Interstitial Pneumonias

Teaching form: Seminar
Auditorium: General medicine students ELP
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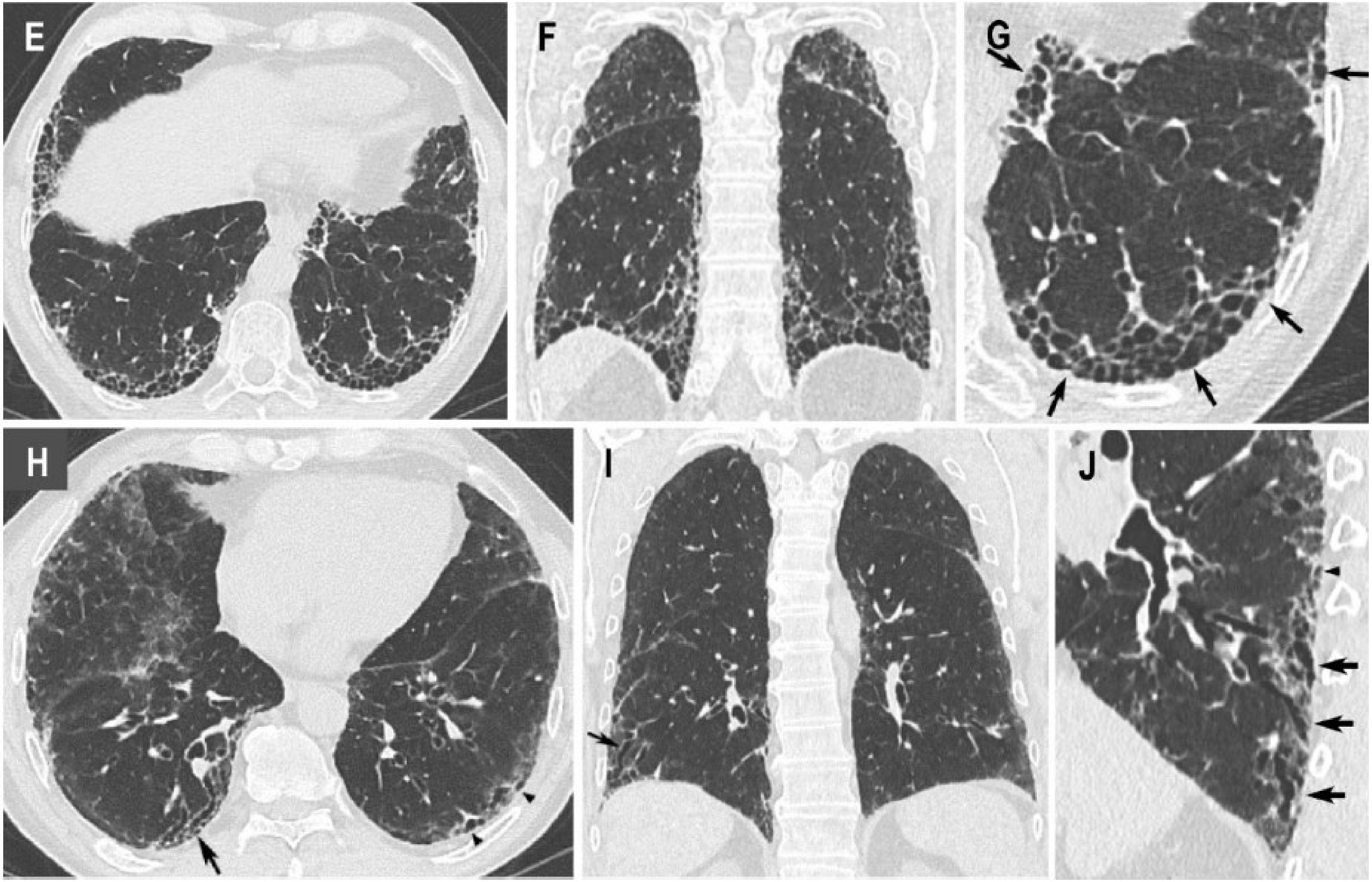
Updated: Sept 14th 2025

	Morphologic patterns by Pathology and Imaging	Major clinical-radiologic-pathologic diagnoses	
		Secondary	**Primary / Idiopathic**
Interstitial patterns	**Usual IP (UIP)**	**Sec. UIP** (*e.g.*, CTD, HP, medications)	**IPF** (Idiopathic UIP)
	Nonspecific IP (NSIP)	**Sec. NSIP** (*e.g.*, CTD >>> HP, medications)	**Idiopathic NSIP**
	Bronchiolocentric IP (BIP)	**Sec. BIP** (*e.g.*, HP >>> CTD, aspiration, inhalational exposures, medications)	**Idiopathic BIP** *(provisional diagnosis*)*
	Diffuse alveolar damage (DAD)	**Sec. DAD** (multiple causes)	**Idiopathic DAD** (acute IP)
	Pleuroparenchymal fibroelastosis (PPFE)	**Sec. PPFE** (IPF, CTD, HP, medications, radiation, transplant, infection [post-TB], occupational)	**Idiopathic PPFE**
	Lymphoid IP (LIP)	**Sec. LIP** (*e.g.*, CTD, immune deficiency)	**Idiopathic LIP**
Alveolar filling patterns	**Organising pneum. (OP)**	**Sec. OP** (*e.g.*, CTD, post-infectious, medications, aspiration)	**Cryptogenic OP** (Idiopathic OP)
	Respiratory bronchiolitis-ILD (RB-ILD)	**Sec. RB-ILD** (*e.g.*, smoking >>> CTD, medications, aspiration, hereditary)	**Idiopathic RB-ILD**
	Alveolar macrophage pneumonia† (AMP)	**Sec. AMP** (*e.g.*, smoking >>> CTD, medications, aspiration, hereditary	**Idiopathic AMP**
	Rare alveolar filling dis.	*e.g.*, **Acute and chronic EP**, **PAP, lipoid pneumonia**	
Other	**Combined pattern**	**Multiple combinations** (*e.g.*, NSIP + OP, UIP + PPFE)	
	Unclassifiable pattern	**Unclassifiable ILD** (multiple undefined patterns)	

