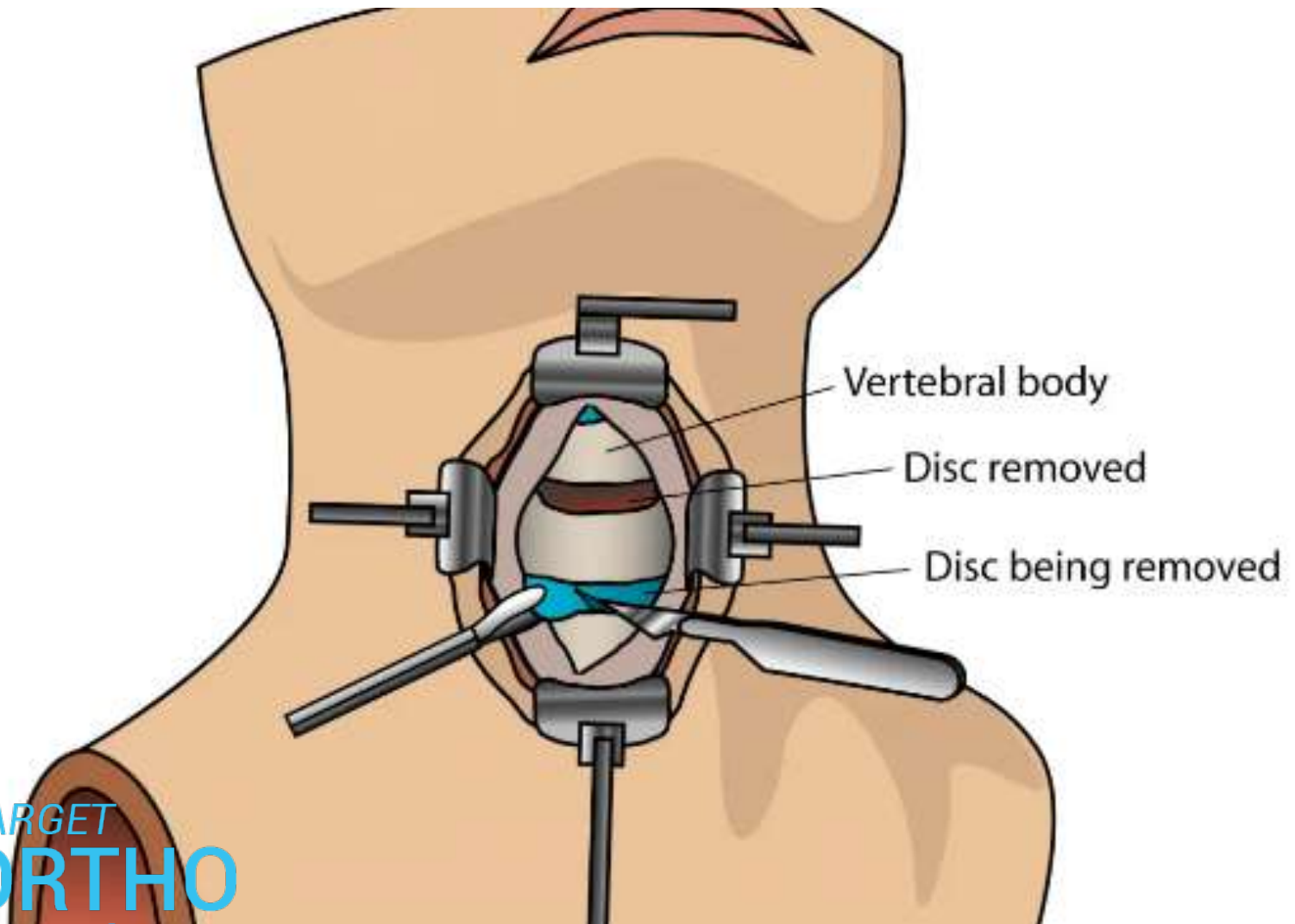
- Rest with large pillow – neck in flexion
- NSAIDs
- Steroids- Deflazocort- start with 24 mg – tapering dose
- Pregabalin
- Zolpidem/ anxit
- Neck exercises – after 2 weeks

