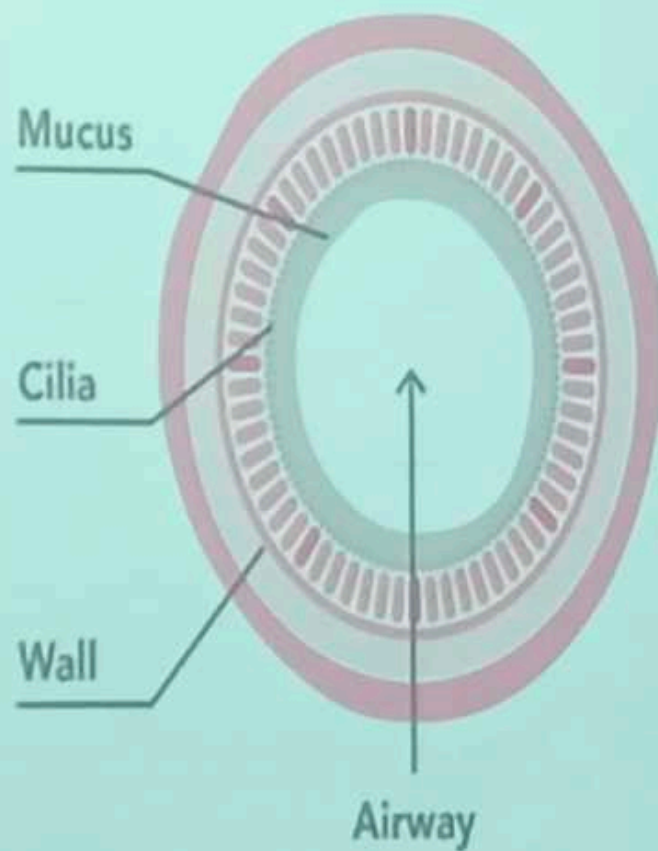
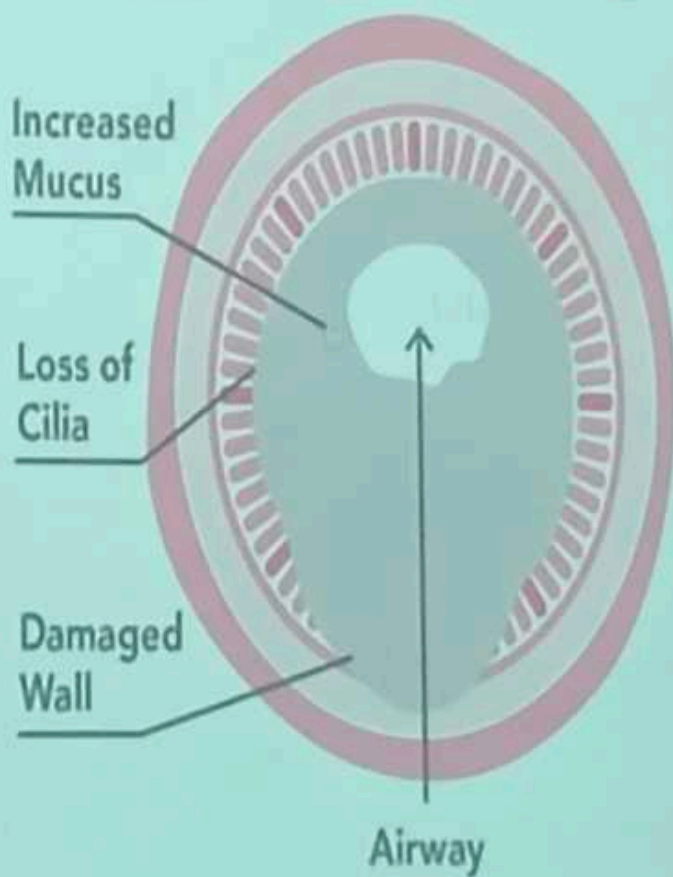


