Halo-gravity Traction (HGT) Care Guideline

Inclusion Criteria: Halo-gravity Traction (HGT) for treatment of scoliosis prior to surgical repair

Exclusion Criteria: Trauma, jaw surgery, not being admitting to the Orthopaedic/ Scoliosis program requiring HGT; PICU level of care

Recommendations/Considerations

- 1 motor/sensory/cranial nerve exam per day by MD

Postoperative Assessment

- Vital signs:
  - Postoperative – q1hr x 3, then q4hr x 3 then BID after 24 hours post-op
  - VS with traction weight change and 4 - 6 hours post traction weight change
- Obtain height/weight weekly
- Neuro checks per orders with vitals, traction weight changes and 4 - 6 hours post traction weight changes
  - Assess for Lateral gaze palsy, Babinski and Clonus
- Pin site assessment upon admission and with each following assessment

Consults

- Pulmonology
- Nutrition/GI
- Psychology
- Child Life
- Case Management
- Respiratory Therapy (RT) for education on Incentive Spirometer (IS), and deep breathing/cough
- Physical Therapy (PT) and Occupational Therapy (OT) for evaluation and treatment

Interventions

- Diet/Nutrition – Advance diet as tolerated
- Out Of Bed (OOB) – Post-op Day 0, as tolerated
  - Activity as tolerated with minimum 12 hours OOB (4 hours with walker)
- Pin site care – BID
- Ok to go off unit - must wait 2 hours after traction weight change
- Labs on admission and preop spinal fusion – CBC, CMP, Ferritin level, Magnesium, Prealbumin, INR/PTT, Vitamin B12 level, Vitamin D 25-Hydroxy, Zinc

Medication Management

- Acetaminophen 15 mg/kg PO q4h PRN pain 1-3 for adjuvant pain, Max dose – 500mg
- Ibuprofen 10 mg/kg PO q6h PRN pain 4-7, Max dose – 600mg
  - STOP 1 week prior to spinal fusion
- Ondansetron
  - 8 mg PO q8h PRN nausea or vomiting, Dosing Guidelines: > 12 yrs
  - 4 mg PO q8h PRN nausea or vomiting, Dosing Guidelines: 4-11 yrs

Complication Management

- Pin site infections:
  - Cephalexin PO 25 mg/kg q6h – Max dose 500mg, for 5-10 days, per order
- If pins loosening, notify MD
- Neurological changes (i.e. - CSF leak, cranial nerve/nerve root or spinal cord palsy)
  - If there is any change in motor movement, remove all the weight – notify MD
  - If there is a cranial nerve concern, only remove the weight that was added that morning – notify MD
  - Add cervical spine x-ray
- If symptoms persist after weight removal, get STAT Spine MRI

Traction/Weight Recommendations

- Traction over night with head of bed elevated 30°
- Check traction q2 hours – includes integrity of ropes, bolts/screws, cord is centered on the traction device, carabiner integrity
- Turning and reposition in bed – patient stays in alignment and weight does not touch the bed/ floor
- Weight for the initiation, advancement (frequency), and max weight will be patient specific – please refer to order set
- RN to increase traction weight, per orders – assess tolerance with each weight change
- Weekly spine x-ray
- Keep traction 23 - 24 hours a day, may only remove for showering

Patient Education

- These patients will not be discharged before spinal fusion
- PFE Handout for SSI
- PFE Handout for CHG bath

Patient removed from guideline and placed on appropriate spinal fusion guideline once spinal fusion surgery is completed.

Approved Evidence Based Medicine Committee
5/17/2023

Reassess the appropriateness of Care Guidelines as condition changes and 24 hrs after admission. This guideline is a tool to aid clinical decision making. It is not a standard of care. The physician should deviate from the guideline when clinical judgment so indicates.

References
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