REHABILITATION GUIDELINE | EARLY MOBILITY WITH NEW TRACHEOSTOMY

Children's MINNESOTA

Aim: To support surgical outcomes by limiting loss of strength and deconditioning following new tracheostomy placement.

EXCLUSION GUIDELINES

Patients **excluded** from this guideline*:

- HALO present.
- BMI greater than 30 or condition featuring an abnormally short neck.
- Ongoing pulmonary instability with PEEP requirements greater than 5 and/or FiO_2 greater than 0.4 or cardiovascular instability requiring ongoing use of pressors.
- NICU admission.

*Patients may be considered for this guideline if cleared to do so by attending MD and rehab team.

PRECAUTION GUIDELINES

Precautions for implementation of guidelines*:

- HR:
- RR:
- SpO_2:
- BP:
- ICP:

*Determine for each patient prior to treatment by attending MD.

Assumptions

- Provider (MD/APP) order in EMR for PT and OT consults.
- Actions described herein are cleared by all medical teams involved (Critical Care Team, ENT, Pulmonology, Trauma, Ortho, Neurosurgery, Surgery, etc.).
- RN/RT available in immediate environment to suction vent or trach.
- C-spine immobilization, if appropriate, is in place as ordered for changing positions in bed and during transfer.
- Patient monitoring of hemodynamics, pain, perceived exertion, and patient presentation (see precautions).
- Timely, accurate documentation completed per applicable policies and procedures.

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POD #1: Elevation of head of bed to minimum 45–90 degrees. Minimum goal of 30–60 min, 1x/day progressing as tolerated to maximum of 60 min 3x/day. This is done by nursing staff in cooperation with Physical Therapy.

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POD #2: RN performs scheduled elevation of head of bed to 45–90 degrees, goal of 3–4x/day for 60 minutes.

- Progress to dangle sit at edge of bed with rehab therapist monitoring for adverse reactions.
- Considerations include: marked increase in tone/posturing, marked dystonia, drug withdrawal (compliance/agitation), baseline motor skill status prior to admission (non-ambulatory prior/no head control).
- PT/OT consult with specific treatment plan developed addressing positioning, exercises (initially PROM with progression to active strengthening in bed until able to be out of bed. Family education initiated as appropriate (ongoing).

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POD #3: First transfer from bed to wheelchair or bedside chair.

- Option 1: Stand pivot transfer with therapist assist as indicated.
- Option 2: Dependent transfer with mechanical lift or staff transfer dependent on patient size.
- Patient stratified to the lift strategy based on manual muscle testing, ability to follow commands, patient insight to safety, and therapist experience. See below for additional considerations for patients under 2 years of age.
- Undertake strict precautions to provide spinal alignment and sufficient manual support to patient to assure safety/comfort.
- Nursing and/or Respiratory therapist must be immediately available with suction and crash cart if there is any evidence of airway compromise. The transfer can be terminated for clinical cause by any of the staff participants.

PT will assess and provide optimal alignment of patient once in seated position.
First out of bed sitting goal: 60 min as tolerated, with reclining wheelchair option if recline needed.
Return to bed transfer accomplished first day with PT/aide/RN assistance, in reverse of bed to chair transfer.

TRANSFER INPATIENT WITH NEW TRACHEOSTOMY

Aim: To support surgical outcomes by limiting loss of strength and deconditioning following new tracheostomy placement.

POD #4–6: Daily PT/OT treatment plans implemented with progression to sitting edge of bed to standing edge of bed, aide involvement as needed. PT will educate nursing staff and nursing to perform bed to wheelchair transfer to allow positioning out of bed 3x/day.

After First Trach Change: OT/PT will progress patient mobility as appropriate to individual patient, with ongoing education and training of nursing staff and family/caregivers. Expect to increase standing time and ambulation progression. Ambulation requires immediate presence of RN/RT for equipment and patient needs.

Sample Mobility Progression
Patient > 2 years old?

Yes

Progression of **child-adolescent** mobility following out of bed transfer:

- **POD #2:** Edge of bed sitting, 1–2 person assist with 10 min sitting tolerance goal.
- **POD #3:** See above for bed to chair transfer.
- **POD #4–6:** Increase tolerance to standing: sit to stand, standing pivot transfer, bed to wheelchair assisted as needed and progressed as able. PT will educate nursing staff and family to allow this multiple times daily.
- **After First Trach Change:**
  - Example: PT will progress patient ambulation (or wheelchair mobility) out of room, with assist or device as needed; progress distance as able to support discharge demands. PT will educate staff/caregivers to allow assisted mobility more frequently during waking hours. Stair mobility and or alternative will be determined and addressed to meet home requirements.
  - Once ambulating — need RN/RT assist to walk (or with wheelchair mobility and wheelchair rides) with ventilation equipment; have emergency supply bag/suction at all times.
  - PT will progress treatment plan as appropriate and update goals, education, determine equipment needs, and involve social worker/ care manager to assure appropriate equipment for discharge subject to Policy 214.00.

No

If patient is **< 2 years old, and cleared by attending and rehab team**, progression of treatment follows same daily plan with the following adjustments based on age and skill level:

- **Out of Bed Transfer:** to parents arms or Tumbleform.
- To floor mat, with developmental progression determine by PT/OT based on clinical and standardized assessment. RN/RT available for suctioning and/or vent adjustment concerns; hemodynamic stability monitored consistently.