# Lower Spinal Cord Injury Management Protocol
(for SCI without neurogenic shock, T6 and below)

## Neuro
- Spinal immobilization and log roll orders
- Additional imaging as needed
- Brace per spine recommendations
- Multimodal Pain management

## Gastrointestinal
- Bowel regimen:
  - Trauma bowel Regimen:
    - (Senna + MiraLAX) AND
    - bisacodyl suppository, qday
  - Nursing order: Administer bowel regimen as ordered; notify provider if no daily BM

## Musculoskeletal/Integument
- Begin PROM on admission if stable
- PT/OT orders after stabilization
- Early mobility
  - OOBTC when cleared by Spine
  - Frequent position changes
- Podis Boots to prevent foot drop

## Genitourinary
- Discontinue Foley per CL 30-15.05 Indwelling Urinary Catheters: Insertion, Maintenance, and Discontinuation
- If patient unable to void, initiate scheduled I/O catheterization q6h; if UOP>500ml, increase frequency

## Psych/Dispo
- Consider psych consult to evaluate patient as depression/anxiety are common after SCI
- Communicate early with Case Management to determine disposition options
- Consider PM&R consult
Cardiovascular

- Avoid hypotension
- Vasopressors for MAP goals as indicated, norepinephrine first line agent
- If persistent vasopressor requirement: Consider midodrine 5mg q8h, and titrate up to 40mg/day
- If bradycardic, consider pseudoephedrine and/or glycopyrrolate as alternatives

Consider for Intubation:

- Patients unable to swallow
- Patients with increasing O2 requirement
- Patients with atelectasis, or plugging on CXR
- Paradoxical respiratory pattern
- Persistent need for frequent suctioning of airway
- Peak Expiratory Flow <5L
- Inability to manage secretions

Consider for Intubation:

- Respiratory Care Guidelines: Non-intubated SCI patients
- Early Tracheostomy Protocol/Respiratory Care Guidelines for intubated SCI patients
- Respiratory Care Guidelines for ventilatory weaning of SCI patients

Respiratory Care Guidelines: Non-intubated SCI patients

Assess patient’s ability to swallow

Begin/continue Secretion management strategies:

- Optiflow
- Coughlator
- Accupap
- IPV (Intrapulmonary Percussive Ventilation)
- Quad cough
- NT suctioning

- Albuterol PRN
- Guaifenesin 20ml (400mg) q6h prn
- PCXR prn

- Consider abdominal binder
- Early mobility
- Postural drainage
- Consider End Tidal CO₂ monitoring

If poor swallow, notify HCT for ETT consideration
Early Tracheostomy Protocol/
Respiratory Care Guidelines for
Ventilated SCI patients

**Indications for Early Tracheostomy**
(2 or more of the following)
- C4 and above motor complete injury
- Early ETT requirement
- Flail chest
- Paradoxical respiratory pattern
- Persistent need for frequent suctioning of airway
- Peak Expiratory Flow <5L

Consider Tracheostomy if:
- Need for multiple operative interventions
- Failed extubation

Planned extubation?
Consider extended 0/0 SBT

Tracheostomy/ETT in-place

**Secretion management strategies**

- **Initial Ventilator settings:**
  - SIMV/PRVC preferred initial mode
  - Heated circuit on ventilator
  - PS to deliver goal TV on spontaneous breaths

- **Respiratory Care Guidelines for Non-intubated SCI patients**
- **Guaifenesin 20ml (400mg) q6h x 5 days then prn**
- **Albuterol PRN**
- **Daily pcxr x 5d then PRN**
- **Consider abdominal binder**
- **Early mobility: turn q2h, OOB bid**
- **IPV**
- **HIT (Hyper Inflation Therapy)**
- **Quad cough**
- **Suction PRN**
- **Bronchoscopy prn**
Respiratory Care Guidelines for Weaning Ventilated SCI Patients

Meets criteria for weaning?
• Hemodynamics stable
• Secretions under control
• Initiating breaths on current mode

[ ] yes

Continue secretion management and reassess readiness for weaning daily

[ ] no

Continue secretion management strategies

CPAP/PS primary weaning mode
• Consider if patient unable to maintain IV on CPAP/PS
• Begin with brief periods of CPAP/PS (minutes) and progress to longer periods
• When tolerating> 24 hrs on spontaneous mode, consider Trach collar trials
• Begin with short (minutes) TC trials, slowly increase as tolerated

Do not decannulate quadriplegic patients with tracheostomy who have successfully weaned from the ventilator during acute hospital phase.
References


