

Ten Topics That Will Make You the Smartest Musculoskeletal Provider in the Room



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- FINANCIAL DISCLOSURE: none
- UNLABELED/UNAPPROVED USES DISCLOSURE:
none



For Handouts or References

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Case # 1

- 17 YO white female softball shortstop
- 6 months of right shoulder pain
- 2 months of NSAIDs with no benefit
- Shoulder X-Ray normal
- “Dead-Arm” with overhead activity

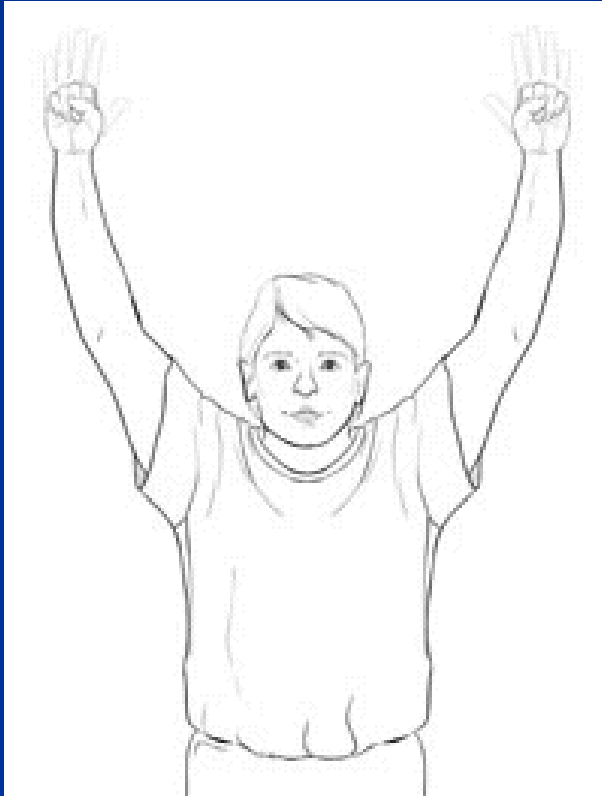


Differential Diagnosis?

