

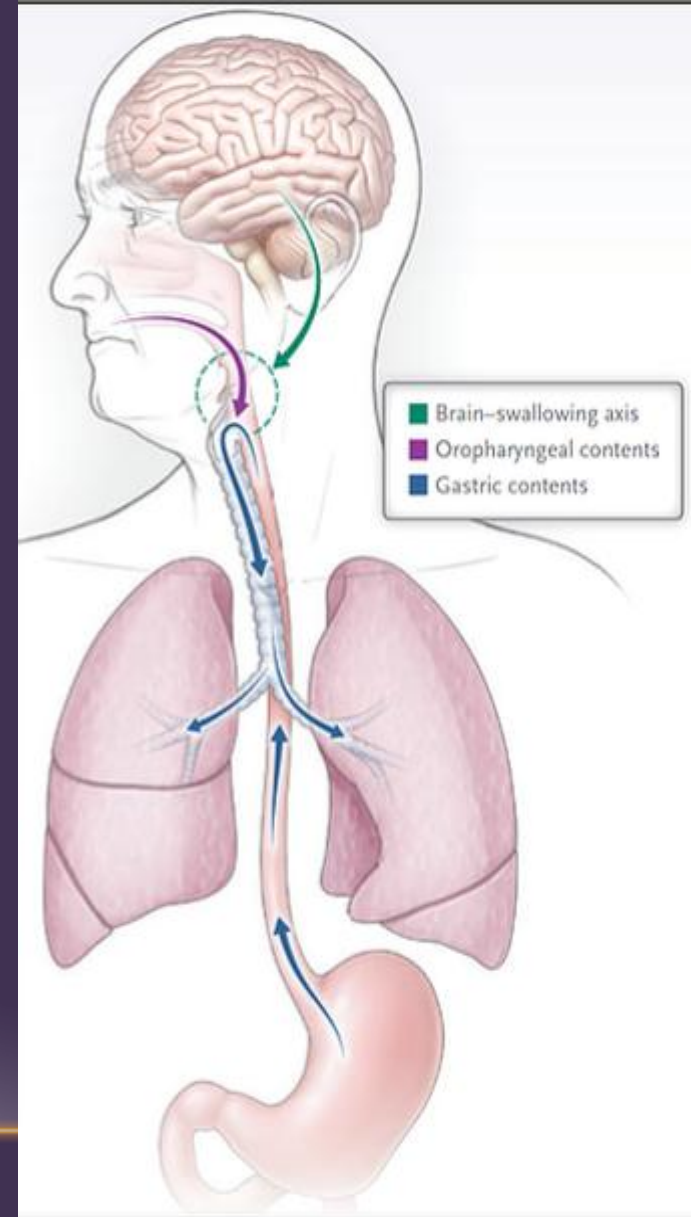
Aspiration pneumonia

Defintions

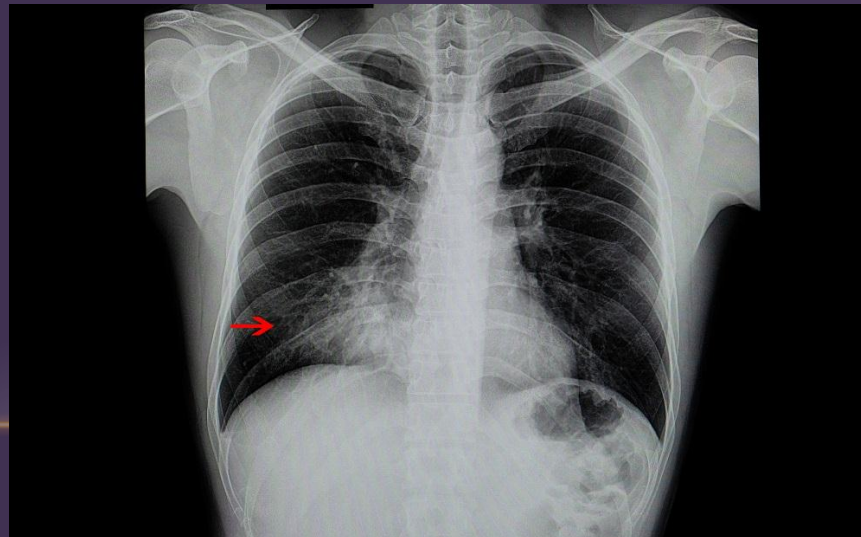
- Suppurative pneumonia is characterised by destruction of the lung parenchyma by the inflammatory process.
- Lung abscess :
- Large collection of pus which may open in bronchi.

