A Case of Surfer's Myelopathy in a Professional Dancer

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- Surfer's Myelopathy is a rare condition in which hyperextension injury leads to anterior spinal cord infarction
- Etiology is thought to be due to any strenuous activity that involves prolonged hyperextension of the spine.

Case Description:

- A 28-year-old professional dancer presented with sudden-onset back pain, bilateral lower extremity weakness, and bladder incontinence after falling asleep on a stretching apparatus.
- He was noted to have an anterior spinal cord infarct and diagnosed with T9 ASIA B SCI.
- The patient was transferred to acute inpatient rehabilitation.
- Repeat ASIA exam 20 days following initial injury was T9 ASIA C.

Discussion: Surfer's myelopathy may present as:

1. Complete infarction typically presents with bilateral paralysis below affected level along with pain and temperature sensation loss.
2. Incomplete infarcts may present as:
   Anterior Horn Syndrome (areflexia and flaccid paralysis)
   Man-in-Barrel Syndrome (brachial diplegia) dependent on injury level

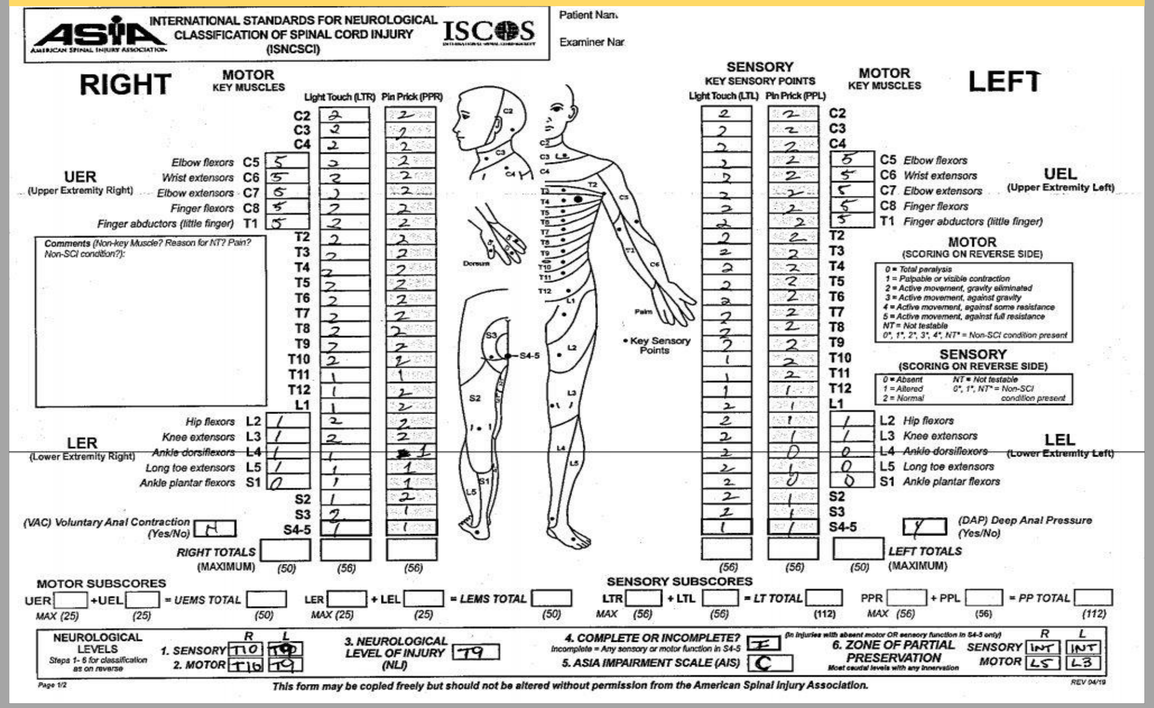

Figure: ASIA exam performed at acute rehabilitation 20 days following initial injury.

Discussion Continued:

- Currently, the mainstay of treatment is combined physical and occupational therapy, ideally in an acute rehab center with physiatrist oversight
- Goal is to prevent and manage complications associated with SCI
- Functional outcomes for these individuals show independent ambulation in 11-46% and wheelchair dependence in 20-57% of cases.
- Treatment with corticosteroids remains a controversial topic due to the limited research and rarity of this condition.

Conclusions

- Surfer's myelopathy should be on the differential in the setting of acute low back pain, lower extremity weakness, sensory changes, and bladder changes in young athletes.
- MRI serves as the best imaging modality.
- To date, specialized spinal cord rehabilitation remains the cornerstone of treatment.

References

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