UIP

Clinical features	Radiologic features
Presentation: Chronic onset with high likelihood of progression and potential for rapid worsening and acute exacerbation.	Subpleural and usually lower lung predominance. Fibrotic changes including reticulation, peripheral traction bronchiectasis, and honeycombing.
Risk factors: More frequent in older males with a smoking history, particularly for IPF.	

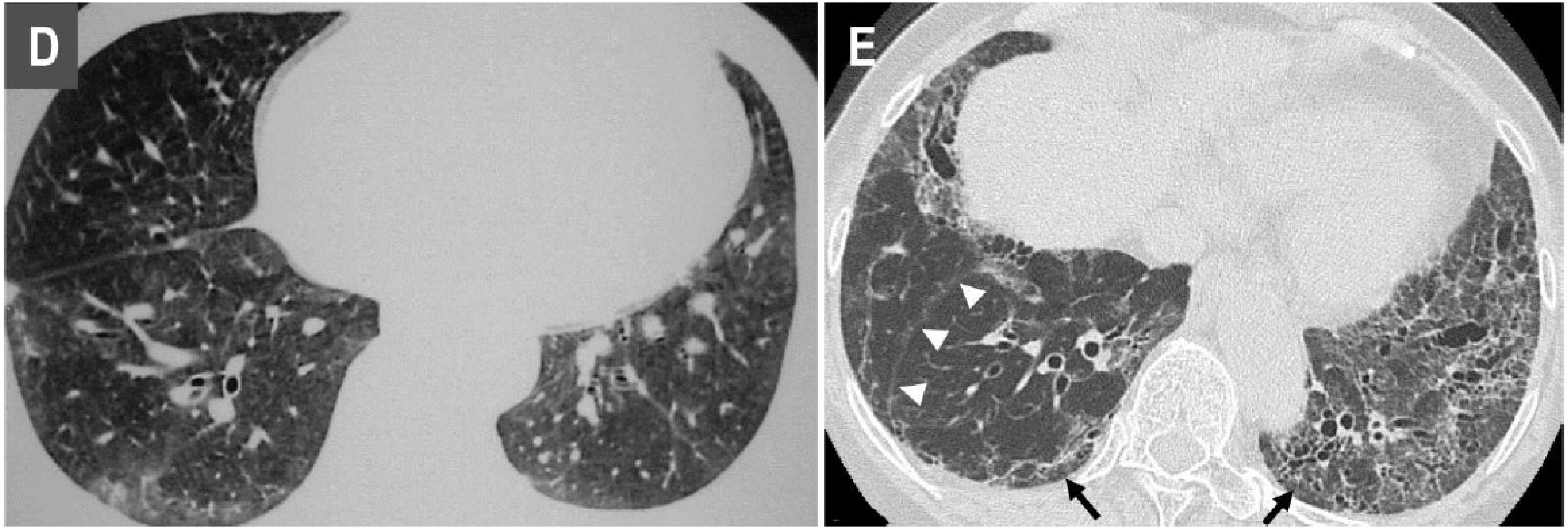
UIP



NSIP

Clinical features	Radiologic features
Presentation: Chronic onset but with variable risk of progression. Potential for rapid worsening, especially with concurrent OP. *Risk factors:* More common in younger females, often with a background of CTD.	Lower lobe predominance, commonly with subpleural sparing. Ground glass opacities, fine reticulation, and traction bronchiectasis, without honeycombing.

