

Common Cervical Spine Disorders - Diagnosis and Treatment

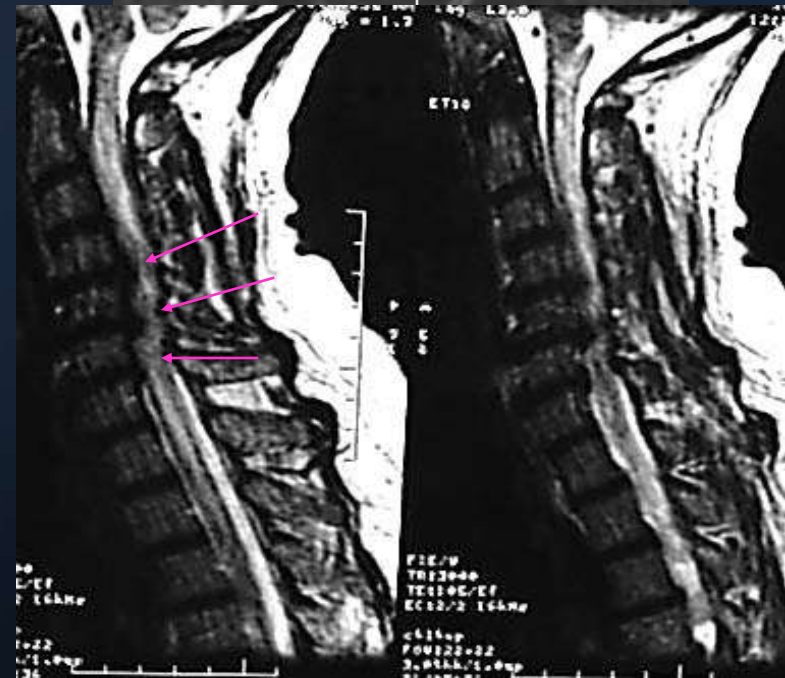
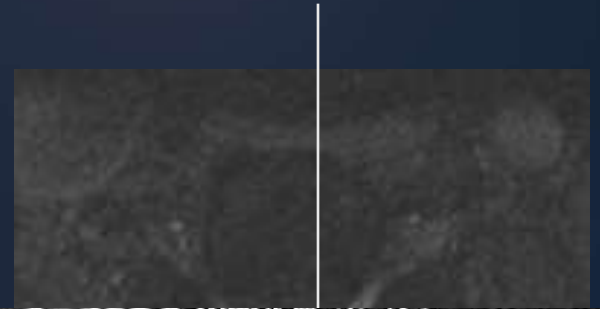
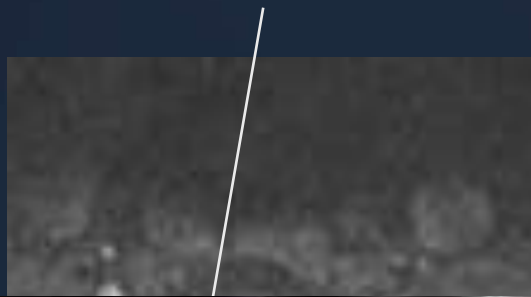
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Bones and Spine



Cervical Radiculopathy Vs. Myelopathy



Clinical Presentation

◆ Radiculopathy

- Shooting pain down the arm with numbness, tangling
- +/- weakness
- +/- interscapula pain
- Better with arm abducted

◆ Myelopathy

- Gait changes/falling
- Bowel(18%) or bladder(15%)dysfunction
- Change hand writing
- Diffuse hyperreflexia/spastic
- 20% no neck or arm pain
- Electric shock with movement of neck