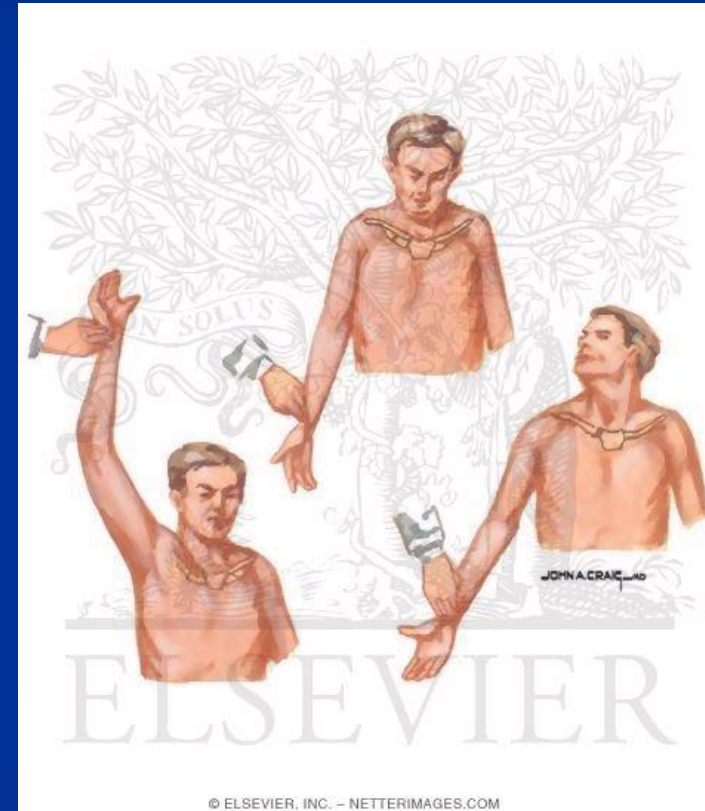


TOS Exam

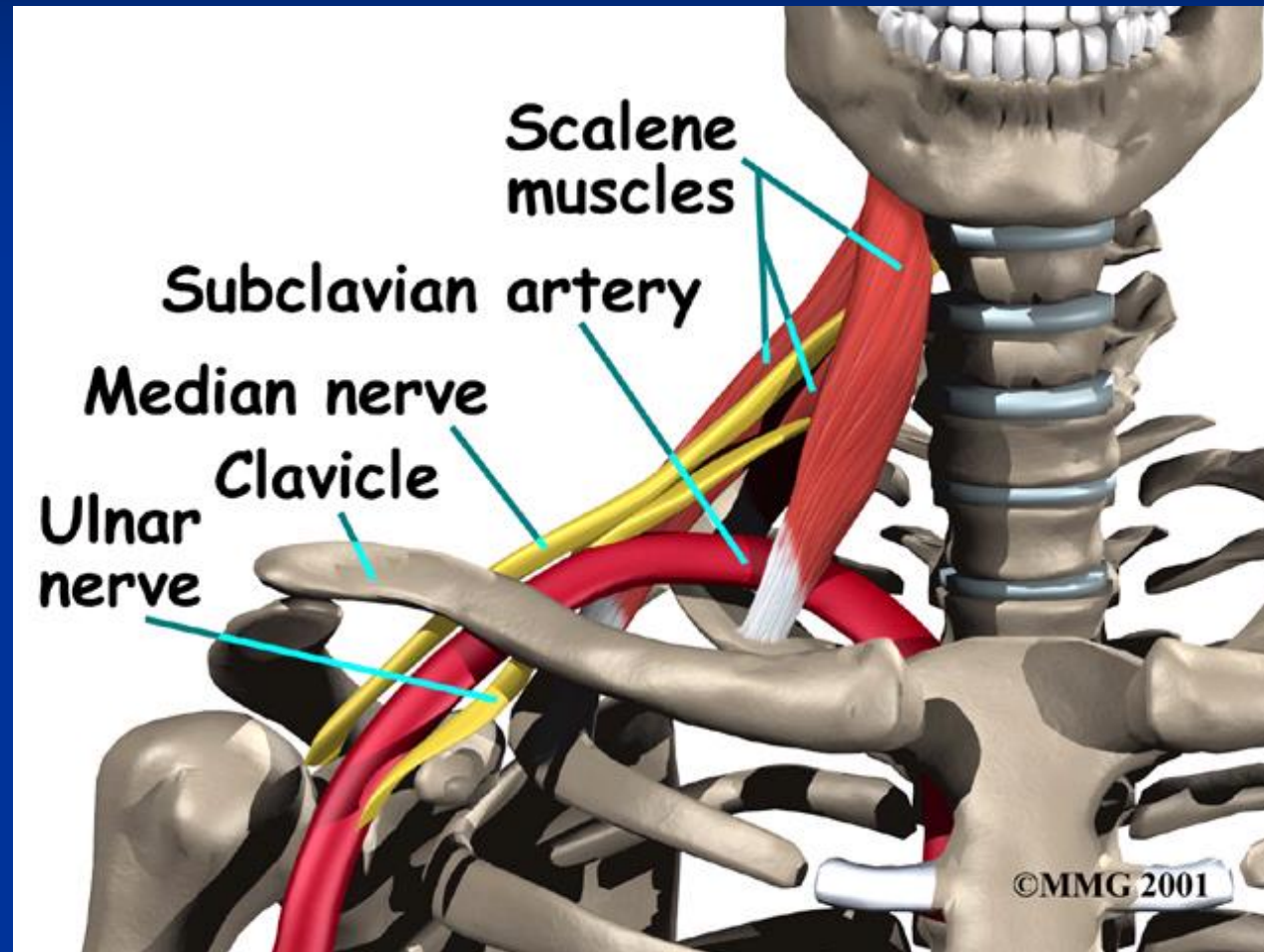
- Roos Test



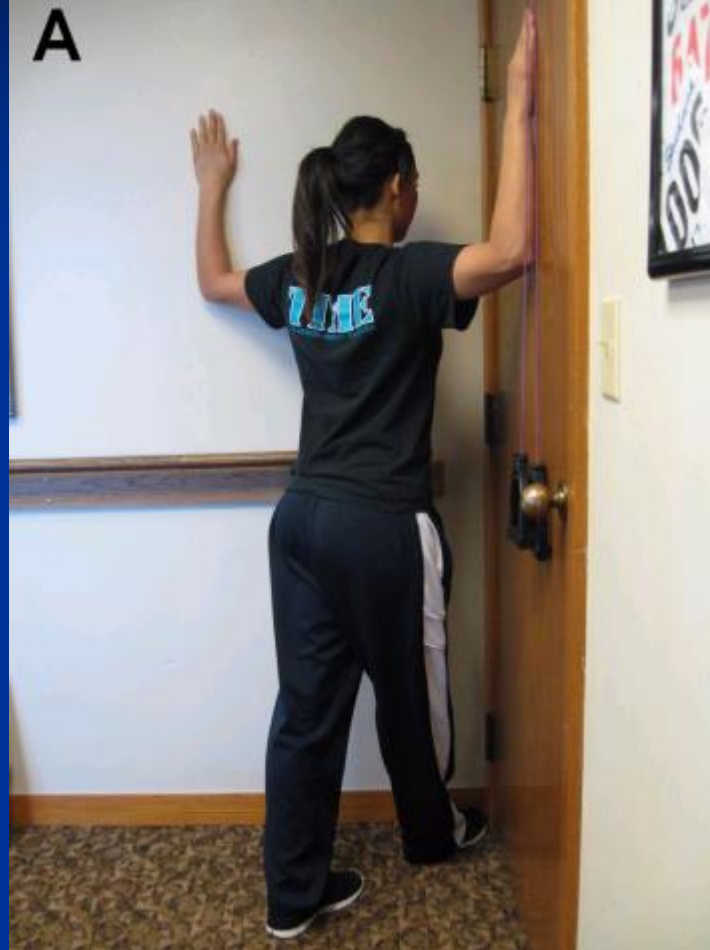
- Adson Manuver



TOS Diagnosis/Treatment?