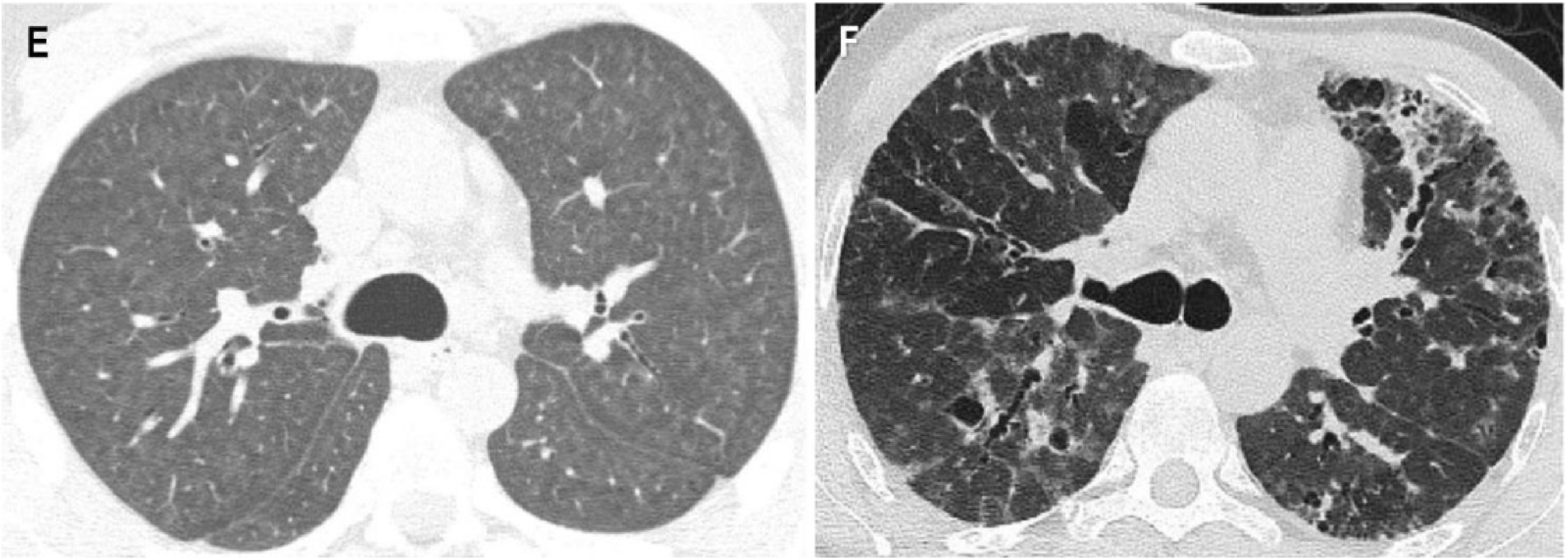
NSIP



BIP

Clinical features	Radiologic features
Presentation: Non-fibrotic BIP: Acute/Subacute onset frequently with respiratory and systemic symptoms.	Non-fibrotic BIP: Centrilobular ground glass nodules, mosaic attenuation, and/or lobular air trapping.
Fibrotic BIP: Chronic onset but with variable risk of progression. Potential for rapid worsening, especially with ongoing exposure. *Risk factors:* No clear age or sex predilection. Positive exposure history for HP associated antigens.	Fibrotic BIP: Peribronchovascular ground glass, traction bronchiectasis, mosaic attenuation, lobular air trapping and three-density sign. Features can overlap with non-fibrotic BIP.

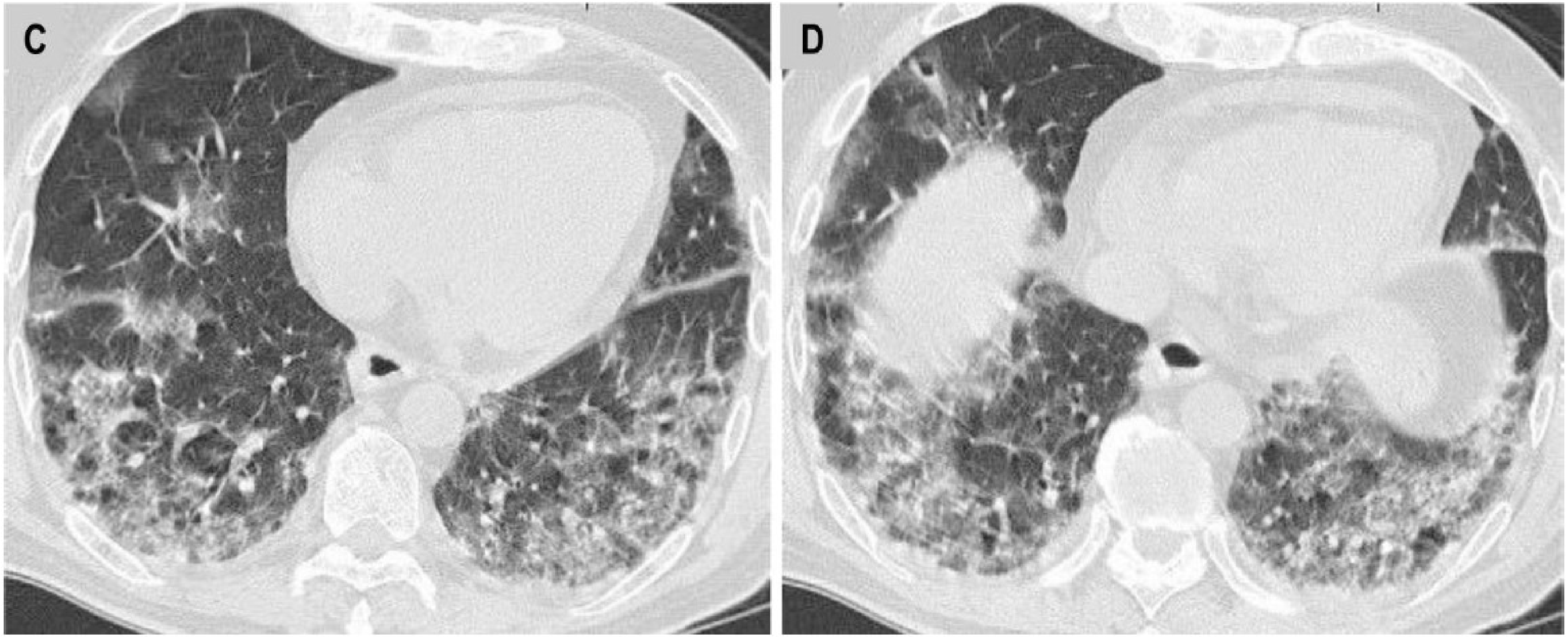
BIP



DAD

Clinical features	Radiologic features
Presentation: Acute worsening with high likelihood of residual fibrosis and potential for ongoing progression. *Risk factors:* Vary with underlying aetiology (e.g., sepsis, aspiration, pneumonia, CTD-ILD).	Patchy or diffuse ground glass opacity that may progress to fibrosis over time with significant traction bronchiectasis, architectural distortion and honeycombing.

