



SAPIENZA
UNIVERSITÀ DI ROMA



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IPF: FIBROSI POLMONARE
IDIOPATICA.
LE NUOVE LINEE GUIDA

AMERICAN THORACIC SOCIETY DOCUMENTS

Diagnosis of Idiopathic Pulmonary Fibrosis **An Official ATS/ERS/JRS/ALAT Clinical Practice Guideline**

THIS OFFICIAL CLINICAL PRACTICE GUIDELINE OF THE AMERICAN THORACIC SOCIETY (ATS), EUROPEAN RESPIRATORY SOCIETY (ERS), JAPANESE RESPIRATORY SOCIETY (JRS), AND LATIN AMERICAN THORACIC SOCIETY (ALAT) WAS APPROVED BY THE ATS, JRS, AND ALAT MAY 2018, AND THE ERS JUNE 2018

This official ATS/ERS/JRS/ALAT Clinical Practice Guideline was endorsed by the Pulmonary Pathology Society October 2018

- ▶ Aggiornamento sulla base di un confronto ATS 2011 e Linee Guida Fleischner 2018.
- ▶ Forte bisogno di MDD
- ▶ Malattia emergente in cui la diagnosi radiologica è fondamentale
- ▶ Necessaria integrazione CLINICA-RADIOLOGICA

INQUADRAMENTO CLINICO

- ▶ Specifica forma CRONICA, PROGRESSIVA di pneumopatia fibrosante da causa sconosciuta
- ▶ Uomo adulto > 60 aa
- ▶ Dispnea insidiosa ed ingravescente, tosse, clubbing
- ▶ Prognosi infausta a causa di diagnosi clinica errata (COPD, asma, polmonite)



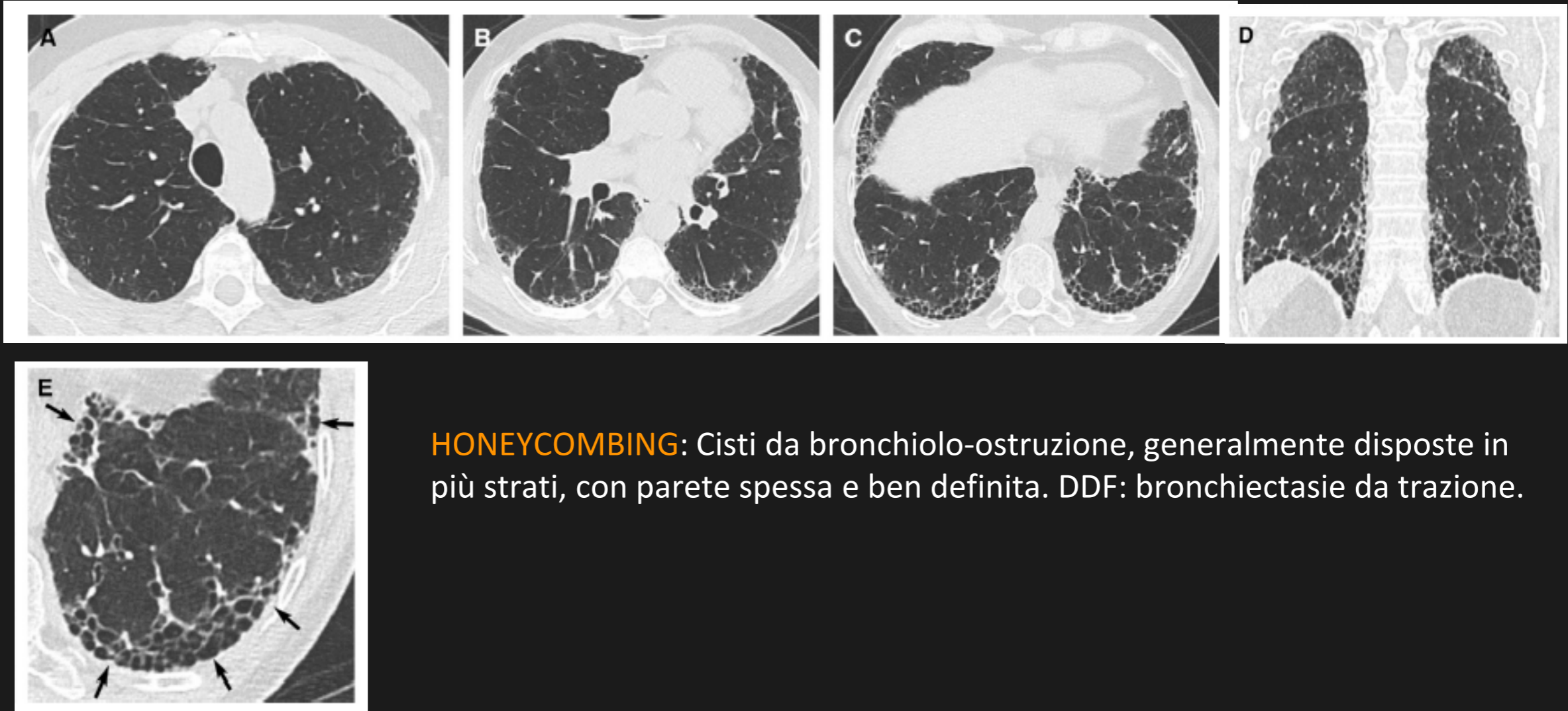
- Escludere altre cause di IPF
- Anamnesi lavorativa-occupazionale
- Storia di fumo
- Parametri di laboratorio per escludere malattie reumatologiche
- Anamnesi farmacologica
- Analisi genetiche

