Assessment: Vital signs, SaO2, blood gas if 1) baseline SaO2 <90%, 2) increased O2 requirement, 3) increased ventilator support from baseline, or 4) change in respiratory, cardiac, or neuro status

Interventions: CHANGE TRACH, then obtain trach aspirate for culture and Gram stain (including quant. WBC), 2 view CXR, MRSA/VRE screening cultures, check previous MRSA status and culture results, notify Trach Specialty Nurse upon admission

Admission location based on clinical status & level of respiratory support required

Pneumonia LRTI

Check CBC, Blood culture, CRP

If history or CXR consistent with aspiration pneumonitis, start H2 blocker (continue if on chronic prophylaxis)

CXR positive for new infiltrates?

Yes

No

Non-pneumonia LRTI, aka “Tracheitis”

Check CBC, Blood Culture, CRP

O2 PRN, Mechanical vent PRN, Bronchodilator as appropriate (test for effect), Airway clearance, humidification

Cefepime 50 mg/kg/dose IV q8hr (Max: 2 gm/dose)

For suspected aspiration – Piperacillin-Tazobactam (Zosyn) 100 mg/kg/dose IV q 6hr (Max: 4 gm/dose)

For MRSA coverage add Clindamycin 10mg/kg/dose IV q 6hr (Max: 600mg/dose)

Adjust antibiotics based on gram stain WBC and trach aspirate culture results

Continued Considerations

• Consider laryngoscopy, bronchoscopy, if appropriate
• Re-evaluate ventilator settings and current therapies

Discharge Criteria

• FiO2 < 0.4, or within 25% of baseline
• Liberation from mechanical ventilation (if applicable with demonstrated toleration of spontaneous ventilation
• Clinical improvement
• Ability to continue antibiotics, either IV or enteral, in non-acute care setting (e.g. home, subacute unit, group home)
• Followup care planned in coordination with patient’s medical home
• Reconciliation of respiratory devices with parent/caregiver

At High Risk For:

• Trach/airway plugging
• Device-related pressure injuries

Recommendations/ Considerations

• Use previous culture results if known
• Steroids are not recommended
• Empiric antibiotic coverage for hospital acquired Gram negative pathogens including Pseudomonas and Gram positive pathogens, including MRSA coverage if recent positive history or strongly clinically suspected.
• For ventilated/critically ill patients, consider H2 blocker if not being fed enterally or on steroids
• Pulmonary consult for persistent clinical evidence of airway obstruction; consider granuloma as source
• ENT consult for trach site granulomas
• Care planning and interventions should be implemented as appropriate.
• Use Mepilex transfer dressing around trach, if needed.

Patient/Family Education

• Trach care
• Suctioning technique
• Review signs and symptoms of respiratory distress with parents/care givers
• Tracheostomy Home Care Instructions - located on PAWS

Approved Evidence Based Medicine Committee 1-15-14, 5-17-17
Prior revisions 5-21-08, 7-16-08, 11-17-10

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

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References for Lower Respiratory Tract Infection (LRTI) with Tracheostomy Care Guideline