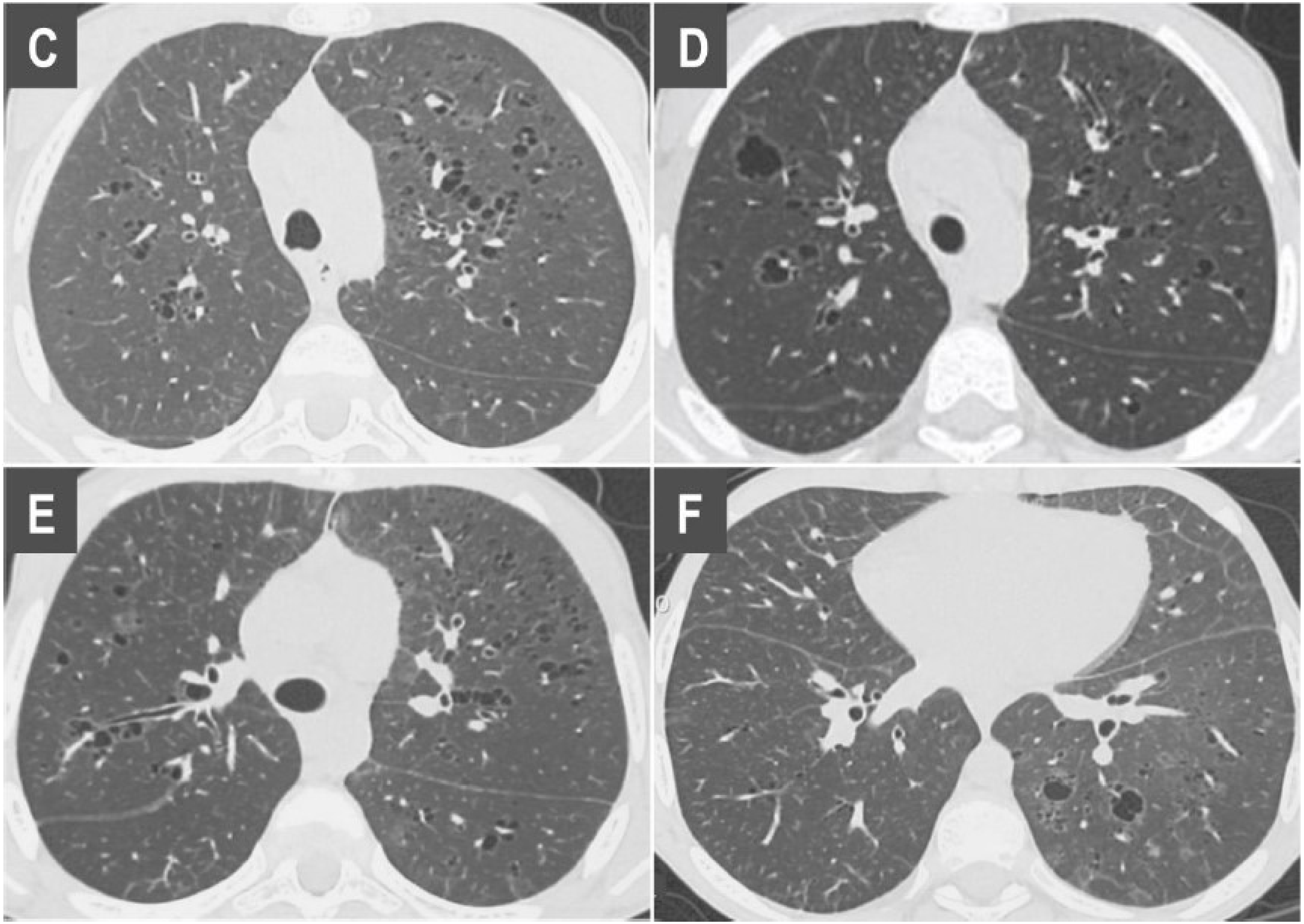
DAD



LIP

Clinical features	Radiologic features
Presentation: Insidious onset with slow progression. *Risk factors:* No clear age or sex predilection for idiopathic LIP. Risk factors for secondary LIP vary with underlying aetiology.	Mid to lower lobe predominant thin-walled lung cysts with reticulation, ground glass opacity, bronchovascular thickening, and perilymphatic interstitial thickening; randomly distributed or lower lobe predominant thin-walled cysts may be the only or dominant finding