INQUADRAMENTO RADIOLOGICO: HRTC

- ▶ 4 pattern radiologici
- ▶ 90-100% VPP



UIP	Probable UIP	Indeterminate for UIP	Alternative Diagnosis
<p>Subpleural and basal predominant; distribution is often heterogeneous*</p> <p>Honeycombing with or without peripheral traction bronchiectasis or bronchiolectasis†</p>	<p>Subpleural and basal predominant; distribution is often heterogeneous</p> <p>Reticular pattern with peripheral traction bronchiectasis or bronchiolectasis</p> <p>May have mild GGO</p>	<p>Subpleural and basal predominant</p> <p>Subtle reticulation; may have mild GGO or distortion ("early UIP pattern")</p> <p>CT features and/or distribution of lung fibrosis that do not suggest any specific etiology ("truly indeterminate for UIP")</p>	<p>Findings suggestive of another diagnosis, including:</p> <ul style="list-style-type: none"> • CT features: <ul style="list-style-type: none"> ◦ Cysts ◦ Marked mosaic attenuation ◦ Predominant GGO ◦ Profuse micronodules ◦ Centrilobular nodules ◦ Nodules ◦ Consolidation • Predominant distribution: <ul style="list-style-type: none"> ◦ Peribronchovascular ◦ Perilymphatic ◦ Upper or mid-lung • Other: <ul style="list-style-type: none"> ◦ Pleural plaques (consider asbestosis) ◦ Dilated esophagus (consider CTD) ◦ Distal clavicular erosions (consider RA) ◦ Extensive lymph node enlargement (consider other etiologies) ◦ Pleural effusions, pleural thickening (consider CTD/drugs)



HONEYCOMBING: Cisti da bronchiolo-ostruzione, generalmente disposte in più strati, con parete spessa e ben definita. DDF: bronchiectasie da trazione.