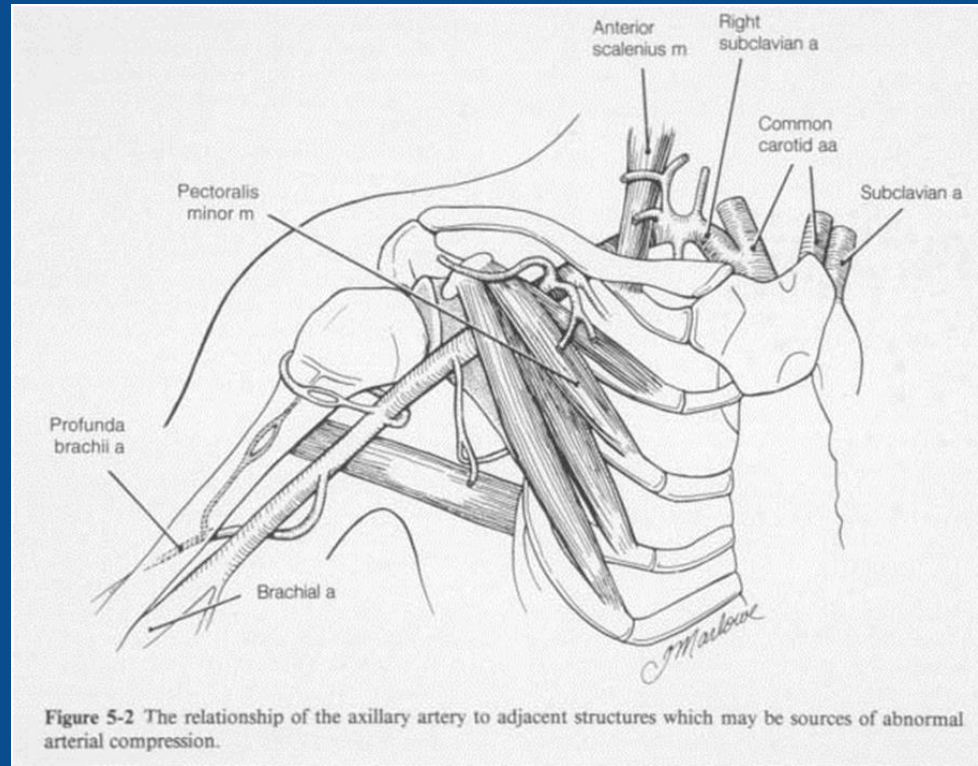
Treatment



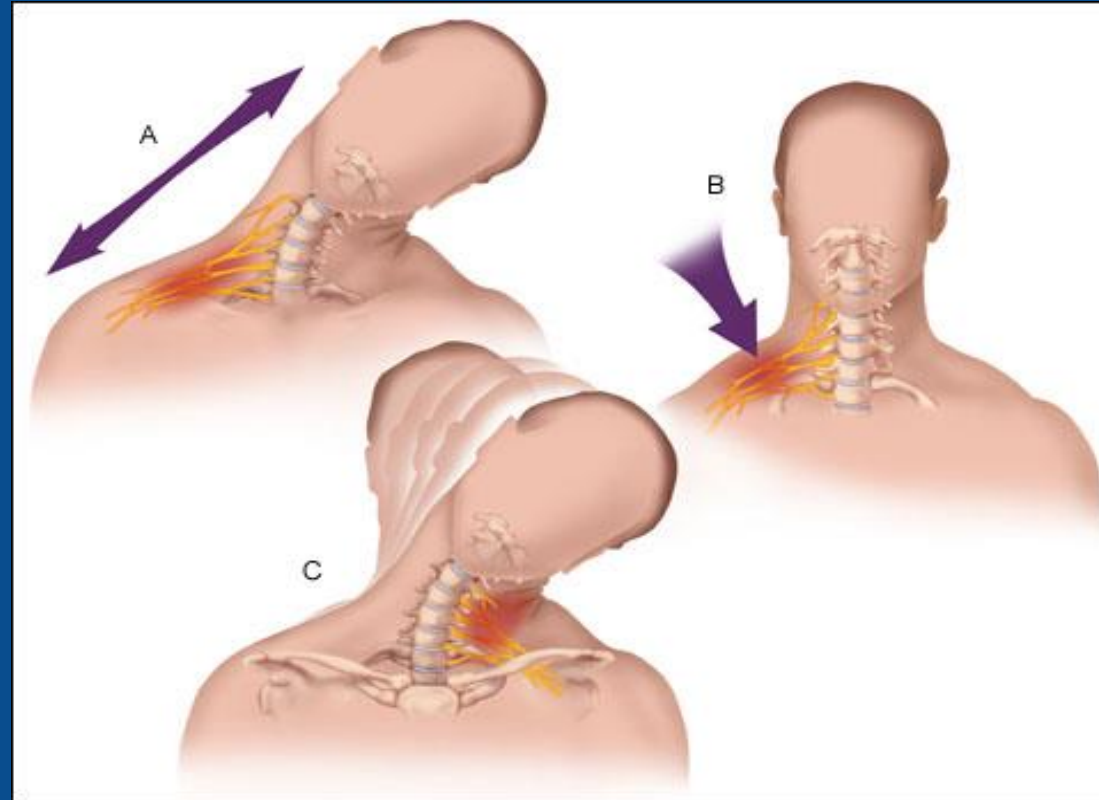
Prognosis?

Nerve Injury

- Brachial Plexus
 - Stinger/Burner
- Disc Pathology
- Thoracic Outlet Syndrome



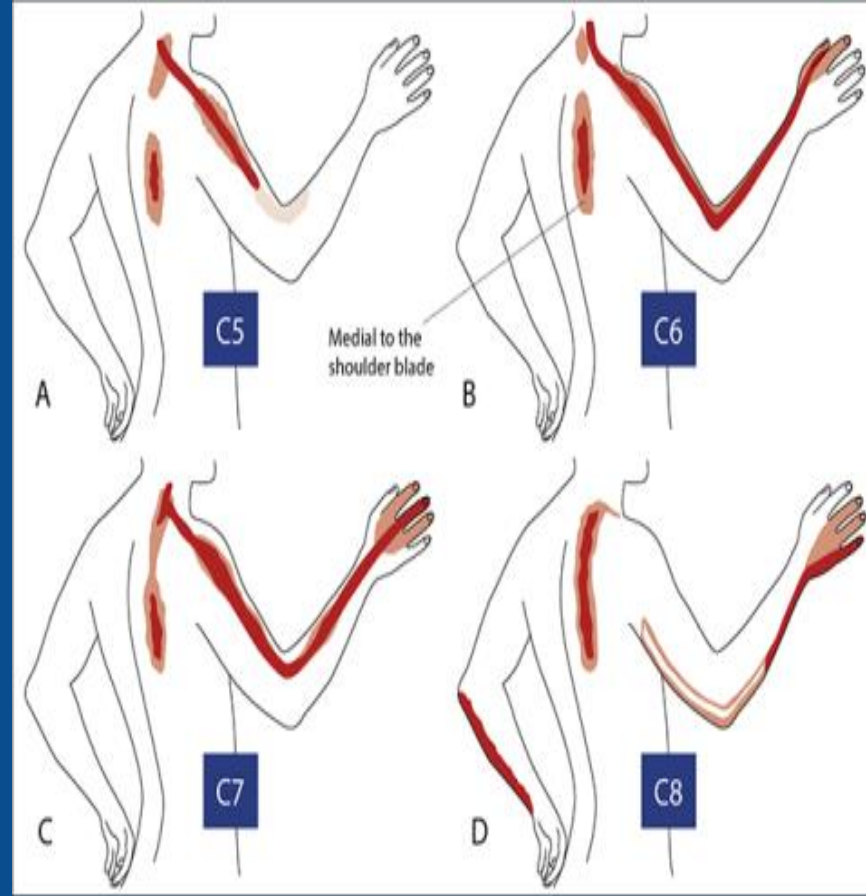
Mechanism Brachial Plexopathy (Stinger)