Physical Exam

C5 Radiculopathy

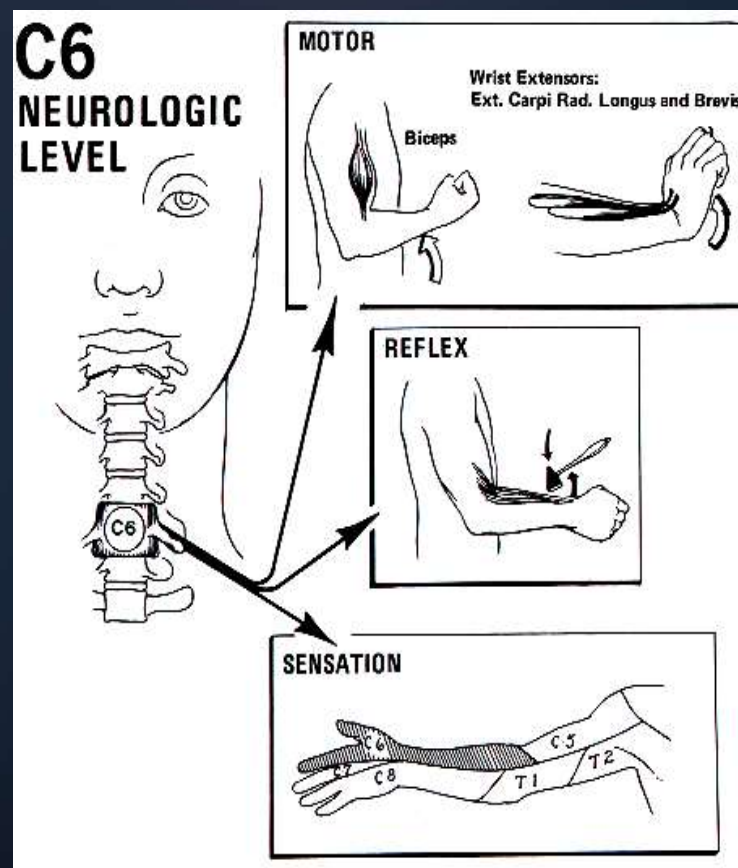
- ◆ C4-5 level
 - 3rd most common
- ◆ Weak deltoid, shoulder external rotators
 - perhaps biceps
- ◆ Biceps reflex
- ◆ Pain & Sensory loss
 - lateral shoulder
 - lateral brachium



Physical Exam

C6 Radiculopathy

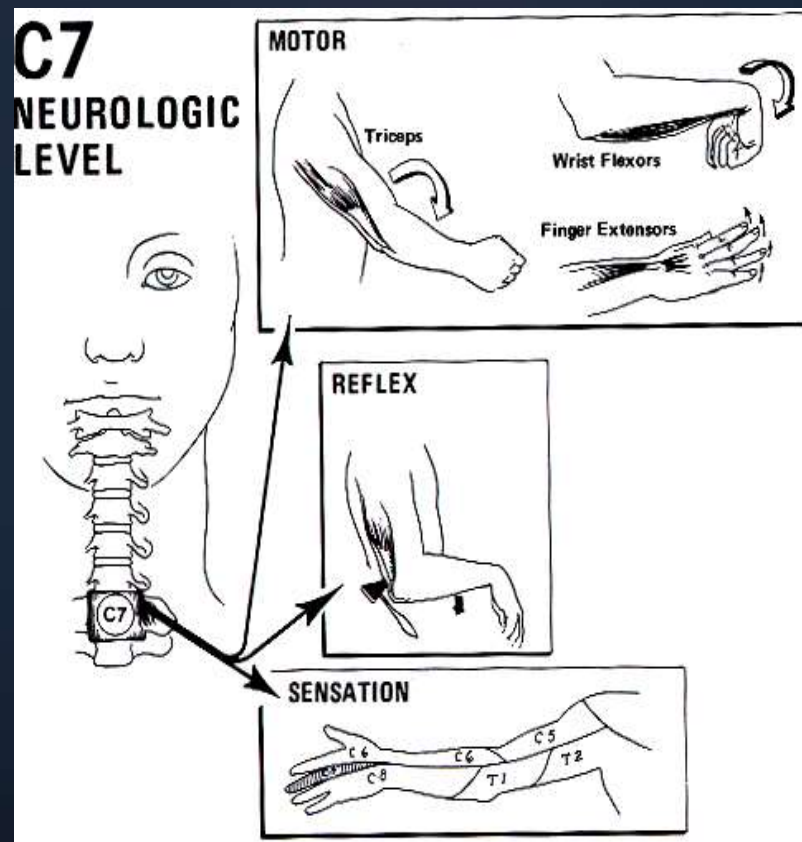
- ◆ C5-6 level
- ◆ Weak biceps & wrist extension
- ◆ Brachioradialis reflex
- ◆ Pain & sensory loss
 - radial hand
 - lateral brachium



