**SYMPTOMS AND LABS**

**SYMPTOMS:** Seizure-like activity, worsening mental status, extreme confusion, severe and worsening headache, persistent vomiting, loss of consciousness with injury.

**EXAM:** Papilledema, cranial nerve palsy, focal weakness or symmetric altered sensation, Glasgow Coma Scale < 15.

**SUGGESTED PREVISIT WORKUP**

Send to ER for further evaluation if concern for intracranial pathology, severe debilitating headache.

If unsure, consider contacting concussion specialist: MMP - Orthopedics & Sports Medicine (207) 773-0040.

**SYMPTOMS AND LABS**

**SYMPTOMS:** History of multiple prior concussions, dizziness, headache, disorientation or confusion, loss of memory, balance problems, visual complaints, amnesia.

**EXAM:** Slight dysmetria on cerebellar tests, ocular tracking abnormalities (nystagmus or provokes symptoms).

**SUGGESTED PREVISIT WORKUP**

If uncomfortable with patient’s presentation or if symptoms lasting greater than 2 weeks, refer to a concussion specialist.

If no concussion specialist nearby, refer to a non-operative sports medicine specialist.

**SUGGESTED WORKUP**

Monitor for any development of symptoms consistent with concussion as sometimes symptoms present later and/or go unrecognized.

Clear for sports participation if no symptoms for 24 hours and able to participate fully in school without symptoms.

**SUGGESTED EMERGENT CONSULTATION**

If uncomfortable with patient’s presenting or if symptoms lasting greater than 2 weeks, refer to a concussion specialist.

**SUGGESTED CONSULTATION OR CO-MANAGEMENT**

If no concussion specialist nearby, refer to a non-operative sports medicine specialist.

**SUGGESTED ROUTINE CARE**

Monitor for any development of symptoms consistent with concussion as sometimes symptoms present later and/or go unrecognized.

Clear for sports participation if no symptoms for 24 hours and able to participate fully in school without symptoms.

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**CLINICAL PEARLS**

- Concussion is not visible on current imaging modalities so only obtain imaging if evaluating for intracranial pathology (mass, bleed).
- Patients on a systemic anticoagulant may be at higher risk for bleeding from head trauma.
- Seizure-like movements at the time of injury can be a benign symptom, however any seizure-like activity should prompt further evaluation (i.e. ER, concussion specialist, neurologist).
- Adults with concussion typically heal in 7-10 days, though some have symptoms longer.
- Vestibulo-ocular dysfunction is frequently seen in concussion patients (abnormal eye movement on smooth pursuits, saccades and vestibulo-ocular reflex testing).

**RECOMMENDATIONS FOR PATIENTS WITH POSSIBLE CONCUSSION:**

- Sleep: no need to wake patient periodically
- Avoid making symptoms worse. Rest will help patient avoid triggering worsening symptoms, but does not help speed up recovery
- Nutrition and Hydration: eat regular balanced meals and drink plenty of fluids, avoiding caffeine
- No sports or contact activities until cleared by a physician
- Avoid TV, computer, phone, electronic device use