Risk factors

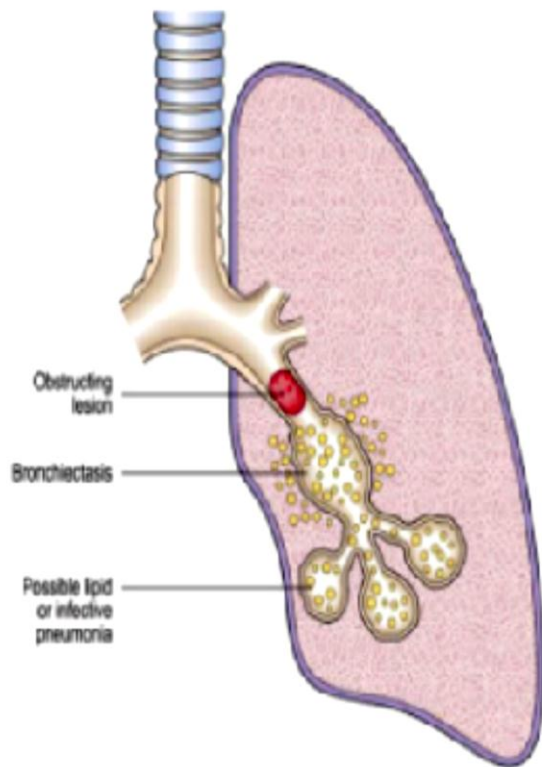
- aspiration (Suppurative pneumonia often develop after the inhalation of septic material) during
 1. operations on the nose, mouth or throat, under general anaesthesia.
 2. vomitus during anaesthesia or coma, particularly if oral hygiene is poor.
 3. bulbar or vocal cord palsy.
 4. achalasia or oesophageal oesophageal reflux
 5. and alcoholism



- Aspiration tends to localise to dependent areas of the lung, such as the apical segment of the lower lobe in a supine patient



Bronchial obstruction. The obstructing lesion causes a pneumonia in the distal lung and, if unrelieved, distal bronchiectasis.