Physical Exam

C7 Radiculopathy

- ◆ C6-7 level
- ◆ Weak triceps, wrist flexion, finger ext
- ◆ Triceps reflex
- ◆ Pain & sensory loss
 - middle finger
 - posterolateral arm



Physical Exam

Spurling Test

- ◆ Extending the neck
- ◆ Rotating head
- ◆ Downward pressure on head
- ◆ Positive if pain radiates to side patient's head is pointed
 - Positive Spurling in 71% football players c recent burner
(Levitz et al *AM J Sp Med* 1997)



Physical Exam

Manual Cervical Distraction

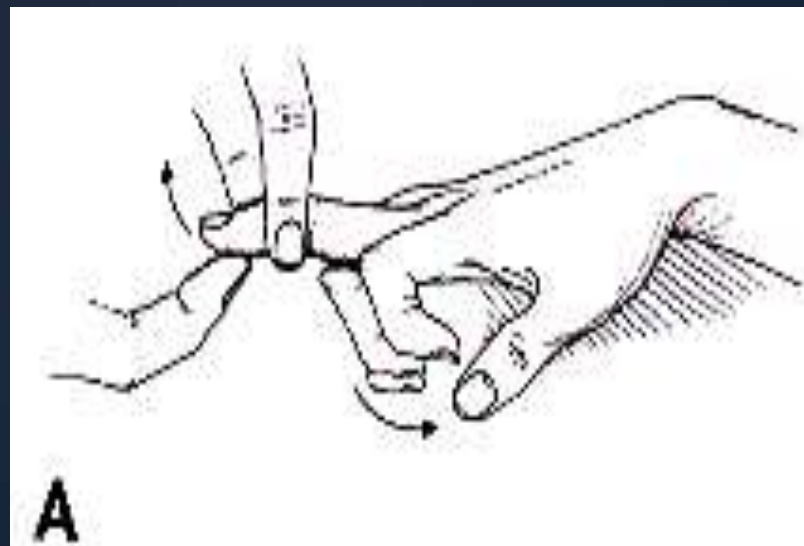
- ◆ Supine patient
- ◆ Gentle manual axial distraction
 - Up to ~30lbs
- ◆ Positive response reduction neck and limb symptoms



Hoffman's Reflex

Myelopathy

- ◆ Suddenly extend middle finger DIP
- ◆ Reflex finger flexion
- ◆ When asymmetric indicative spinal cord impingement



Physical Exam

L' hermitte' s Sign - myelopathy

- ◆ Neck flexion
- ◆ Electric-like sensation radiating down spine and/or extremities
 - Cervical spondylosis
 - Multiple sclerosis
 - Tumor



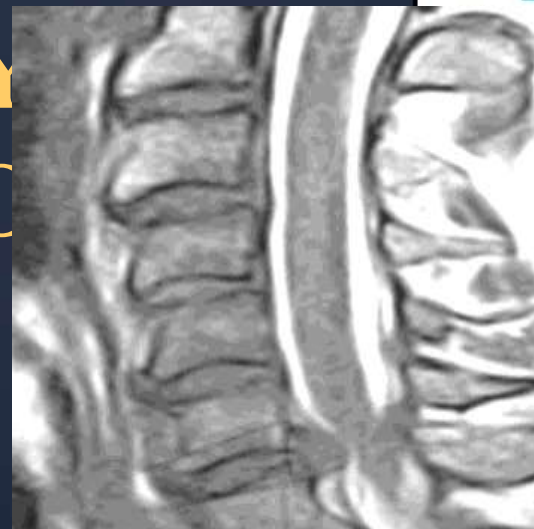
Non-Operative Treatment

- ◆ NSAID
- ◆ Oral steroid
- ◆ Soft cervical collar
- ◆ Cervical traction
- ◆ Epidural steroid injection

