

Bronchiectasis

An abnormal dilatation of distal airways, characterised by chronic cough and sputum production

Causes

- Congenital CF, Young's syndrome, Kartagener's syndrome, Yellow nail syndrome
- Mechanical malignancy, foreign body
- Childhood infection pertussis, measles, TB, pneumonia
- Immune ABPA, hypogammaglobulinaemia, HIV, leukaemia

Clinical features

- Symptoms
 - Chronic productive cough
 - Haemoptysis
 - Recurrent chest infections
- Signs of bronchiectasis
 - Clubbing
 - Inspiratory clicks
 - Coarse inspiratory crepitations
 - Large airway rhonchi
- Signs of cause
 - Curved yellow nails and lymphedema (Yellow nail syndrome)
 - Dextrocardia (Kartagener's syndrome)
 - Young and thin (CF)
 - Tall with long extremities and high arched palate (Marfans)

Investigations

- Diagnosis
 - Chest X-ray (tramlines and ring shadows)
 - High-resolution CT chest (signet ring sign and bronchial wall thickening) – diagnostic test
 - Spirometry (variable but often obstructive pattern)
- To ascertain cause
 - Immunoglobulins and electrophoresis
 - Aspergillus precipitins and serum IgE
 - CF sweat test/genetic mutation analysis
- Sputum culture (to determine any colonising bacteria and sensitivities)

Management

- Chest physiotherapy
- Prompt treatment of infections (use sputum cultures to determine sensitivities)
- Rotating antibiotics may be used for prophylaxis if recurrent infections
- Pneumococcal/influenza vaccines
- Lung resection if medically-uncontrolled localised disease