Normal Airway



Bronchiectasis

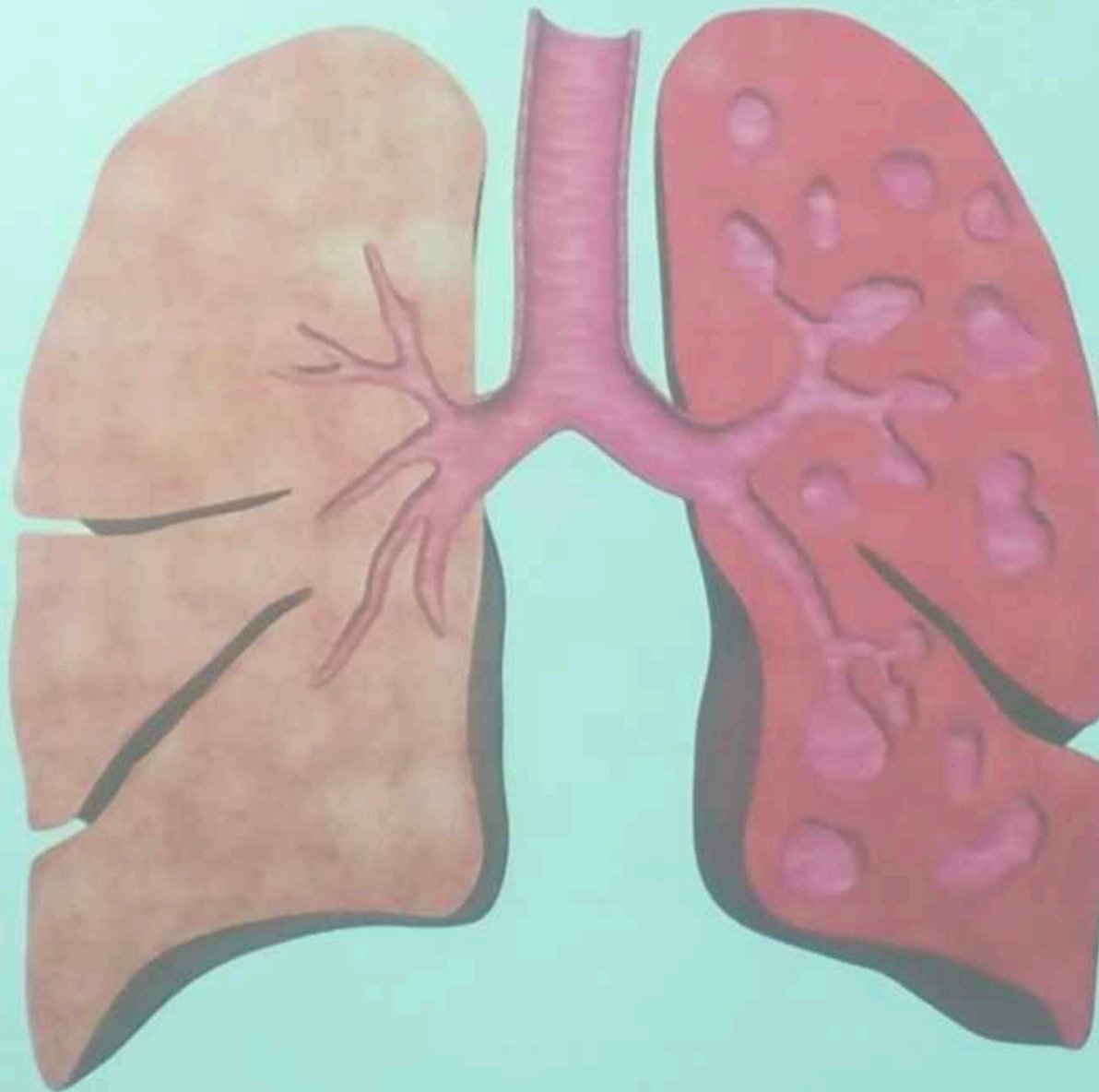


CAUSES OF BRONCHIECTASIS

- Cystic fibrosis 50%
- Foreign body Aspiration
- Infections (TB, fungal, abscess, pneumonias)
- Impaction of copious mucus (Asthma- ABPA. Ch. Bronchitis)
- Tumors
- Immunodeficiency- AIDS
- Whooping cough
- alpha 1 antitrypsin deficiency

Normal Bronchi

Bronchiectasis



Upper lobe:
Cystic Fibrosis
Tuberculosis

Central:
Cystic Fibrosis
ABPA
Congenital Tracheo-
bronchomegaly

Lower lobe:
Childhood Infection
Aspirations
Immunodeficiency.

