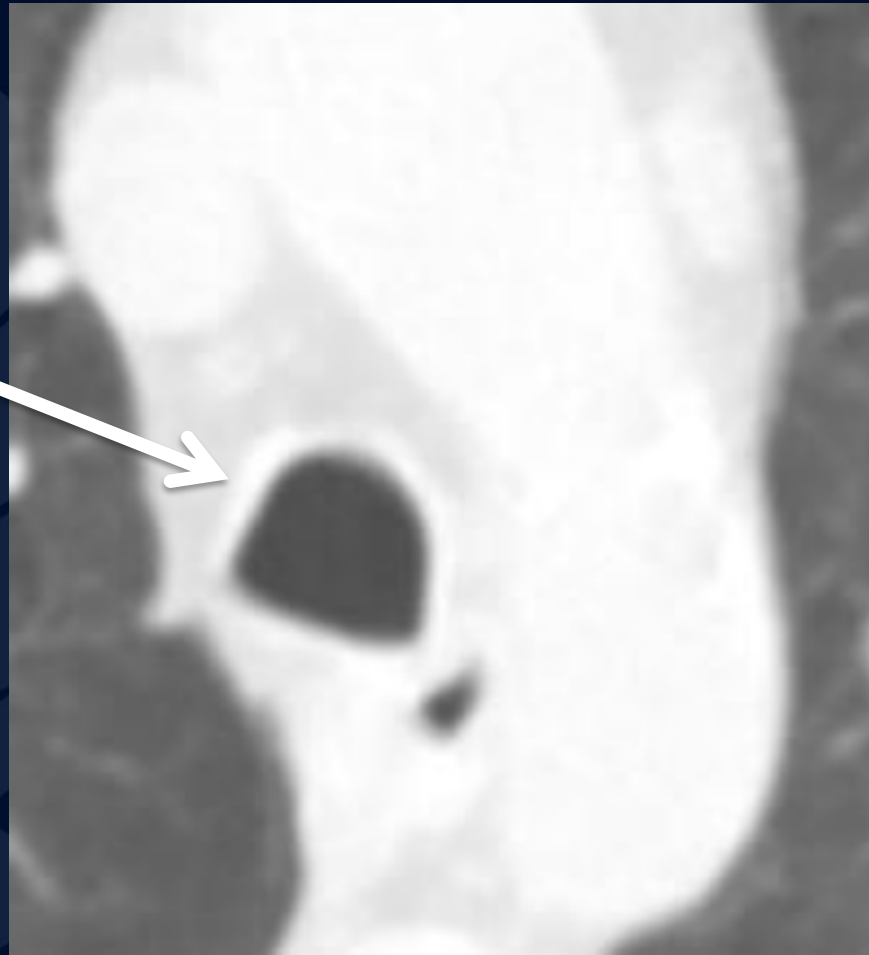


59 y/o F with wheezing

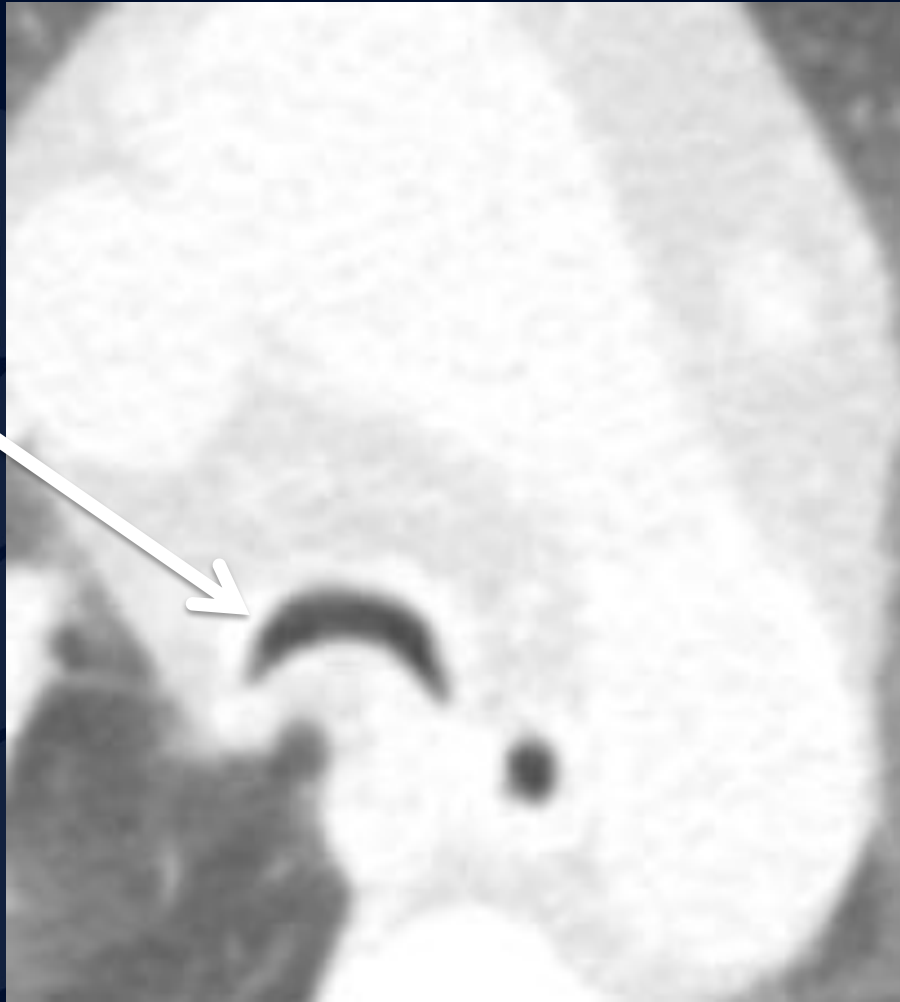
Atul Kumar, MD, MS

Lower
Trachea



Axial Inspiratory CT

Lower
Trachea

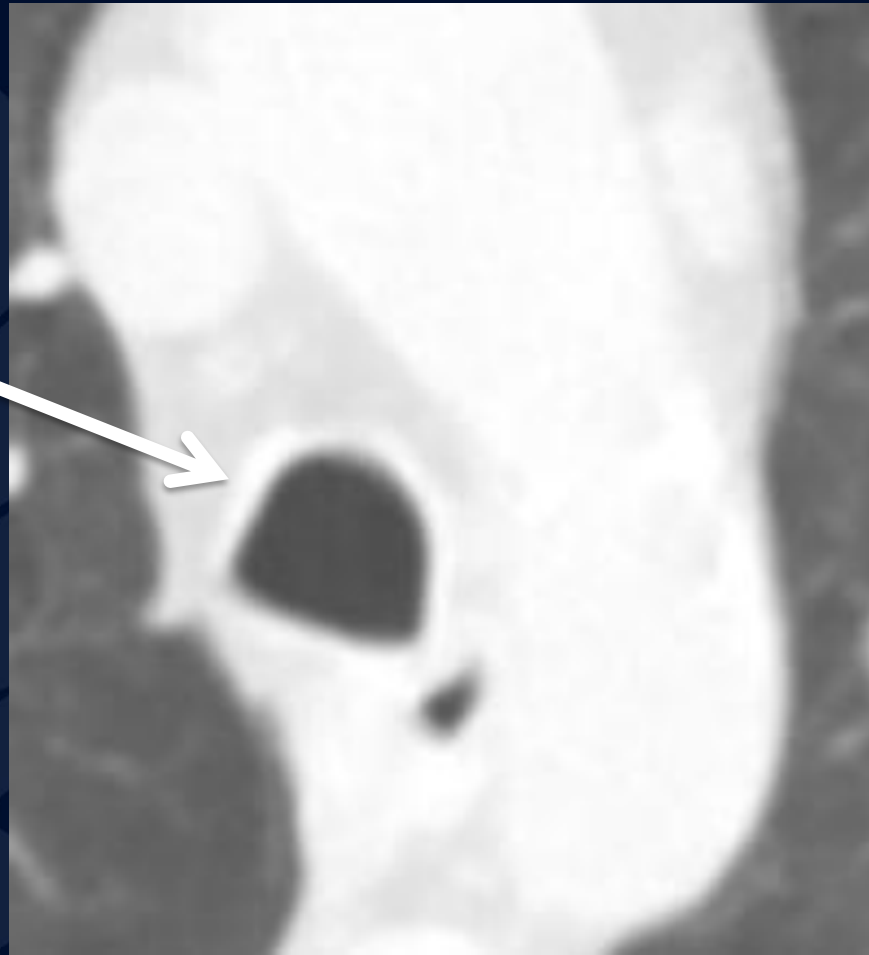


Axial Dynamic Expiratory CT



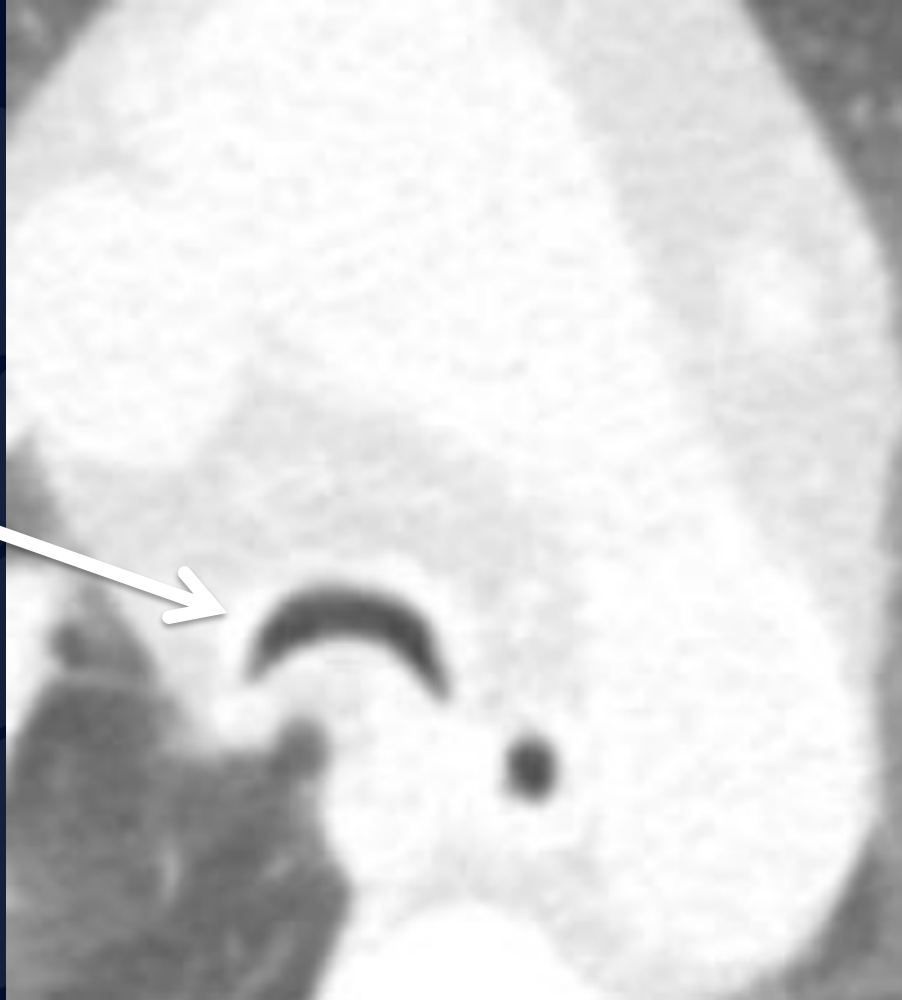
Tracheobronchomalacia

Lower
Trachea



Axial CT

Lower Trachea
"Frown Sign"



Axial Dynamic Expiratory CT

Tracheobronchomalacia

- Increased compliance and compressibility of trachea and bronchi
- Symptoms:
 - Wheeze
 - Cough
 - Dyspnea
 - Shortness of breath
 - Recurrent respiratory infections
- Caused by cartilaginous weakening or hypotonia of posterior membranous trachea
- Use combination of inspiratory and dynamic expiratory CT scan to diagnose
 - Frown sign: seen in dynamic expiration as tracheal collapse
 - Decrease in cross sectional area of trachea of at least 50%
 - Some literature quotes at least 70% decrease in cross sectional area