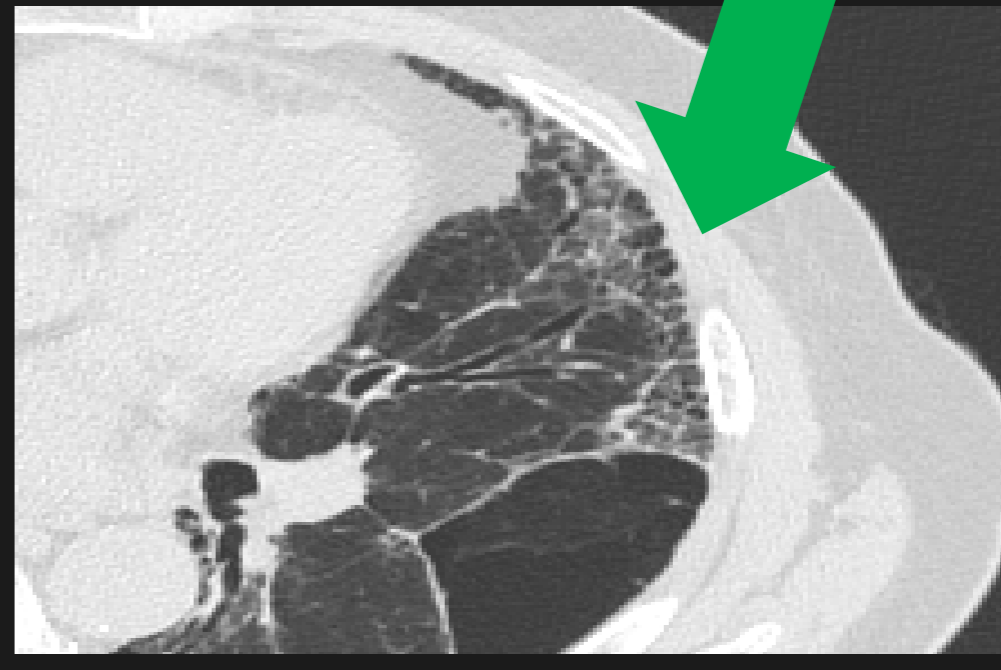
- Predominantly **subpleural and basal**
- Distribution is often heterogeneous and occasionally diffuse or asymmetrical
- **Honeycombing**, with or without peripheral traction bronchiectasis or bronchiolectasis, **must** be present for a definite HRCT diagnosis of UIP