Clinical signs

Physical signs in chest may be

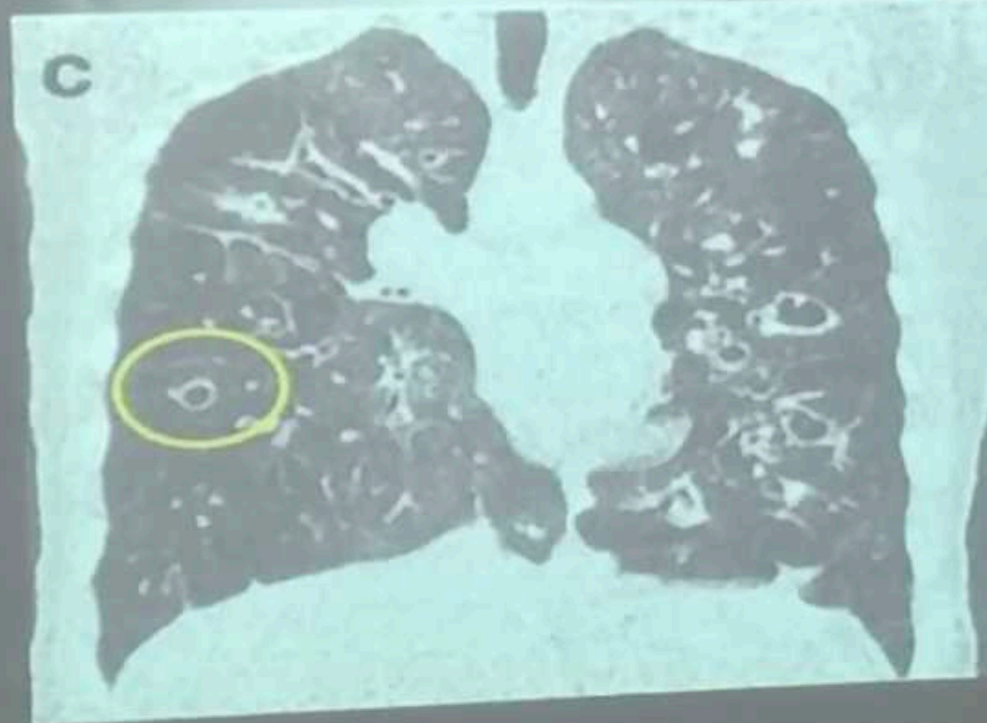
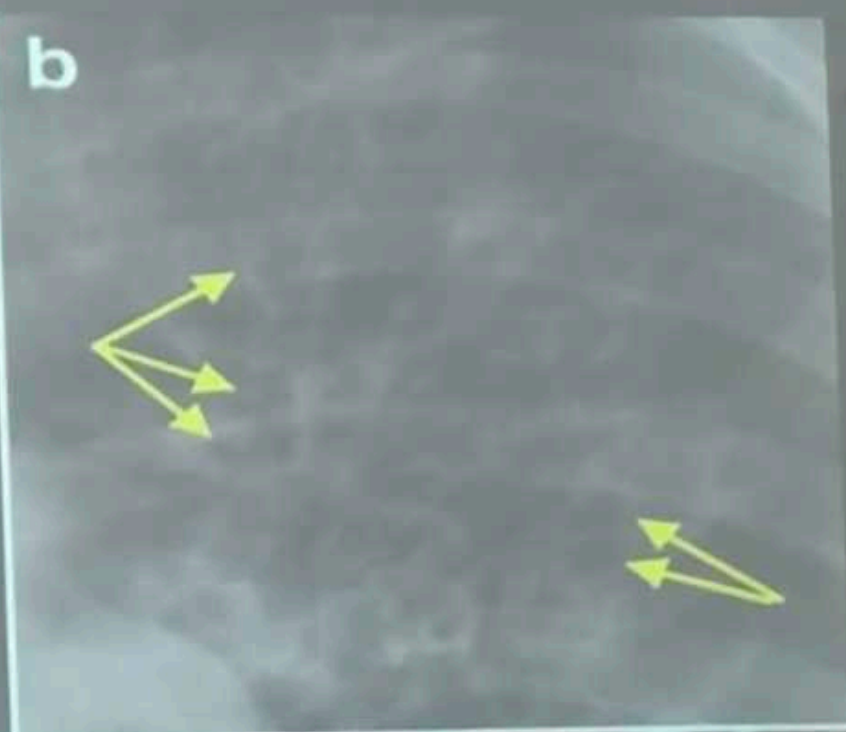
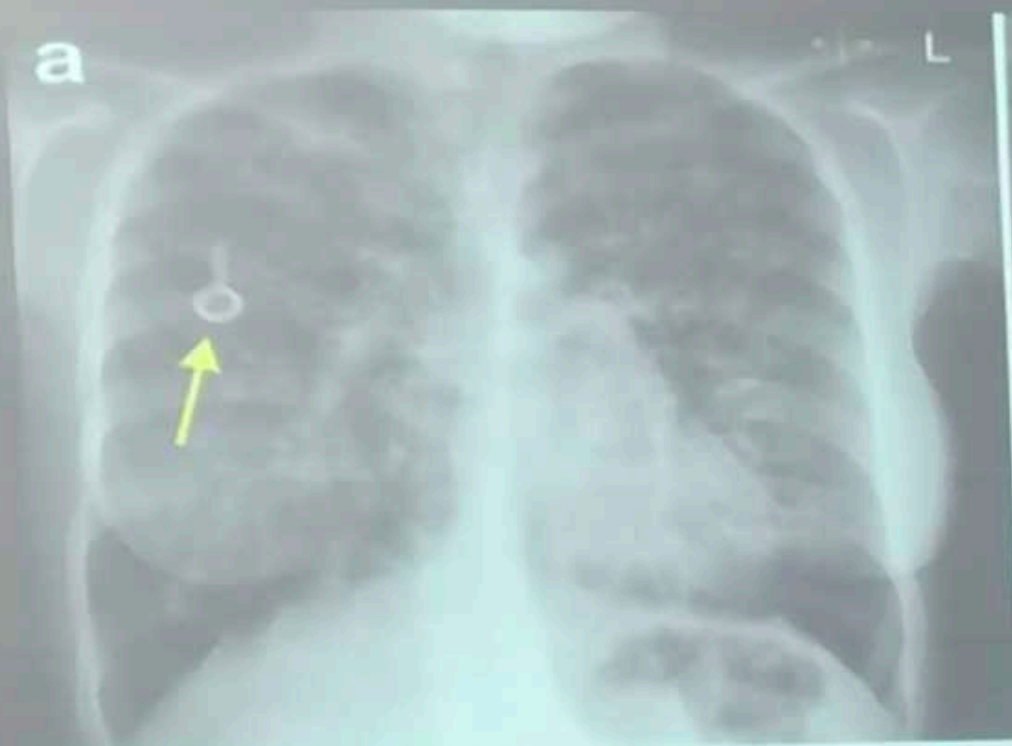
- Unilateral or bilateral.
- Large amount of sputum in bronchiectasis spaces, coarse crackles may be heard.
- Bronchial breathing in selected cases in pneumonias.
- Digital clubbing
- Hypertrophic pulmonary osteoarthropathy
- Cor pulmonale