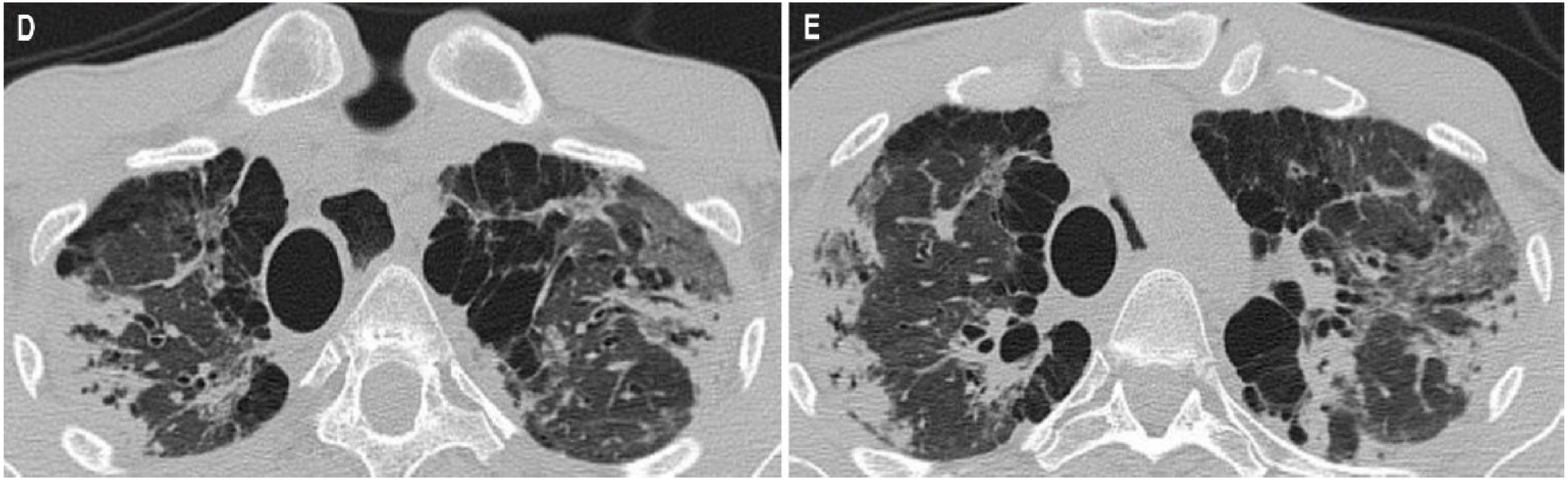
LIP



PPFE

Clinical features	Radiologic features
Presentation: Chronic onset but with variable risk of progression. Frequently associated with significant weight loss. *Risk factors: No clear age or sex predilection.*	Patchy or diffuse ground glass opacity that may progress to fibrosis over time with significant traction bronchiectasis, architectural distortion and honeycombing.