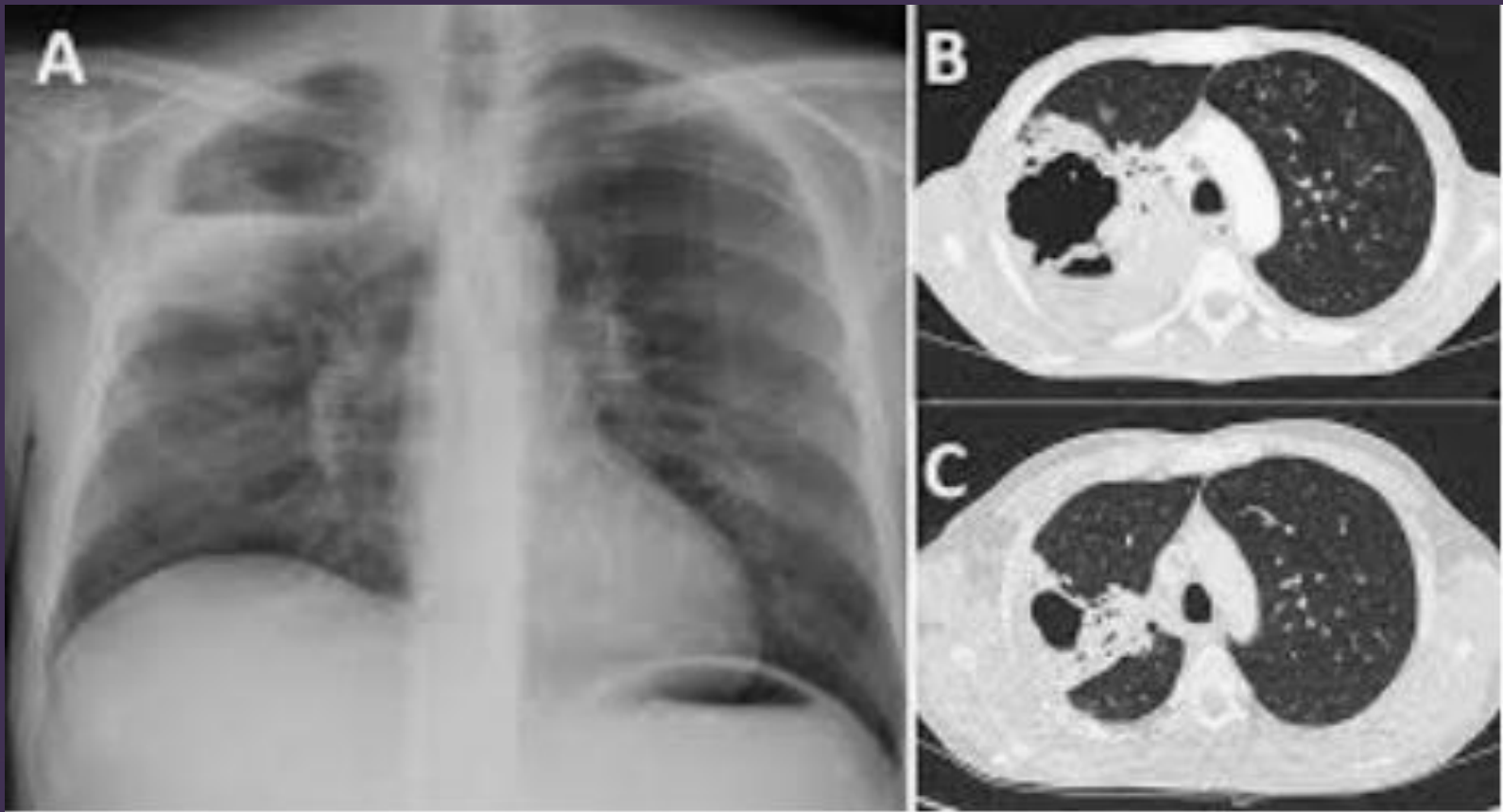


- Like bronchiectasis aspiration pneumonia may also complicate local bronchial obstruction
Due to tumor or foreign body.

- Infections are usually due to a mixture of anaerobes and aerobes in common (microflora in mouth)
Fusobacterium necrophorum, anaerobic or microaerophilic cocci,
and *Bacteroides*.

- Suppurative pneumonia or a pulmonary abscess occurs in a previously healthy lung, the most likely infecting organisms are Staph.aureus or K. pneumoniae.

Actinomyces infections (mostly *A. israelii*) cause chronic suppurative pulmonary infections, which may be associated with poor dental hygiene.



- Bacterial infection of a pulmonary infarct or a collapsed lobe may also produce a suppurative pneumonia or lung abscess,



- Injecting drug-users are at particular risk of developing haematogenous lung abscess, often in association with endocarditis affecting the pulmonary and tricuspid valves.





- A 56-year-old male known diabetes type 2 for 15 years and has 20 pack year h/o smoking complained of cough and expectoration for 2 months and hemoptysis for 2 weeks. He reported recurrent fever, dyspnea, right sided chest pain. On physical examination, his temperature was 38.5°C, heart rate 102 bpm, blood pressure 100/70 mmHg and oxygen saturation 94% when he was breathing ambient air. His breath sounds were clear without rales. The laboratory tests showed white blood cell count was 18×10^9 cell/L, containing 67% neutrophils, 25.8% lymphocytes and 7% monocytes. The C-reactive protein was 16 mg/L his chest x ray.

