



A GUIDE FOR

# REDUCING SPINAL CORD INJURY COMPLICATIONS

Practicing good hand hygiene is one simple and effective method to prevent the spread of infections that complicate a patient's condition. Here are other important steps that can reduce the incidence of complications from spinal cord injury.



## PROVIDE AGGRESSIVE PULMONARY CARE

- Control secretions with suctioning, an in-exsufflator cough-assist device and higher-tidal volumes on ventilation.
- Provide good oral care, including swabbing with a hydrogen peroxide solution or oral chlorhexidine.
- Elevate the head of the patient's bed.
- Evaluate the patient for extubation.
- Pay close attention to trach care.
- Perform early intubation to reduce sputum retention.
- Allow patients to have "sedation vacations" to minimize sedation time.



## PREVENT VENOUS THROMBOEMBOLISM (VTE)

- Administer low-molecular-weight heparin when the patient is stable and risk of bleeding is low.
- Consider a vena cava filter, especially for patients who are not candidates for anticoagulation or haven't responded to prophylaxis.
- Use appropriate pressure-grade/sequential stockings.
- Pay attention to discrepancies in leg appearance, size, color and temperature.



## MAINTAIN SKIN HEALTH

- Use gel-padded backboards, operating tables and stretchers.
- Examine skin twice a day for signs of bruising, redness or abrasion.
- Keep skin clean, especially where it has contact with bowel movements.
- Turn patients frequently, using draw sheets and lifts to lift and reposition rather than dragging the patient.
- Monitor weight shifts.
- Reduce friction/abrasion.
- Always check bony prominence areas after a position change.
- Check to see if equipment, seat cushions and mattresses are working properly.
- Control moisture, especially in gluteal folds, folds under breasts and fatty folds. Sprinkle an anti-fungal powder to reduce friction and bacteria. Antiperspirant deodorant is a good strategy for troublesome areas.
- Provide good foot care; trim nails.
- Pay attention to thick callouses on feet. (There may be a pressure ulcer underneath.)



## BOWEL MANAGEMENT

- Start a bowel program immediately.
- Introduce fiber, hydrate and get patient out of bed as soon as possible.
- Use a chemical or mechanical stimulant to start peristalsis.
- Diarrhea doesn't mean the patient's bowels are moving; it could indicate an impaction.
- Listen for changes in bowel sounds.
- Discontinue medications that can cause constipation, if possible.



## PAIN MANAGEMENT

- Treat acute pain to prevent chronic pain.
- Work with therapy team to coordinate therapy interventions, such as ice, heat, positioning, splinting and transcutaneous electrical nerve stimulation (TENS).
- Consider a pain consultation for trigger-point injections and alternative measures.



## INTERVENE EARLY WITH THERAPY

- Therapy maintains range of motion (ROM).
- It reduces the risk for complications such as joint contractures, VTEs, respiratory infection and bowel impaction.
- Therapy can preserve and improve functional abilities.
- Therapeutic activity increases strength and endurance.
- Consult with speech therapy regarding swallowing and voicing.



## TAKE OTHER INFECTION-CONTROL PRECAUTIONS

- When patients present with fever, focus on one of the three W's: wind, wound, water. The source of infection for people with SCI is usually found in one of these areas.
- Minimize the use of antibiotics and use targeted (not broad-spectrum) antibiotics whenever possible.
- Use maximal barriers (gown, mask, sterile gloves, cap) when inserting a central line.
- Clean the skin with chlorhexidine before inserting a central line.
- Monitor changes in the bladder program, look for blood in the urine and check patient temperatures to detect possible urinary tract infections.
- Only treat clinical urinary tract infections to prevent antibiotic resistance.
- Provide adequate nutrition, including a positive nitrogen balance.
- Monitor duration of intravenous catheters to reduce bloodstream infections.
- Remove the indwelling catheter as soon as possible.