Prolonged Transient Hemiplegia in Collegiate Ice Hockey Player

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Case Description

- Patient is healthy 21-year-old hockey player
- Sustained cervical whiplash injury after fall on ice
- **Right hemiparesis and sensory abnormalities**
- X-Ray, CT, MRI of spine and CT Angiography of neck unremarkable except for reversal of normal lordosis concerning for spear tackler's spine



Case Resolution

At 24 hours, majority of RUE motor and sensory symptoms resolved; complete resolution at 5 days At 6 weeks, patient's RLE strength returned despite mild residual sensory deficits

- At 6 weeks, repeat imaging was still **unremarkable** \geq
- At 18 weeks, all symptoms resolved except mildly decreased RLE proprioception

Patient cleared to return to non-contact drills but not cleared for contact play





Case Diagnosis

#Physiatry21

Majority of RUE symptoms resolved in 24 hours Majority of RLE symptoms resolved in 6 weeks

Cervical cord neuropraxia (CCN) or Spinal cord injury w/o radiographic abnormality (SCIWORA) > Gray diagnostic area exists between the two

- Our case has elements of both but leans SCIWORA
- CCN typically resolves in 48 hours
- SCIWORA more likely to persist beyond 48 hours

Return to Play (CCN and SCIWORA)

Risk stratification from single to multiple episodes

- Single episode generally leads to clearance
- > >2 episodes generally leads to contraindication
- Other spinal abnormalities can alter decision

Return to play guidelines are controversial

- Tremendous extrinsic pressure on athletes
- Further research needed for well-defined guidelines

Image 1: Representation of Whiplash Image 2: Our Patient's Lateral Cervical Spine X-Ray Image 3: Representation of Cervical Cord Neuropraxia