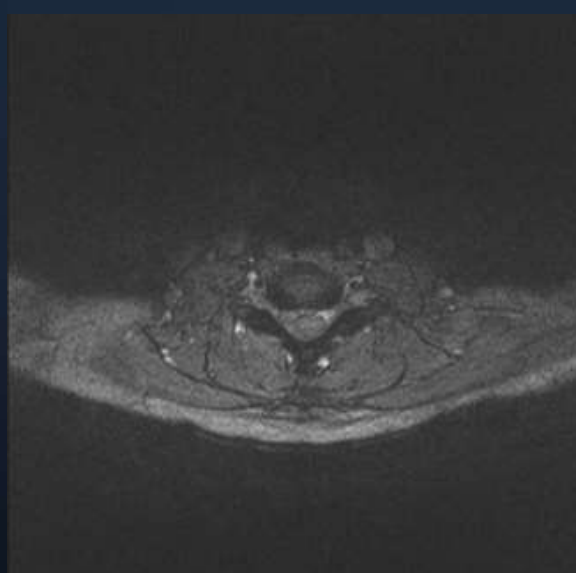


ANT. CORPECTOMY POST FORAMINOTOMY

- ◆ 59 yo businessman with severe R. arm pain.



Cervical artificial disc



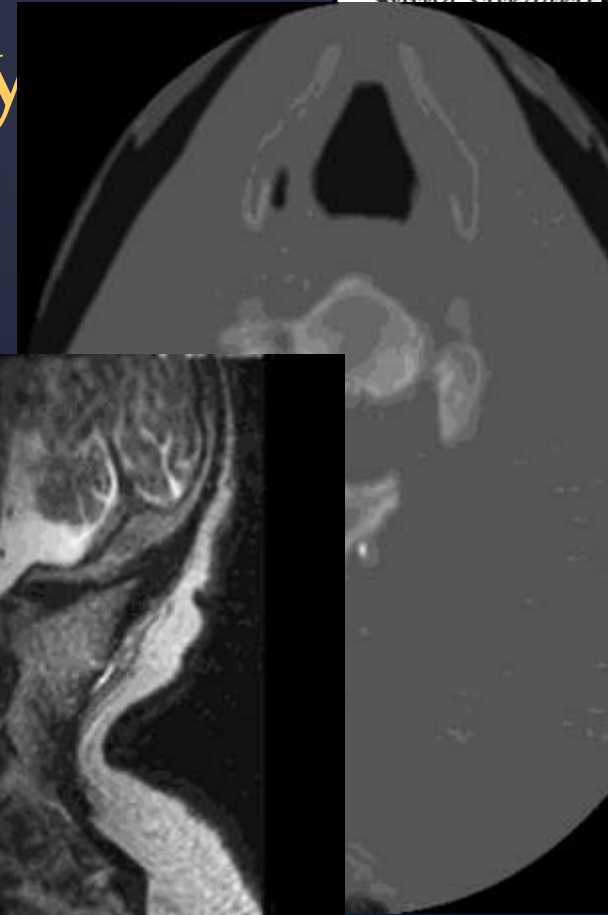
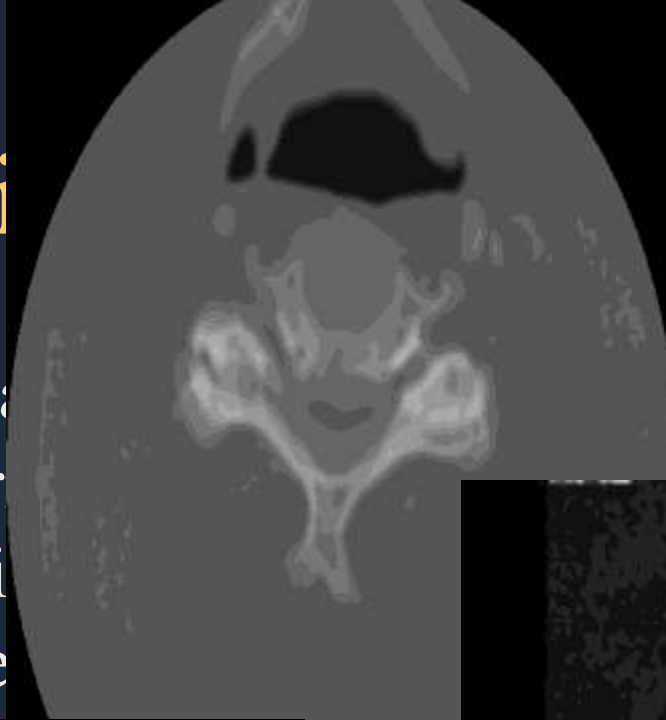
2 Level cervical artificial disc



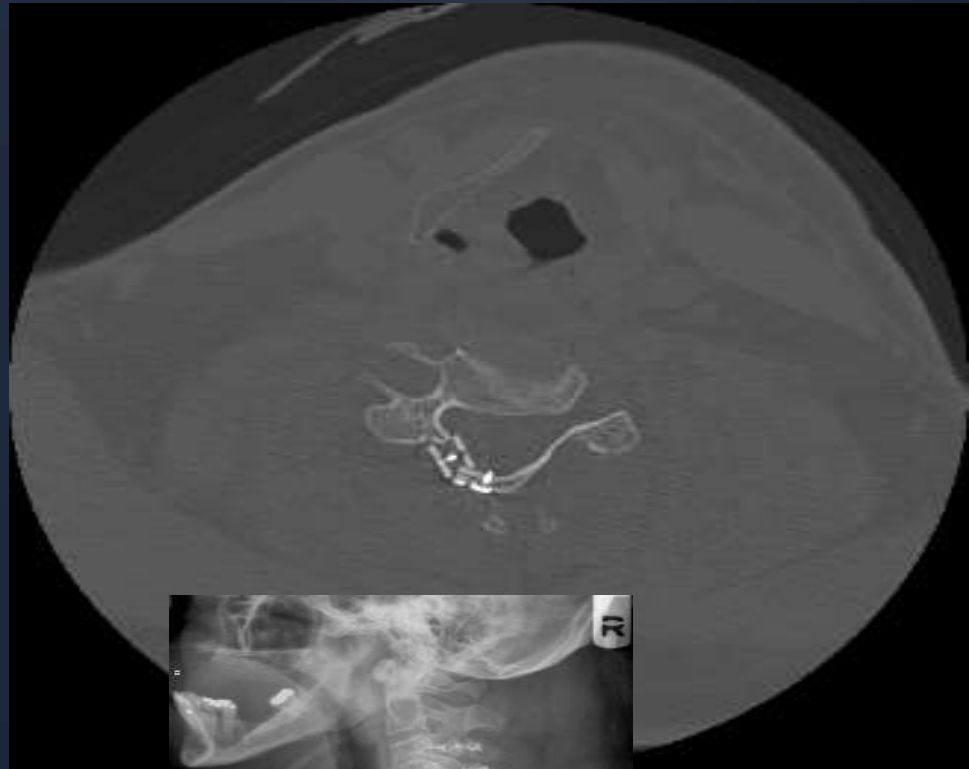
Cervical

Instability

- ◆ 81 year old male with long standing quadriceps weakness and gait worse



Cervical laminaplasty



Conclusion

Patient selection and Making the correct diagnosis is the key to success.



Thank You