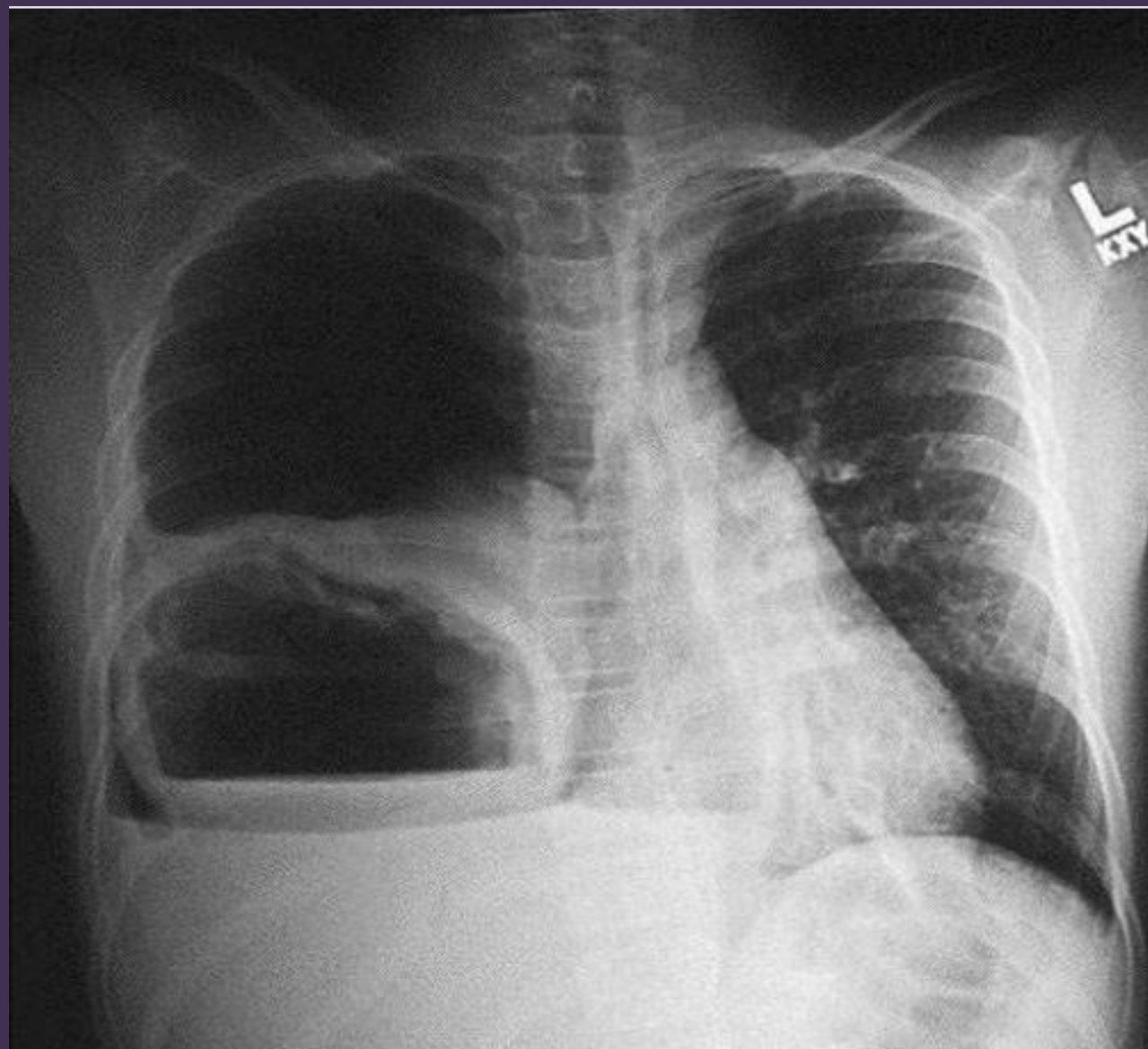


- homogeneous lobar or segmental opacity consistent with consolidation or collapse. Abscesses are characterised by cavitation and a fluid level.

A lung abscess is a localized area of destruction of lung parenchyma (usually >2 cm in diameter) in which infection by pyogenic organisms results in tissue necrosis and suppuration manifested radiologically as a cavity with air fluid level.

TREATMENT

- Amoxicillin and metronidazole. Co-amoxiclav also has a suitable antibiotic spectrum but increases the risk of *Clostridium difficile* infection.
- Further modification of antibiotics should be informed by clinical response and microbiological results
- Physiotherapy.
- Surgery should be contemplated if no improvement occurs despite optimal medical therapy. Removal or treatment of any obstructing endobronchial lesion is essential.



WHEN TO REFER TO SURGERY

- Patients who fail medical therapy.
- Complications e.g.a. Massive haemoptysis
.Bronchopleural fistula Empyema.
- Suspected neoplasm or Congenital lung malformation
- In the setting of fulminant infection

THANK U