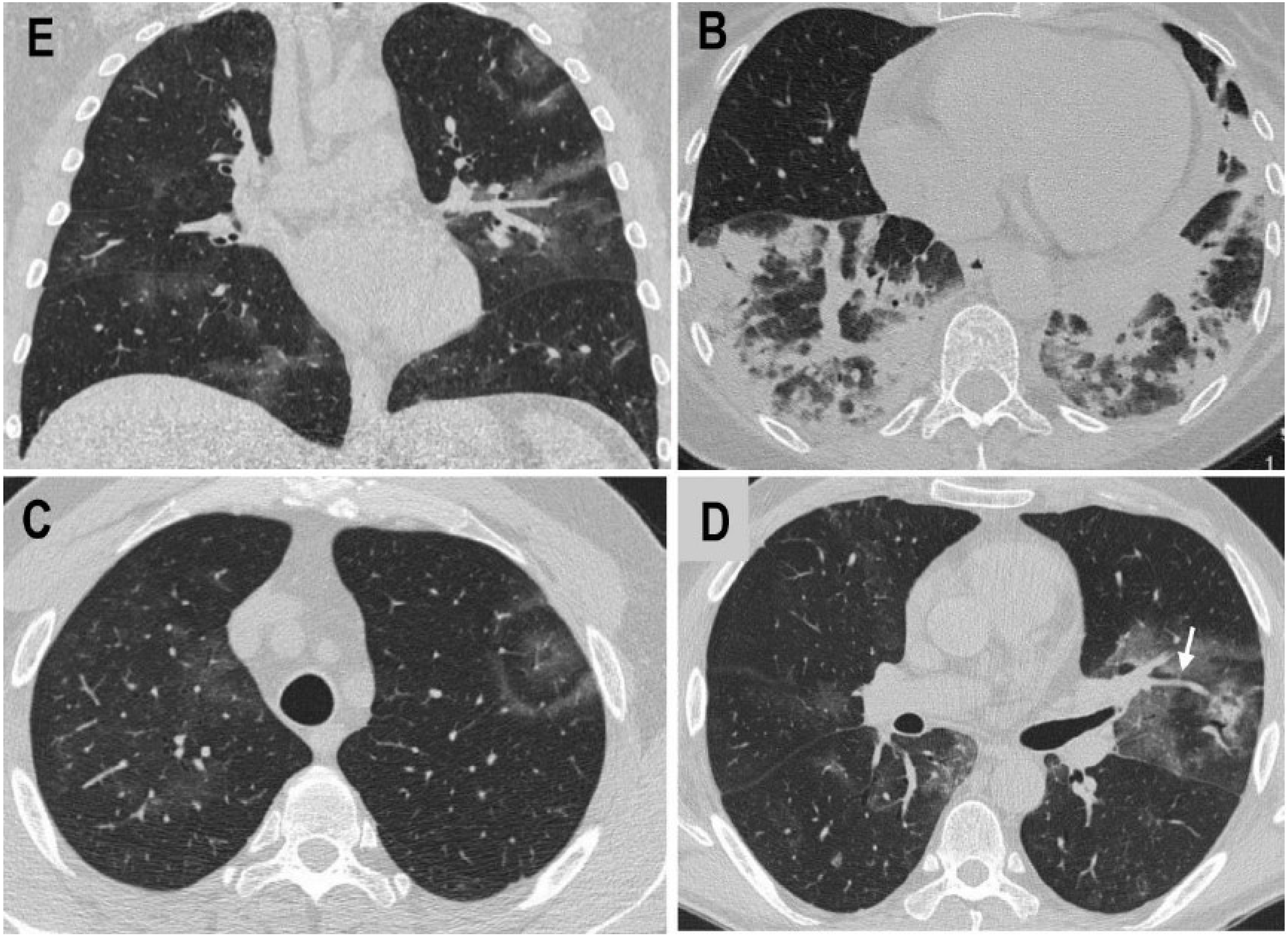
PPFE



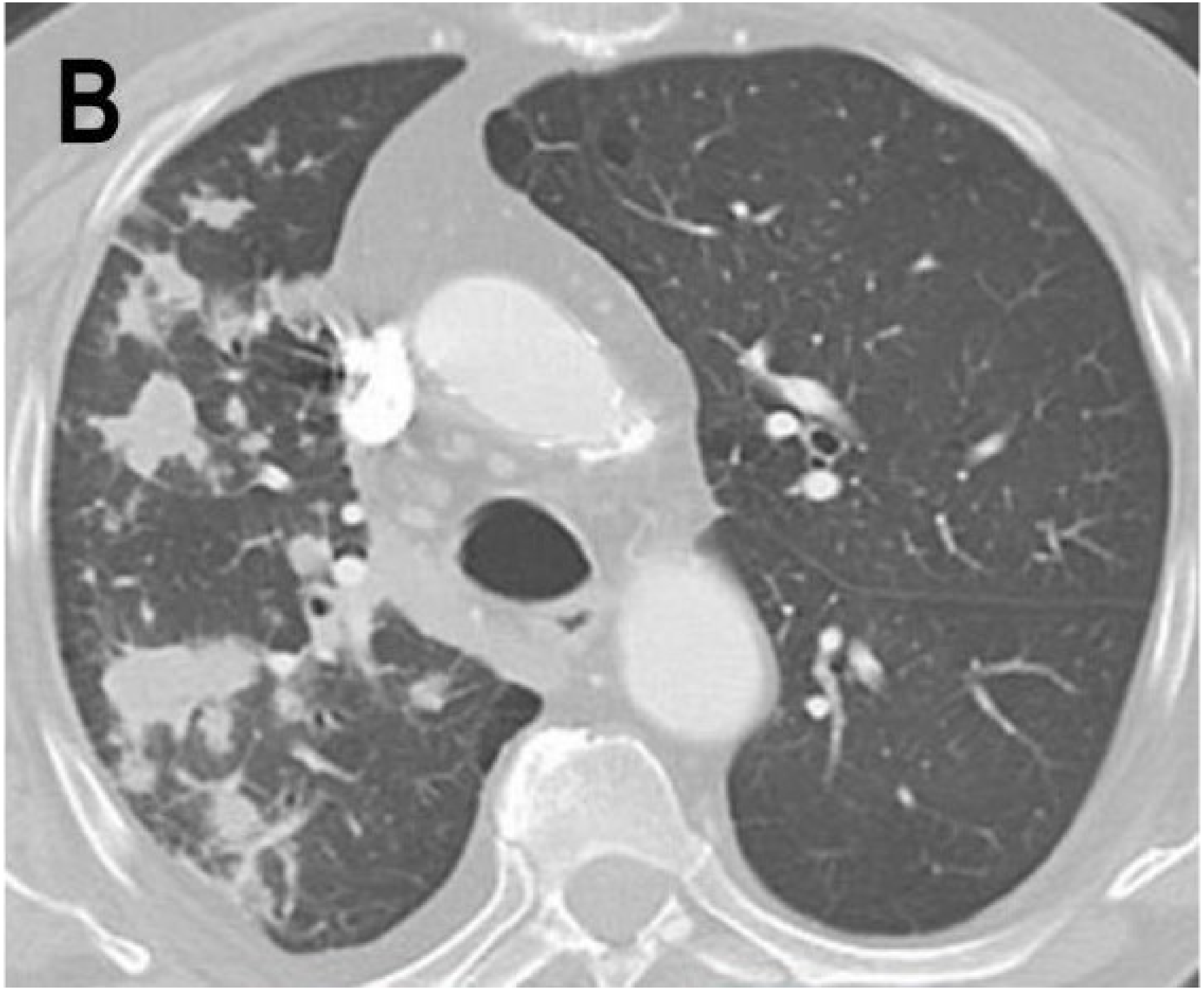
OP

Clinical features	Radiologic features
Presentation: Acute or subacute onset of respiratory constitutional symptoms. Typically reversible, but potential for residual fibrosis; low potential for ongoing progression for cryptogenic OP, with higher potential for recurrence or progression for some causes, particularly CTD. *Risk factors:* No clear age or sex predilection for COP. Risk factors for secondary OP vary with underlying aetiology.	Patchy consolidation with air bronchograms, patchy ground glass opacities, focal nodules, and/or mass-like lesions, sometimes featuring a halo sign, reversed halo sign, perilobular pattern, or air-bronchograms.

