

Bronchiectasis: New Insights



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Organization

Perelman School of Medicine at the University of Pennsylvania

Current Position

Associate Professor

Educational background

1982-1986

M.D., Mt. Sinai School of Medicine

1978-1982

B.A., Biology / Political Science, Columbia College of Columbia University

Professional experience

2025-Present

Treasurer, American Thoracic Society

2013-Present

Chief, Penn Presbyterian Medical Center, Department of Medicine

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Senior Vice Chair, Perelman School of Medicine at the University of Pennsylvania, Department of Medicine

2001-Present

Associate Professor of Medicine, University of Pennsylvania School of Medicine, Pulmonary, Allergy and Critical Care Division, Department of Medicine

Bronchiectasis is an entity characterized pathologically by airway inflammation and permanent bronchial dilatation, and clinically by chronic cough, sputum production and by exacerbations/recurrent respiratory tract infections.

It is a heterogeneous syndrome with complex pathogenesis and many different contributing etiologies. Bronchiectasis is associated with a notable impairment of quality of life and mortality, likely influenced by sputum volume, severity of airflow obstruction, and the presence of chronic gram-negative infection, particularly with *Pseudomonas aeruginosa*.

Establishing a diagnosis of bronchiectasis requires an organized and systematic approach, considering elements of the history and physical examination, chest imaging, laboratory data, as well as additional studies.

Treatment options for bronchiectasis are evolving. Therapies can be grouped in several categories: 1) Antimicrobial therapy, both systemic and inhaled; 2) Airway clearance measures; 3) Anti-inflammatory agents; 4) Surgery; and 5) Treatment of underlying conditions.

This lecture will provide a comprehensive review on bronchiectasis including current approaches to diagnosis. In addition, treatment modalities will be addressed in detail, including novel anti-inflammatory agents such as DPP1 (dipeptidyl peptidase 1) inhibitors. Natural history and prognosis will also be discussed.