DIAGNOSIS OF BRONCHIECTASIS

- History
- Physical examination
- X-ray Chest/HRCT
- Sputum cultures for bacteria, fungi and mycobacteria.

BRONCHIECTASIS-CHEST XRAY FINDINGS

- Increased pulmonary markings
- Ring like structures
- Atelectasis
- Dilated and thickened airways (Tram lines)
- Mucus plugging (Finger in glove appearance)



- SERUM IMMUNOGLOBULINS:

10% of adults with bronchiectasis have antibody deficiency mainly IgA.

- SWEAT ELECTROLYTES:

If cystic fibrosis is suspected.

- SINUS X-RAYS:

30% have concomitant rhino sinusitis.

BRONCHIECTASIS- TREATMENT

- Controlling infection
- Reducing inflammations
- Improving bronchial hygiene
- Surgical resection of affected segment in selected patients.

TREATMENT - BRONCHIECTASIS MUCUS CLEARANCE

- Maintenance of adequate hydration by oral or intravenous fluids is helpful to avoid tenacious inspissated sputum retention.
- Humidification of air or oxygen is used as an adjunct to chest physiotherapy.
- Nebulization of normal or hypertonic saline
- Use of acetylcysteine or other mucolytic agents

Bronchodilators

There is airway obstruction and mucosal hyperreactivity bronchodilators are used.

- SABA/LAMA

- SAMA/SABA

- L/M/H- ICS

BRONCHIECTASIS-TREATMENT CONTROL OF INFECTION

- Antibiotics for acute exacerbations
- Prophylaxis in cases
- Oral Flouroquinolones are commonest. Mostly for 10-14 days.
- Augmentin/ 3rd generation cephalosporin/ doxycycline/ quinolones

BRONCHIECTASIS-TREATMENT SURGERY

- Symptoms control
- Control of bleeding
- Reduction of tenacious sputum production
- Reduction of acute exacerbations
- Improved quality of life

BRONCHIECTASIS-TREATMENT

MISCELLANEOUS

LUNG TRANSPLANT:

- A viable option in selected cases

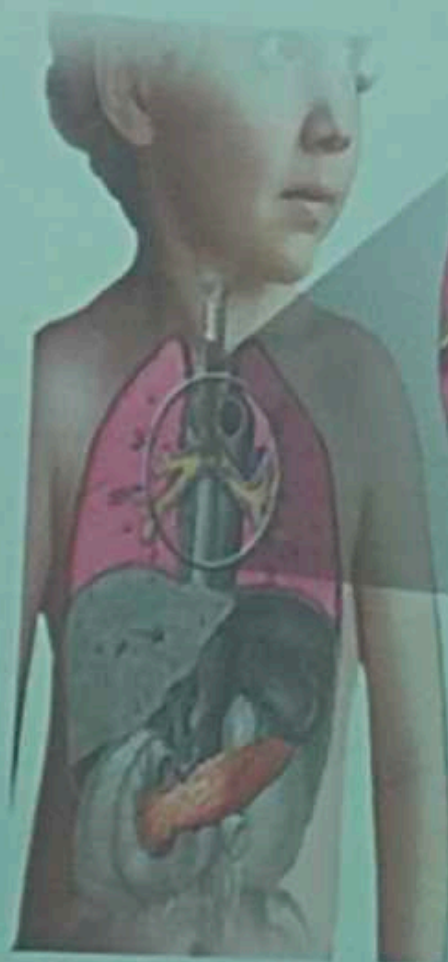
VACCINATIONS

STOP SMOKING

OXYGEN INHALATION

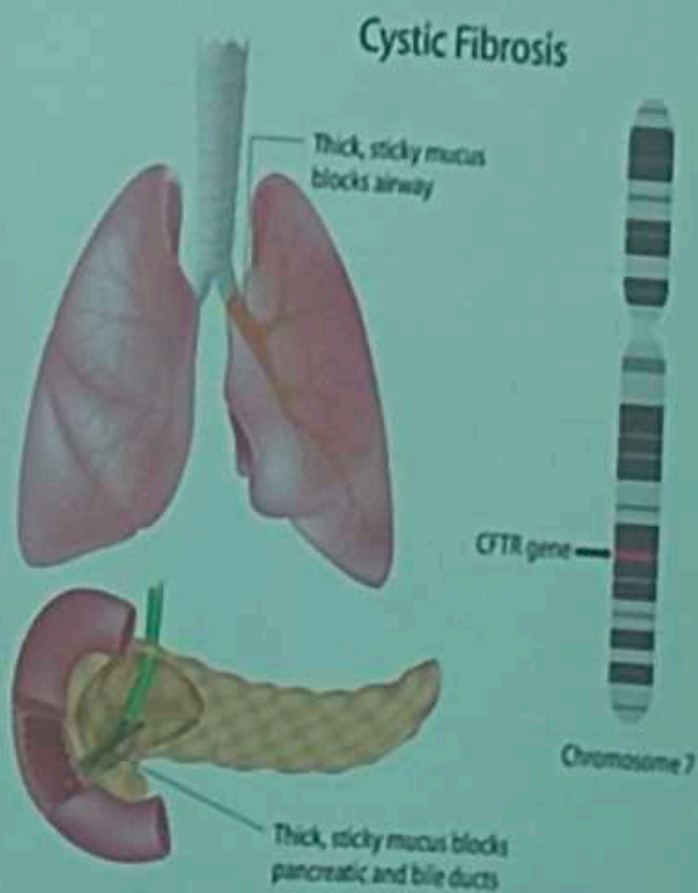
Cystic fibrosis

Cystic fibrosis

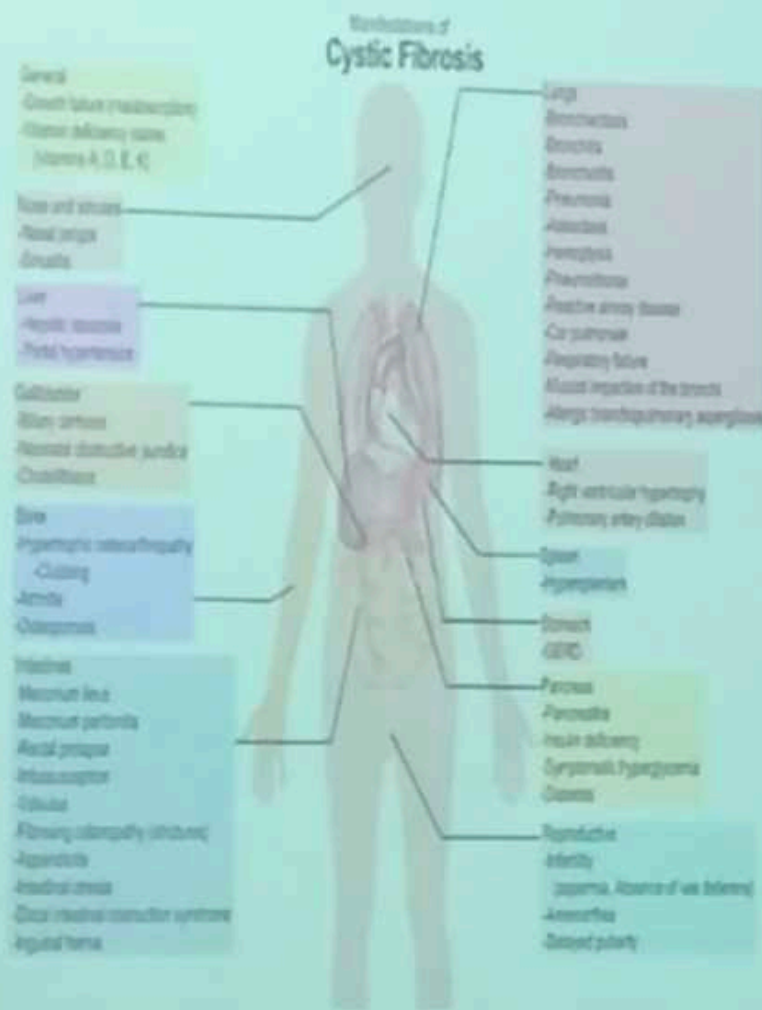


Cystic fibrosis is a hereditary disorder characterized by lung congestion and infection and malabsorption of nutrients by the pancreas

ADAM



Cystic fibrosis



Respiratory Symptoms

- Persistent cough with productive thick mucus
- Wheezing & shortness of breath
- Frequent chest infections
- Sinusitis, nasal polyps

Reproductive Problems

- 95 % men & 20 % women are infertile

SYMPTOMS OF CYSTIC FIBROSIS

Digestive Symptoms

- Bowel disturbances
- Weight loss
- Obstruction
- Constipation

Osteoporosis

- Arthritis

