86 year old woman with shortness of breath

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Axial Chest CT







Coronal Chest CT





Idiopathic Pulmonary Fibrosis







Peripheral reticular opacities







Bronchiectasis



RADIOLOGY



Coronal Chest CT

Reticular opacities, basilar and peripheral predominance

Reticular opacities increasing towards the bases (apicobasilar gradient)



Idiopathic Pulmonary Fibrosis

- Etiology unknown (by definition)
- Pathogenesis: alveolar injury & dysregulated repair
- Epidemiology:
 - Age >50, M > F. Prevalence 60 per 100,000 persons
- Presentation:
 - Chronic exertional dyspnea, chronic dry cough, fatigue
- Diagnose with high-resolution CT chest
 - Typical UIP pattern is diagnostic
 - Consider lung biopsy if HRCT isn't definitive



Idiopathic Pulmonary Fibrosis

• Typical UIP pattern on HCRT:

- Bibasilar and peripheral reticular opacities involving the immediate subpleural lung
- Honeycombing
- Traction bronchiectasis
- Craniocaudal gradient of peripheral septal thickening, bronchiectasis, and honeycombing
- Differential: Chronic hypersensitivity pneumonitis, connective tissue disease, sarcoidosis (all can have UIP pattern on CT)
- Treatment
 - Non-pharmacologic: supp O2, pulmonary rehab, lung transplant
 - Pharmacologic: Nintedanib and pirfenidone
- Overall poor prognosis; median survival 3.8yr for those ≥65yr



References

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