

## Clinical Guideline

# **Bronchiectasis/Chronic Cough (Pediatrics)**

#### **Definitions**

 Bronchiectasis is a lung condition with chronic wet cough and lung infections and is diagnosed by CT with contrast.

Use ICD10 code J47 - "Bronchiectasis."

 Bronchiectasis risk is defined as ≥3 episodes of wet cough >4 weeks in the past 2 years, often in a setting of persistent infiltrates and recurrent pneumonia.
 Use ICD10 code J41.1 – "Chronic purulent bronchitis."

 All patients with either diagnosis should be made CPP and referred to pediatric pulmonology.

### Stable Chronic Management

#### Comorbidities

- Aspiration: Trial thickener if <3 years, feed with swaddling in side-lying position at 45 degrees with slowflow nipple, consider speech therapy.
- TB: Place PPD, send sputum/gastric aspirates if indicated (see <u>Pediatric TB Evaluation & Treatment quideline</u>).
- · Asthma: Bronchodilators, inhaled steroids.
- Immunodeficiencies: Consider referral to Alaska
- Asthma, Allergy, & Immunology for work-up.
   CF: Confirm screen negative on newborn screen.

#### Maintenance Management

- Follow-up with pulmonology clinic Q3-6mo and pediatrician or health aide Q2-3mo to check symptoms and medications. At every visit:
  - Patient and caregiver should verbalize diagnosis.
  - Review plan for exacerbations.
  - Check that Problem List is up-to-date with plan.
- Annual PFTs if >5 years.
- Annual sputum culture if chronic productive cough.
- Annual flu and COVID vaccines.
- Pneumococcal vaccines: PCV-13 series followed by one dose of PPSV-23 (Pneumovax) at ≥ 2 years.
- Treat dental caries.
- Optimize environmental health with woodstove safety, vents, irritant reduction, smoking cessation, etc.
- Airway clearance: P&PD/chest PT, consider acapella.
- · Consider allergy testing.

#### Transition of Care

- Review diagnosis and management with patient and caregiver at each visit. Patient and caregiver should verbalize diagnosis, treatment, and exacerbation plan.
- At age 17, a pediatrician should review chart and refer patient to pediatric pulmonology for chest CT, treatment plan, and handoff visit.
- By age 18, a pediatrician should schedule a transition of care appointment with family medicine, write an Alert Note that includes a summary of medical history and current treatment plan, and refer to adult pulmonologist.

# Exacerbation Management Consider if:

Persistent infiltrate >6 weeks

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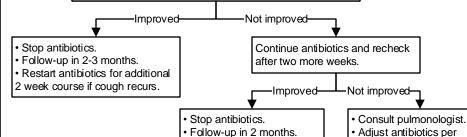
Chronic wet cough ≥4 weeks

or

Fever, increased wet cough, dyspnea, etc.

 Treat with Augmentin 45 mg/kg/dose BID or cefdinir 14 mg/kg/dose daily for at least 2 weeks.

- · Consider probiotics.
- If able, do sputum culture (via RT in Bethel). If patient cannot produce sputum, use method described in <u>Induced</u> <u>Sputum Collection Checklist</u>.
- Ask screening questions for dysphagia and have low threshold to thicken feeds.
- · Chest physiotherapy TID.
- · Recheck after two weeks.
- · Consider systemic steroids if significant bronchospasm.



· Restart antibiotics if cough

course (plan for 4-6 weeks).

recurs. Give prolonged

sensitivities on sputum

Consider repeat CXR.

culture.