

# BROWN SEQUARD SYNDROME



with **Bridget Ripa**  
PT, DPT

## WHAT IS IT?

- Brown Sequard syndrome is damage to one side of the spinal cord.
- MOI: traffic accidents, gun shot wound, stab wound
- Ipsilateral impairments
  - DCML pathway: proprioception, vibration, deep touch, discriminative touch
  - Corticospinal pathway: voluntary motor control
- Contralateral impairments
  - Spinothalamic pathway: pain, temperature, crude touch



## SPECIAL TESTS

- CT/MRI
- Clinical presentation: ipsilateral/contralateral impairments

## DIFFERENTIAL DIAGNOSIS

- Multiple Sclerosis
- Spinal infarct
- Spinal tumor
- Guillain-Barre Syndrome
- Transverse Myelitis



## TREATMENT EXAMPLES



- Patient needs to be medically stable
- 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: unilateral injury, stab wound, gun shot wound
- Ipsilateral/contralateral impairments



An Affiliate of C&A Industries, Inc.

**AUREUS**<sup>®</sup>  
MEDICAL GROUP

Download at  
[aureusmedical.com/npteststudycast](http://aureusmedical.com/npteststudycast)