Spinal Cord Injury Return to ADL Guideline

The purpose of this guideline is to assist in the care of Spinal Cord Injury patients and establishing a systematic approach in the return to activities of daily living (ADL) post trauma injury.

Patients with diagnosed Spinal Cord Injury or fracture

1. Consult Neurosurgery to determine surgical vs nonsurgical needs
    - Neurovascular checks (Q1Hr checks require ICU monitoring, Q2Hr checks PCU status, Q4Hr checks floor status)
    - Further imaging warranted
    - Activity status and bracing needs
        - Maintain proper immobilization per recommendations
        - Custom TLSO braces must be ordered from the company-communicate directly with Neurosurgery APP on order timeline.
        - Establish any mobility restrictions.
    - Do not place patients on specialty beds until fractures have been repaired per NSGY or their team has cleared the patient for the bed.

2. Monitor Hemodynamics
    - Hypotension and bradycardia can occur with injuries above T6, i.e., see ICU SCI protocol.
    - Consider holding home anti-hypertensive meds (not including beta blockers if not bradycardic) and allow for permissive hypertension. Consider resuming once SBP are greater than 140.
    - Monitor orthostatic BPs when OOB
        - Ensure adequate hydration
        - Add TEDs or abdominal binder compression
        - Telemetry if any rhythm or heart rate abnormalities
        - Add Midodrine 10 mg po TID, may increase to QID if needed.
        - Add Fludrocortisone 0.1 mg daily, may be in adjunct to Midodrine dosing.
        - Discuss Theophylline for bradycardia
        - If continued at discharge help patient establish a PCP follow-up.
        - If progressing well, begin considering weaning these medications once on the floor and monitor response.
3. Pulmonary Management
    - Aggressive Pulmonary Management with IS and/or Acapella
    - Monitor closely for work of breathing and increased oxygen needs
    - Monitor via Telemetry/Vital Sync (Continuous Pulse Ox) as indicated
    - Trach patients tolerating collar trials may be downsized as soon as possible.
    - **Patients being transferred to the floor, please consider downsizing to a cuffless prior to transfer due to safety concerns with improper inflation of cuffs.**
    - Consider capping trials prior to decannulation. (Ensure there is not a cuffed trach)
    - **Remain guarded with C6 or higher injuries and decannulation i.e., High risk for failure and long-term trach needs.**

- Consult Speech Therapy (ST) to assist with trach PMV trials as needed.

4. Bowel Regimen
    - Immediately initiate aggressive bowel regimen with MiraLAX 17g BID and daily suppository.
        - Begin education on rectal stimulation to encourage daily BMs with patient and family.
    - Monitor for daily bowel movements and administer milk of magnesia 30 ml if no BM in the last 24 hrs.
    - If still no BM, add enema and magnesium citrate.

5. Bladder Management
    - Remove indwelling catheter as soon as possible.
    - Most patients with spinal cord injury require straight catheterizations every 4-6 hrs.
    - Monitor catheterization volumes and increase frequency if volumes over 500ml.
    - If consistently having >500mL UOP with q4hr caths, consider placing a short-term foley, monitor UOP, and order labs.
    - If patient voiding, consider bladder scan checks post void to monitor for post void residuals.
    - Monitor closely for UTI and treat following UTI CPG.
    - Begin early education of patient and family on straight catheterizations and catheter care.

6. Early Mobility
    - Consult PT/OT to establish DME vs spinal rehab needs.
        - Both PT/OT consults are needed to consider inpatient neuro rehab placement.
        - Any neuro deficits should prompt both evaluations.
        - Early consults when medically stable promote prompt placement and early mobility.
    - With lower extremity paralysis or deficits, monitor for foot drop and AFO boot needs. (Must place a PT Eval order to fit for AFO in order to obtain for patient)

7. Early Nutrition
    - Begin PO diet or early enteral feedings
    - Consult ST for dysphagia concerns, transition to bolus feeds if unable to clear for PO diet.
    - With upper extremity paralysis order staff to assist with meals or encourage family involvement.
    - Consult Dietitian and add nutritional supplements per recs.

8. Close Skin Monitoring
    - Begin Q2H turning schedule ASAP to prevent pressure injury
    - Monitor pressure points often
    - Order specialty mattress early

- Consult with WCRN with breakdown concerns
- Use skin barrier creams to prevent excoriation with incontinence
- Begin family teaching on skin monitoring and pressure prevention

9. Pain and Mental health monitoring
    - Always start multimodal pain control
    - Wean narcotics as able starting with IV narcotics first.
    - Consider long term muscle spasms agents i.e. baclofen
    - Begin monitoring for situational depression
        - Consider VRR for referral if patient is agreeable for counseling Outpatient
        - Consider SSRI within 24-48 hrs (Fluoxetine, paroxetine, sertraline or venlafaxine in adult patients with concern for Acute Stress Disorder/PTSD) (APA 2019 Guidelines)
10. VTE Recommendations
    - Initiate Lovenox 30 mg BID unless BMI over 30 0.5 mg/kg BID (Please Refer to CPG for further details)
    - Duration of VTE is up to 90 days, then consider discontinuation.

11. Discharge Planning
    - Begin discussion with patient and family on continued care needs
        - Consult with Case Management early to assist with barriers, establishing funding and placement needs.
        - Again, early consults with PT/OT are often needed for rehab placement post spinal cord injury.
        - Assist with establishing a PCP post discharge.

References:

American College of Surgeons, Trauma Quality Program, Best Practice Guidelines: Spine Injury March 2022.

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