Nerve Injury - Pathology



TOS



Nerve Root

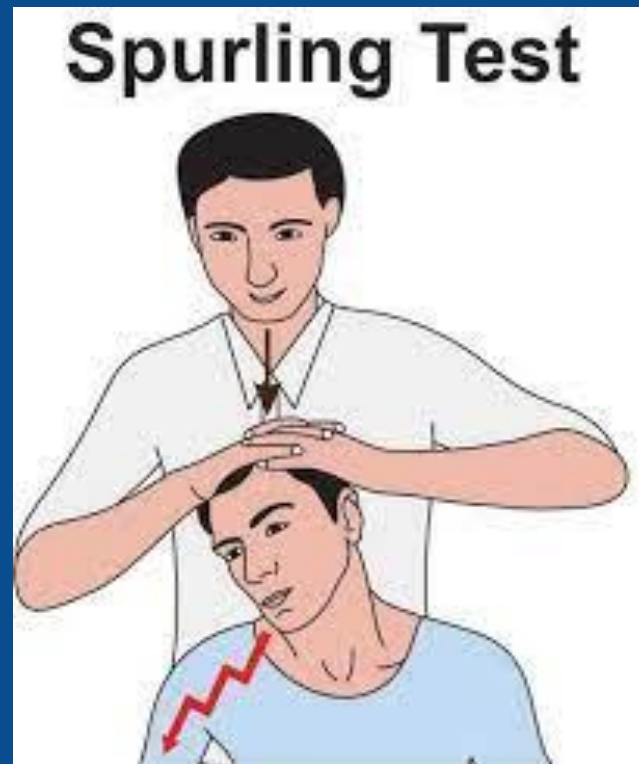


Nerve Injury - Prevention

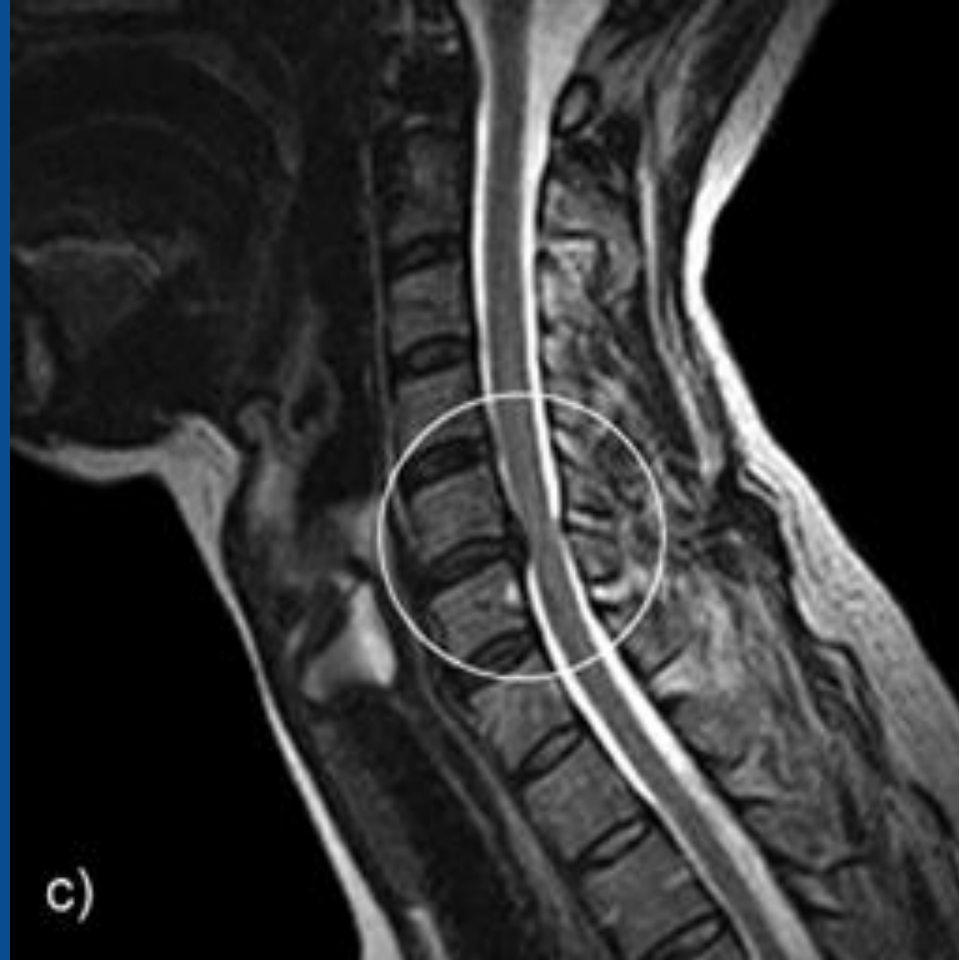


Nerve Injury - Tests

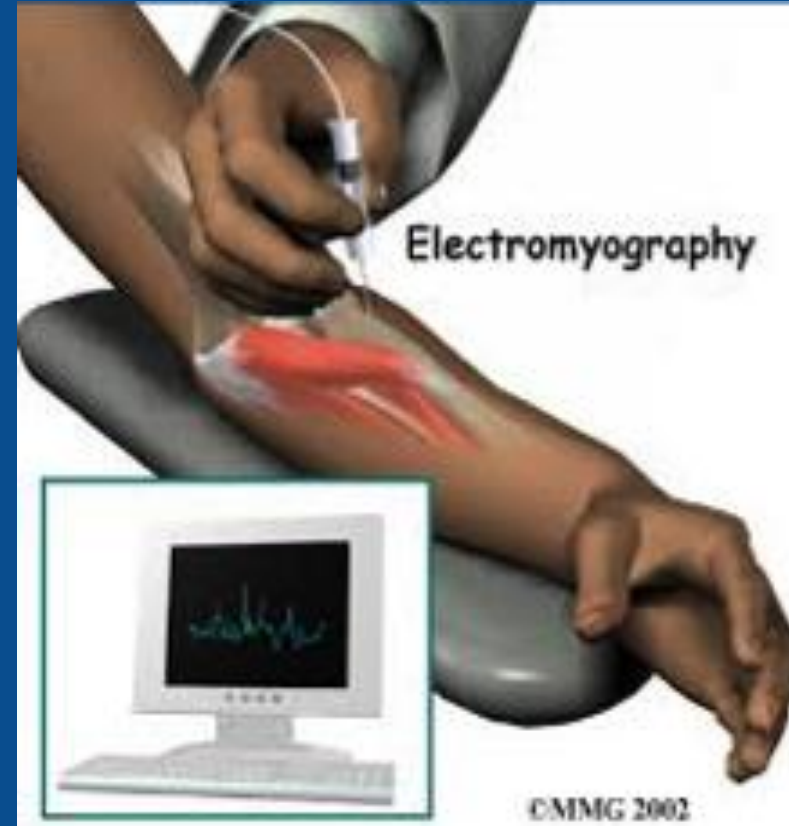
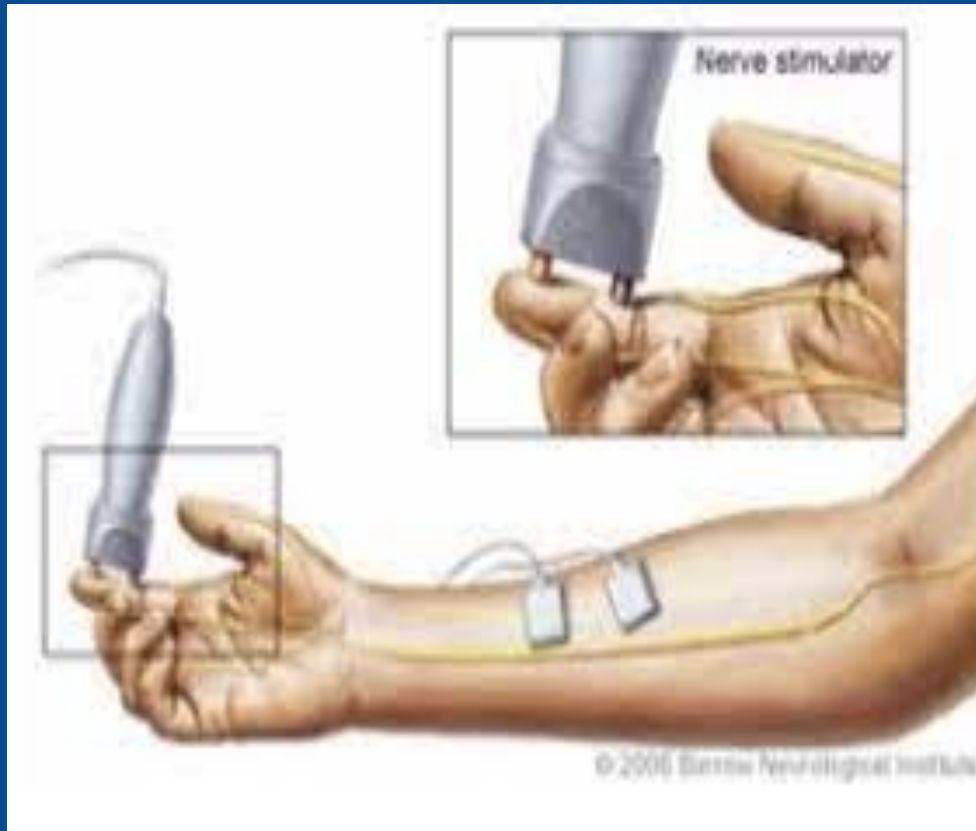
- Scalene Triangle/Spurling Test



