PICU Case Study:

8-year-old multi-trauma following car accident

- s/p resuscitation, thoracolumbar vertebral and left femoral fractures
- Currently on continuous ICP monitoring and CPAP (previously intubated for 3 days)
- Hypotension
- External fixators for temporary stabilization of LLE
- Good family support

Occupational Therapy Process:

Upon receiving referral, determine:

- LLE WB status and ROM restrictions (non WB in this case)
- Cardiac parameters and whether or not telemetry can be removed during out of bed activity
- Speak with medical team regarding trends in ICP; if VP shunt is placed, determine safe parameters with team (may need to be clamped by RN prior to movement)
- Avoid reclined position (keep head of bed to approx. 30° vs flat depending on MD recommendation)
- Determine wearing schedule for CPAP to maximize ease of movement during eval and treatment (mask may limit participation in activities OOB)
- Explore medication schedule with team to determine appropriate time to work with patient to maximize pain management and level of arousal

Evaluation

- Occupational Profile (speak with patient, caregivers, and staff regarding previous level of function, interests, strengths/weaknesses, etc).
  - Psychosocial assessment (PTSD following accident)
    - Acute version of PedsQL may be appropriate
    - CAPD
  - Standard OT areas of assessment/observation:
    - Participation in ADLs (may start with simple grooming in bed)
    - Transfers (sitting edge of bed with LLE support if medically cleared and tolerated)
    - Cognition/communication skills
    - MMT and ROM
    - Sensation
    - Fine motor
    - Play skills
    - Psychosocial
**Intervention**

- Establish sleep/wake cycle
  - Create schedule and post on wall for staff and caregivers to follow (include ADL activities, medication activities, school related activities, OT/PT/ST, child life, etc)
  - Create daily schedule and specific environmental modifications to improve awareness of time of day (open door, open curtains, OOB for meals, etc)
  - Maximize quiet, relaxing environment to improve sleep participation (limit disturbances, turn lights off, close door, turn off TV, etc)

- Modify room to improve accessibility to maximize participation (position tray with important items within reach; etc)

- Transfer OOB if cleared by medical team (educate caregivers as soon as possible to maximize engagement and participation in their child’s care)

- Relaxation, mindfulness techniques to manage potential pain and anxiety

- Role play/demonstrate transfers and activities expected of child; DISCUSS each step of what is planned for the session

- Educate on spine precautions, positioning, and activity restrictions to maximize safety during mobility and skin integrity

- Promote increased levels of activity as tolerated by providing appropriate media (Wii, etc)

**Discharge plans:**

Inpatient rehab vs home-based OT services