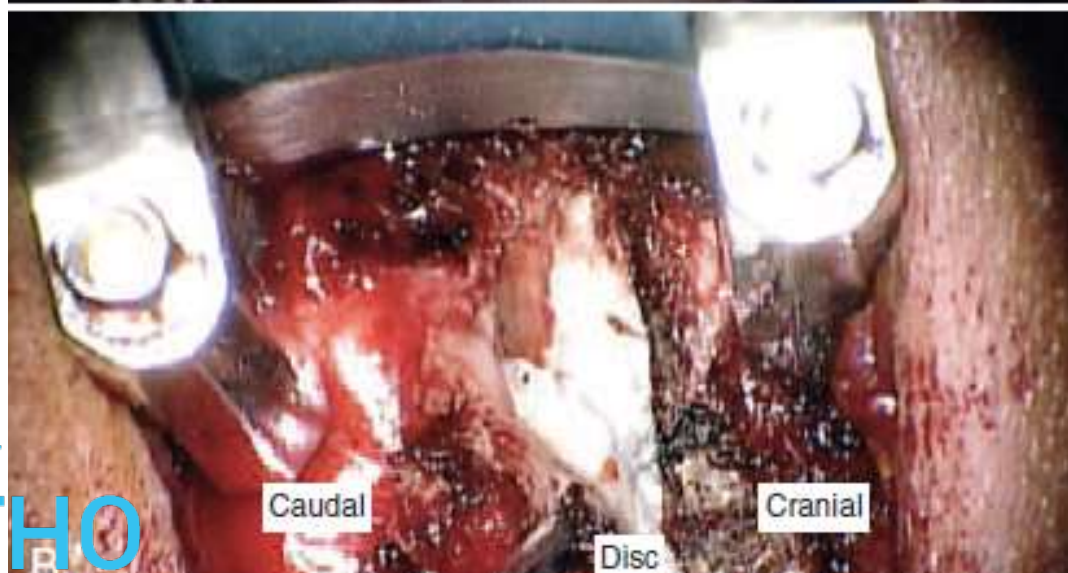
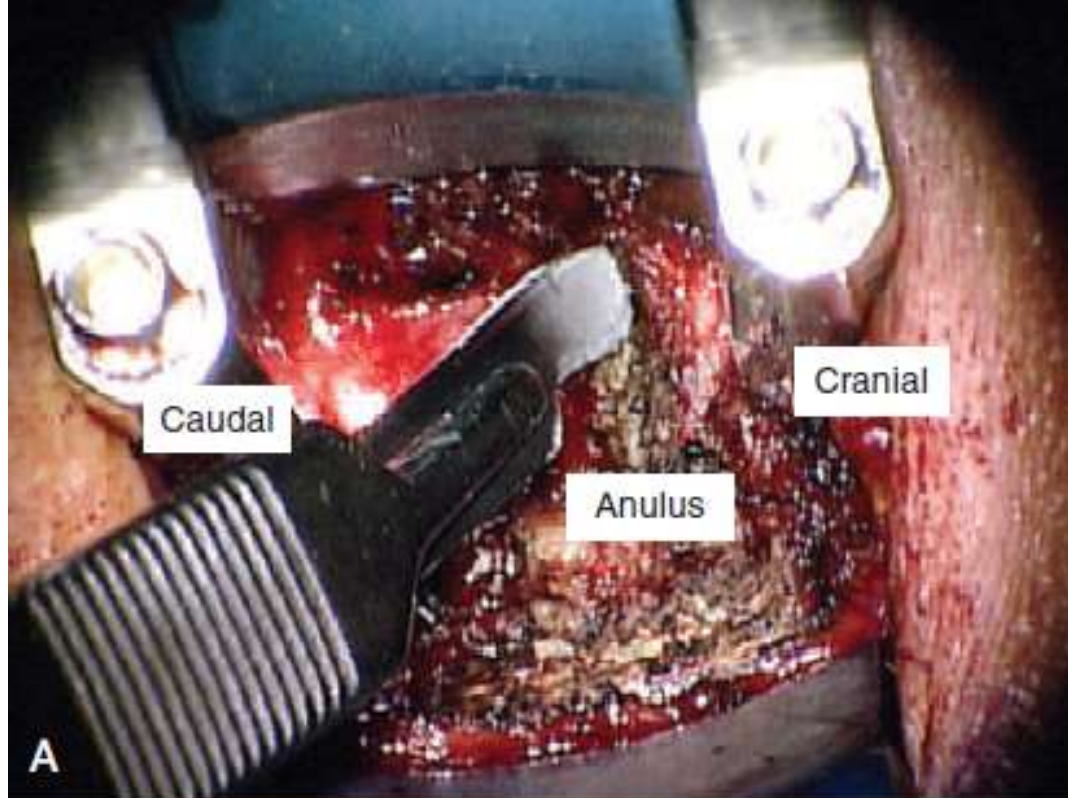
Surgery

- Not responding to conservative treatment – 6 weeks
- Significant neurological deficit
- Cervical myelopathy











A



B

Complications

1st question

- A 40 yr old singer presented with Left sided upper limb radicular pain .He had difficulty in palying guitar. X-ray cervical spine was normal and his MRI section is given below:

