

# ANTERIOR CORD SYNDROME



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## WHAT IS IT?

- Anterior cord syndrome is damage to the anterior or anterior-lateral portions of the spinal cord.
- Preservation of the posterior portion of spinal cord.
- MOI: hyperflexion, burst injury, injury to the anterior spinal artery
- Impairments:
  - Corticospinal pathway: loss of motor function
  - Spinothalamic pathway: loss of pain and temperature sensation
- Intact proprioception and light touch (DCML pathway)



## SPECIAL TESTS



- CT/MRI
- Clinical presentation
- MOI

## DIFFERENTIAL DIAGNOSIS

- Posterior Cord, Brown Sequard, Central Cord, Cauda Equina
- Multiple Sclerosis
- Spinal infarct, spinal tumor
- Guillian-Barre Syndrome
- Transverse Myelitis



## TREATMENT EXAMPLES



- Utilize ICF model
- Managed medically
- Bowel and bladder program
- Motor learning
- Task specific training
- Neuromuscular reeducation
- Strengthening, weight bearing
- Tone management
- Functional E-Stim
- Aerobic training
- Positioning, splinting, bracing
- Locomotion
- Allowing compensation with this population

## HOW WILL THIS LOOK ON THE NPTE?

- MOI: hyperflexion
- Loss of motor function & pain and temperature sensation



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