Nerve Injury - MRI



NCT/EMG



EMG- indicated if symptoms persist after 3 weeks

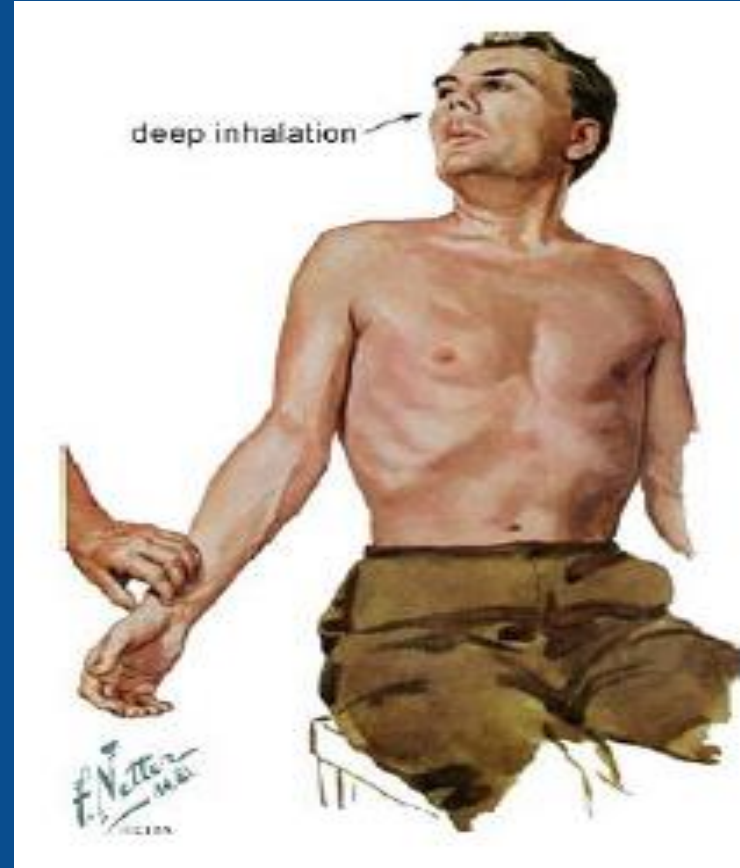


TOS Exam

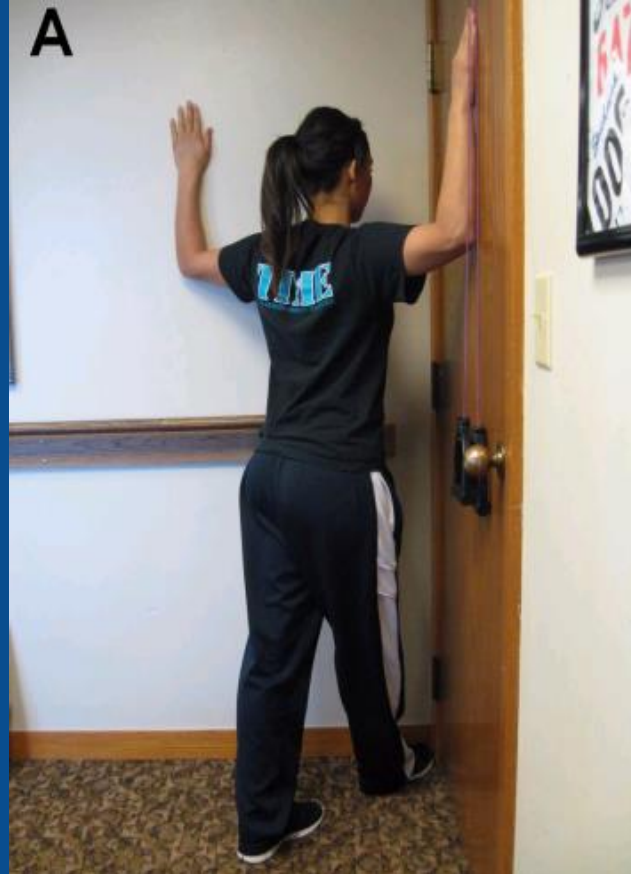
- Roos Test



- Adson Maneuver



Treatment



Prognosis?



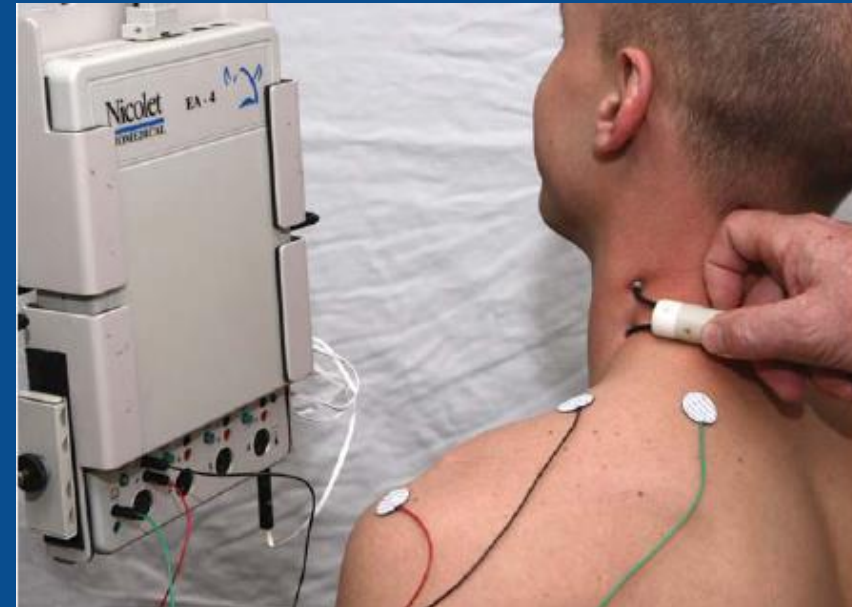
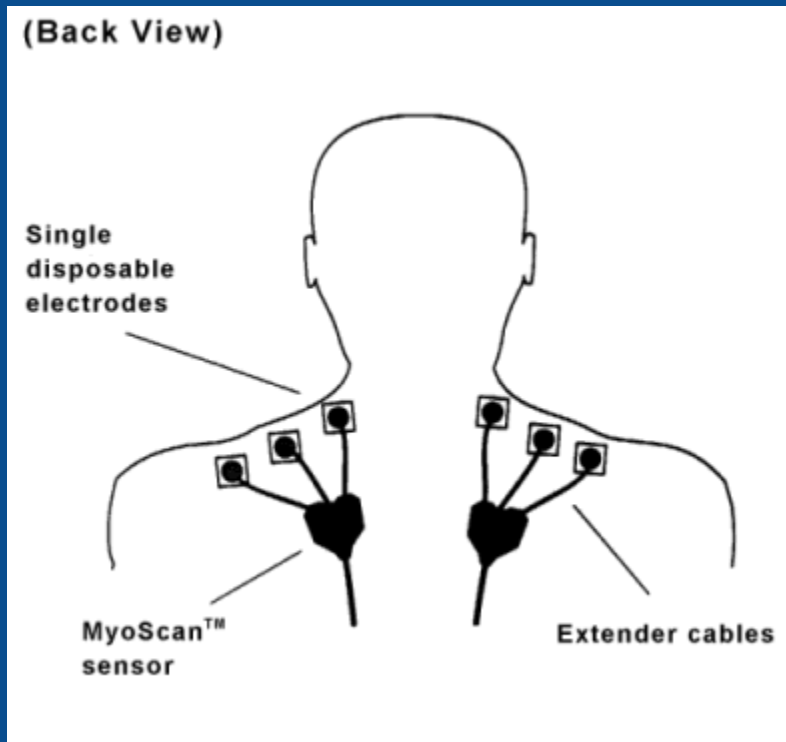
Cervical X-Ray



Cervical Rib



EMG/NCT



Stress Fractures

What Is The Clinical Presentation?



Symptoms

- Deep ache
- No response to treatment
- Rapid training change
- Pain after activity ➡ during sports ➡ ADL
 ➡ pain at rest

Physical

- Palpable periosteal thickening
- Tuning fork test
- “Hop Test”



Stress Fractures

■ Plain Film Radiographs

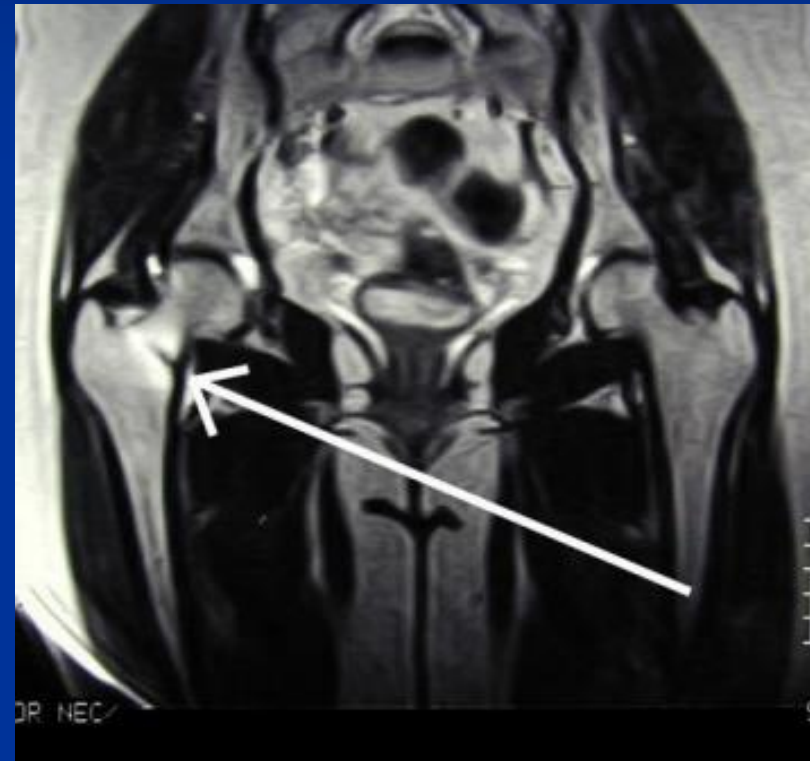
- Often negative early in course
- May become positive 2-4 weeks after onset of symptoms
- Positive in about 30% of cases
- Findings include periosteal new bone formation with cortical thickening or radiolucent fracture line in cortex



Stress Fractures

■ MRI

- May demonstrate focal marrow edema and low signal intensity lines in area of stress fracture
- Findings may be very subtle
- Better for evaluation of soft tissues
- Usefulness limited by cost and subtlety of findings



Stress Fractures

How Do You Treat Them?

REST

REHAB

RETURN TO SPORT

Stress Fractures- Treatment

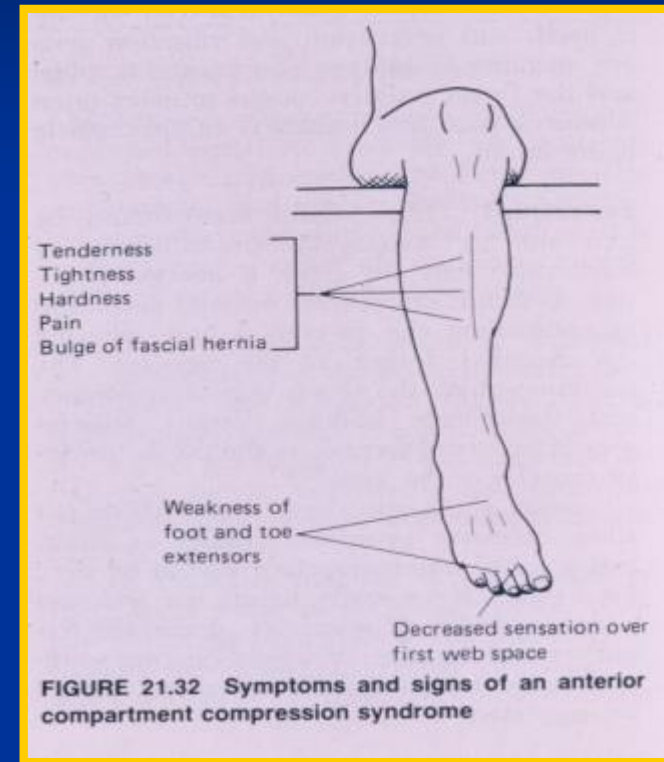
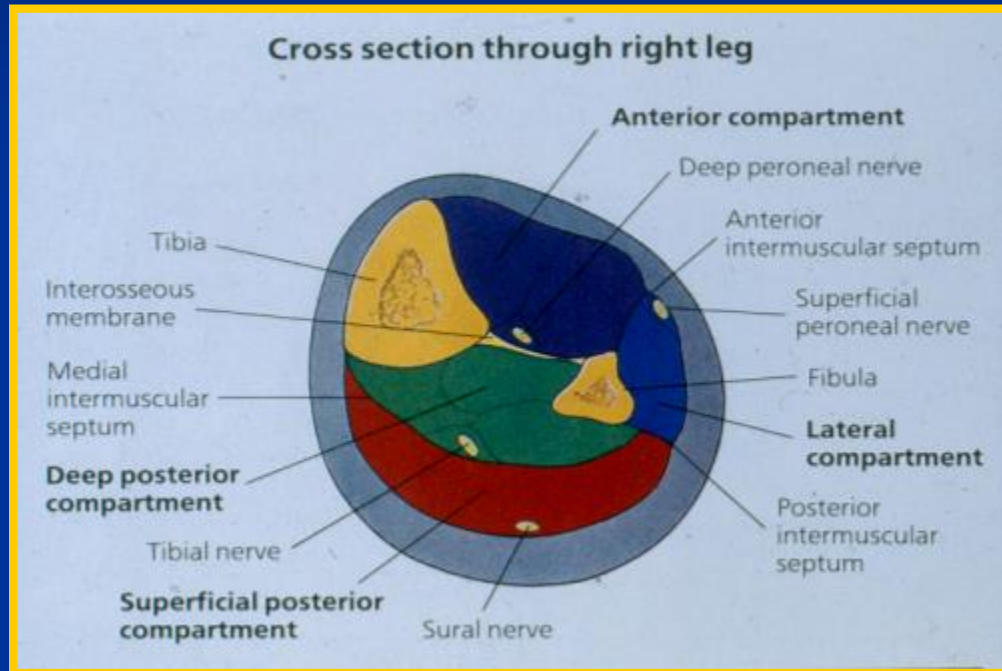
- “Active” rest using pain as guide
- Alternate fitness activities
- Support as needed with crutches, braces, etc.
- Strict immobilization usually not necessary (unless visible crack on plain films)
- Nutritional & hormonal therapy (calcium supplements, estrogen therapy)
- Develop a “Game Plan”