- Mild GGO **associated with** reticular pattern. Pulmonary ossification may be present

UIP PATTERN

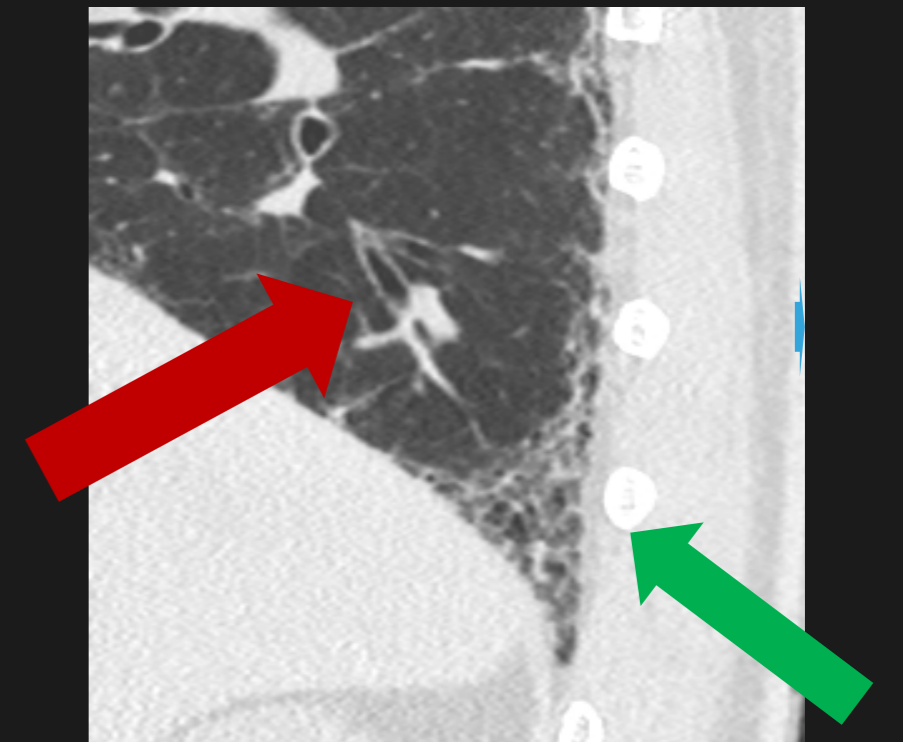
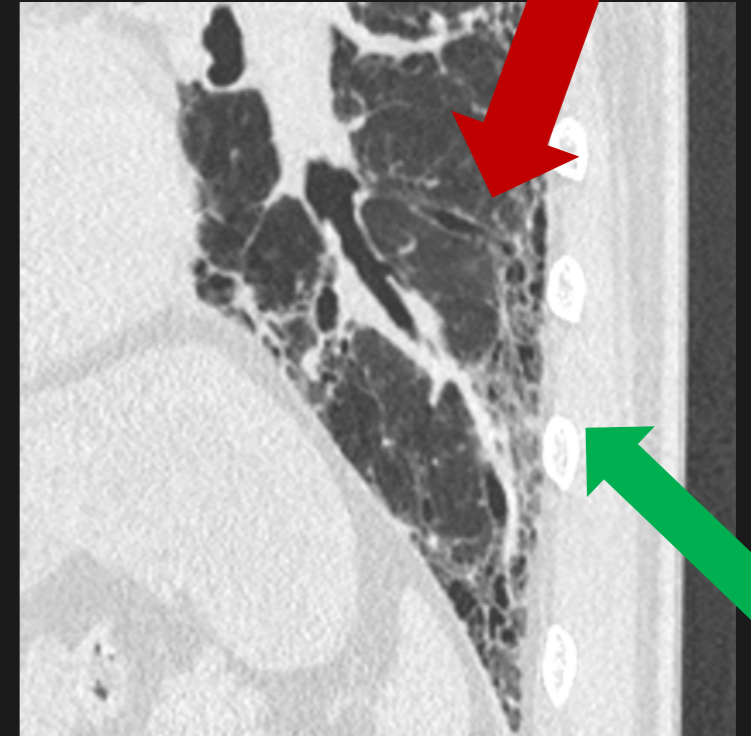
- Uomo, 65anni
- Ex fumatore (1pack/die x 25 yrs)
- Ex vigile del fuoco, nega esposizione a farmaci ed allergeni
- Nega familiarità
- Autoimmunità negativa
- Esordio con dispnea da sforzo

