Bronchiectasis (BE) and Chronic Obstructive Pulmonary Disease (COPD)

Research on Bronchiectasis COPD Overlap Syndrome (BCOS) is emerging.¹⁻⁴

Global Initiative for COPD (GOLD) Guidelines on Bronchiectasis

- **2014**: Bronchiectasis defined as a comorbidity of COPD.²
- **2015**: Emphasized the influence of bronchiectasis in the natural history of COPD.³
- **2016**: Comorbid bronchiectasis associated with longer exacerbations and increased mortality. Treatment should be along conventional lines for bronchiectasis with the addition of usual COPD strategies where indicated.⁶
- **2017**: When exacerbations are repeatedly characterized by purulent sputum, patients should be investigated for bronchiectasis.⁷
BCOS Phenotype

- Clinical features/factors
  - Moderate to severe airflow obstruction
  - Increased daily sputum
  - More frequent respiratory exacerbations
  - Higher rates of potential pathogenic microorganisms
  - At least 1 hospitalization

BCOS Has Worse Outcomes

- Greater sputum production
- More frequent respiratory exacerbations
- Longer duration of acute exacerbation
- Higher rate of pathogenic microorganisms in sputum
- Poorer lung function
- Extended ICU and hospital length of stay
- Increased mortality

Combining BE Management With COPD

- Bronchiectasis common in lower lobes
  - May reflect gravity-dependent retention of infected secretions
- Retained secretions
  - Cause obstruction and damage of airways
  - Create an environment for bacteria to grow, which may lead to recurrent infections
  - Airway clearance critical to management

HFCWO Improves Outcomes in BE

- Decrease in:
  - Hospitalizations
  - Office, emergency department and hospital outpatient visits
  - Prescriptions/antibiotic use
- Improvement in:
  - Dyspnea and quality of life
  - Several lung function parameters compared to CPT
- Good–Excellent reported in:
  - Ability to clear lungs
  - Overall respiratory health

References