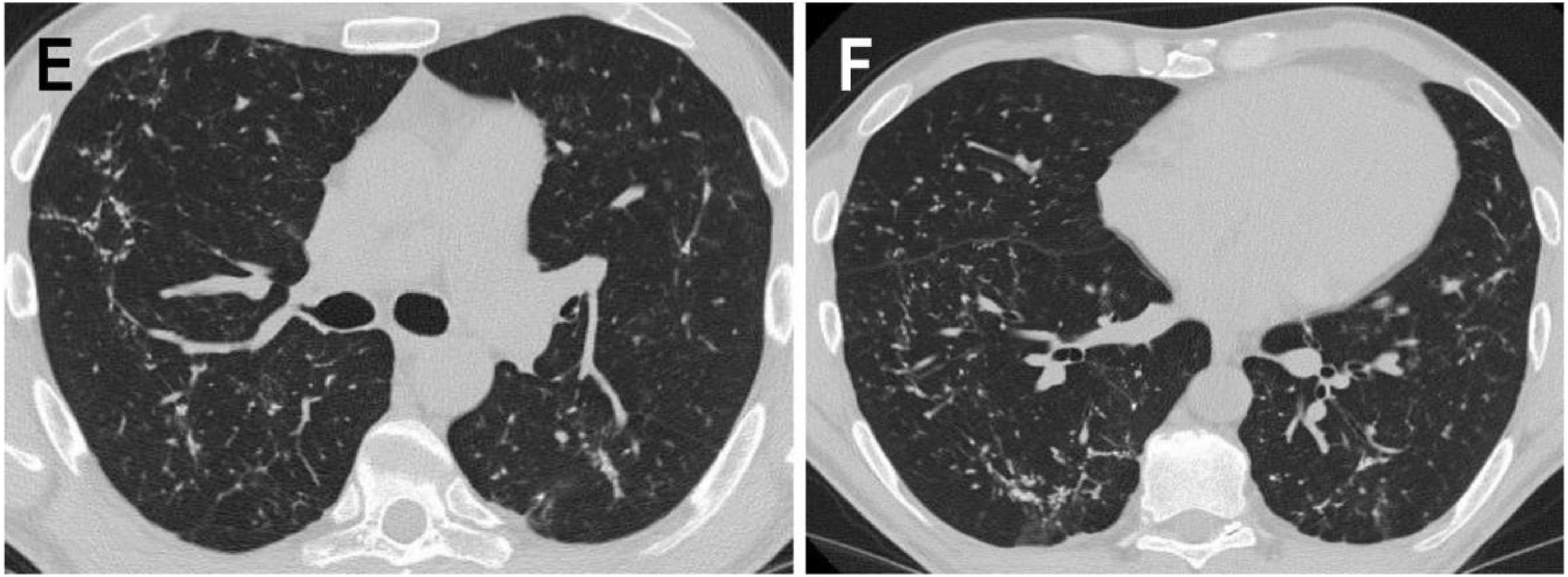
OP



AFOP



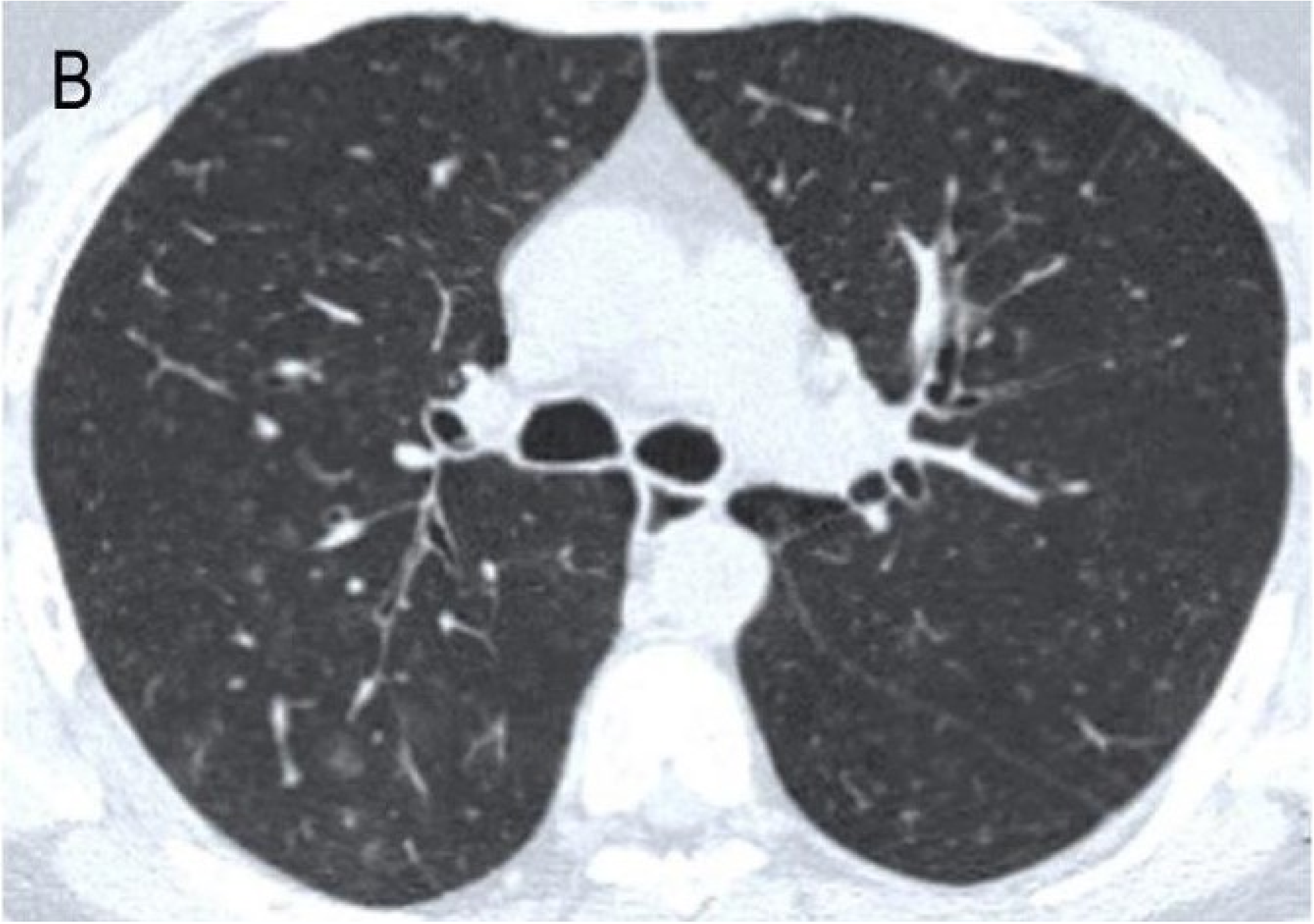
CiOP



RB-ILD

Clinical features	Radiologic features
Presentation: Subacute onset with potential for improvement or resolution with smoking cessation. *Risk factors:* adult smokers with slight male predominance.	Upper lobe predominant centrilobular ground glass nodularity.

