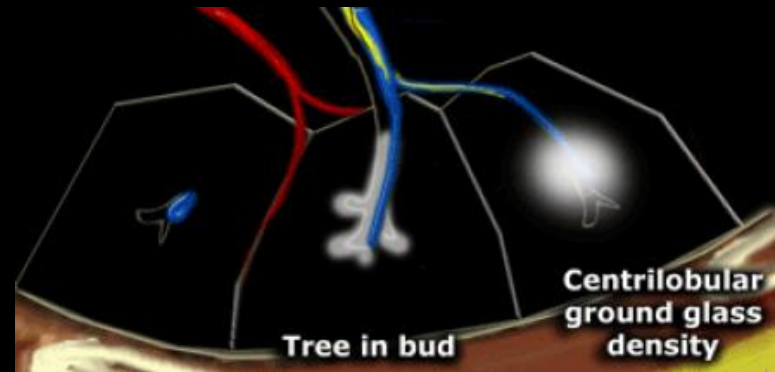


# Tree in Bud

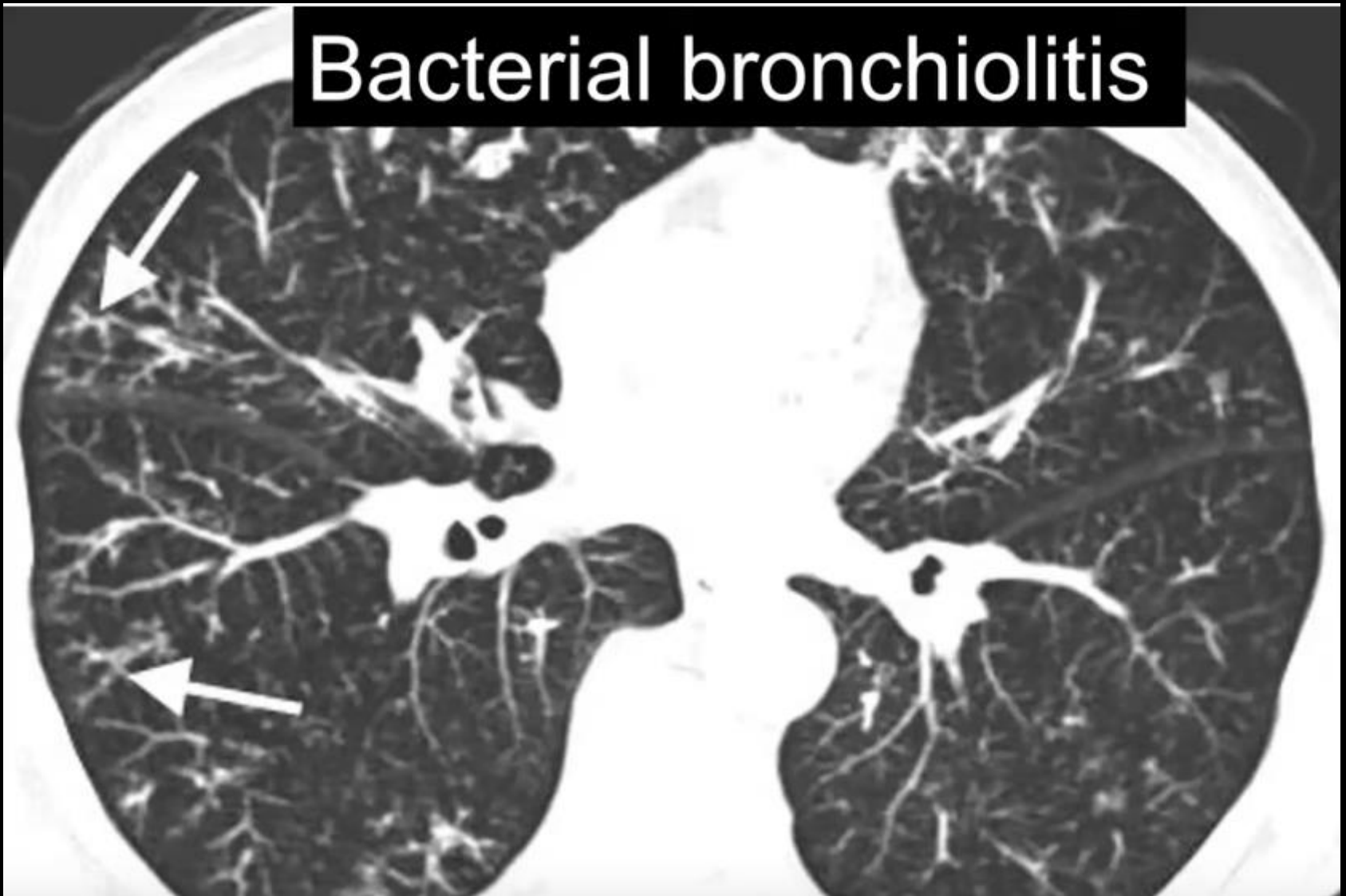
- Infection most common
- multiple areas of centrilobular nodules with a linear branching pattern.
- Although initially described in patients with endobronchial tuberculosis, it is now recognized in a large number of conditions.



# Tree-in-Bud Pattern

- ABPA
- Cystic fibrosis
- Aspiration
- Diffuse panbronchiolitis

# Bacterial bronchiolitis



# MRSA Pneumonia



# Obliterative Bronchiolitis

- Constrictive bronchiolitis, is an irreversible fibrosis of small airway walls that narrows or obliterates the lumen, leading to chronic airway obstruction.
- Most common causes include
  - Infection (viral, bacterial, mycoplasma),
  - Inhalation of toxic fumes,
  - Drug treatment (penicillamine or gold),
  - Collagen vascular disease (rheumatoid arthritis, especially after the therapies mentioned),
  - Chronic lung transplant rejection, bone marrow transplantation with chronic graft-versus-host disease.
- Nevertheless, obliterative bronchiolitis is often idiopathic