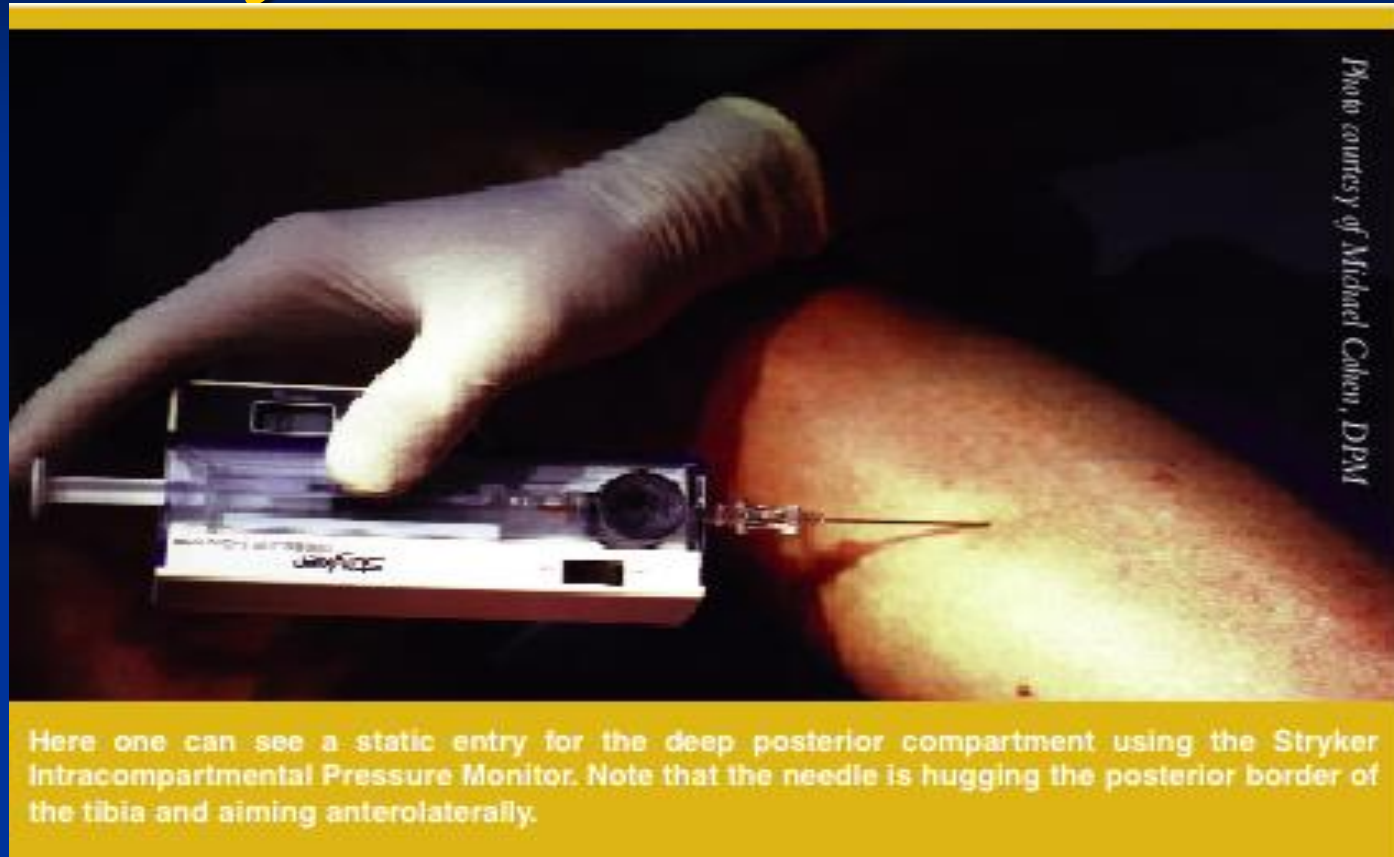
Case # 12

- 18 YO female soccer player plays year round and is playing indoor in the winter season
- She is having recurring shin splints
- Has had treatment including stretching, icing and orthotics
- She has not received much benefit
- Her pain is much more noticeable after 10 min of play
- Recently she's been signaling to her coach to come out of the game at that time
- Had x-rays at PMD and was negative

Exertional Compartment Syndrome/Diagnosis?



Exertional Compartment Syndrome/Treatment?



Prognosis?