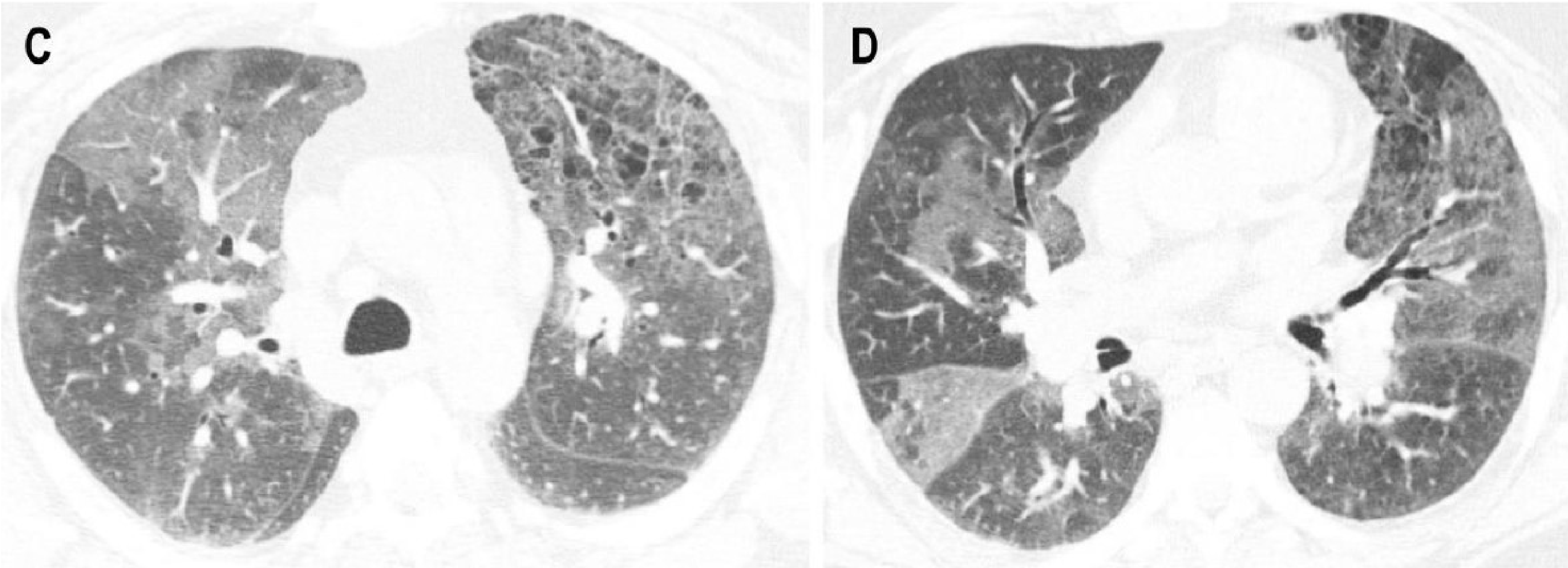
RB-ILD



AMP

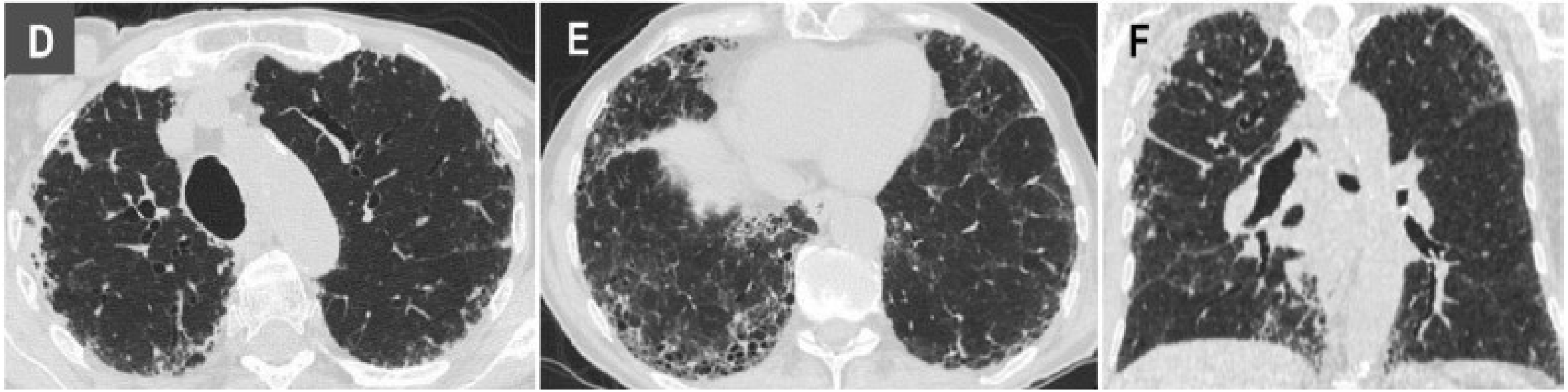
Clinical features	Radiologic features
Presentation: Highly variable onset, progression in a subset. *Risk factors:* adult smokers with slight male predominance, although rare cases have been reported in non-smokers.	Middle to lower lung predominant with variable upper lung involvement, although may be predominantly peripheral. Primarily patchy and confluent ground glass opacities with smooth reticulation. Cystic spaces may be present within the ground glass; emphysema, and traction bronchiectasis may also be seen.

AMP



NSIP+OP

PPFE+UIP



HP+emphysema