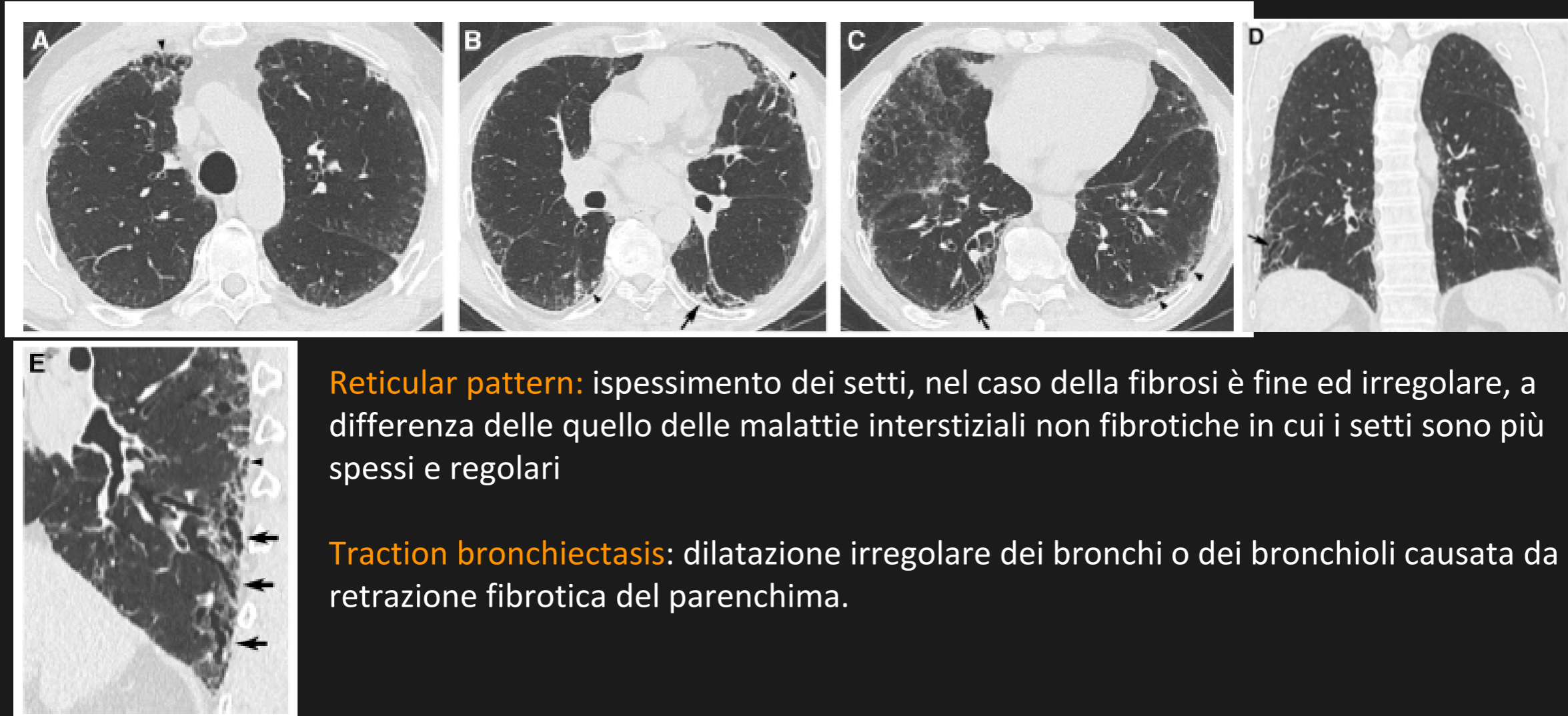


UIP PATTERN



UIP PATTERN





Reticular pattern: ispessimento dei setti, nel caso della fibrosi è fine ed irregolare, a differenza delle quello delle malattie interstiziali non fibrotiche in cui i setti sono più spessi e regolari

Traction bronchiectasis: dilatazione irregolare dei bronchi o dei bronchioli causata da retrazione fibrotica del parenchima.

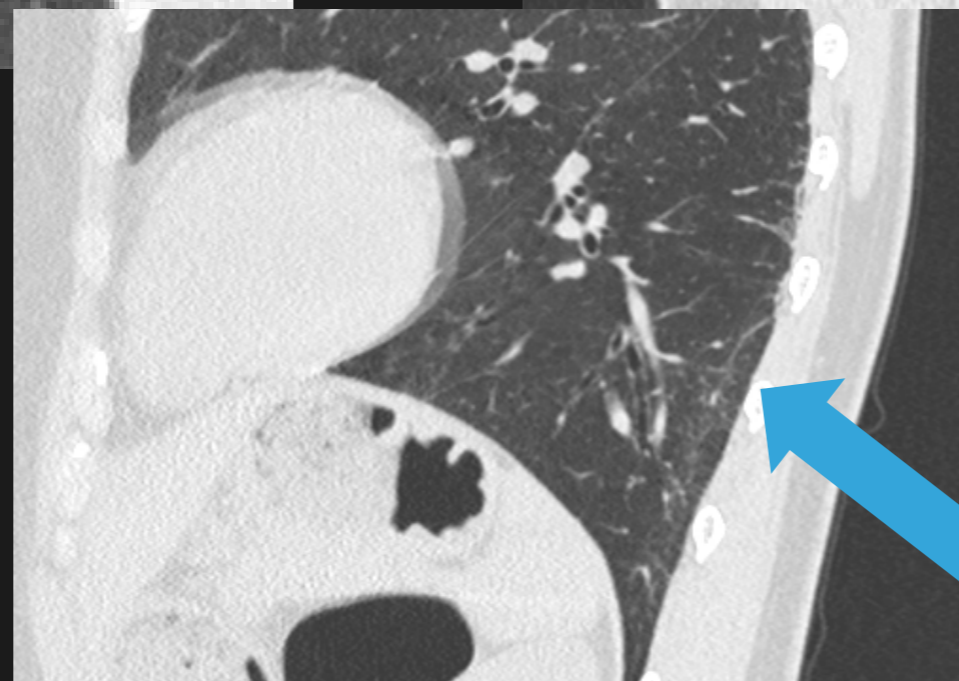
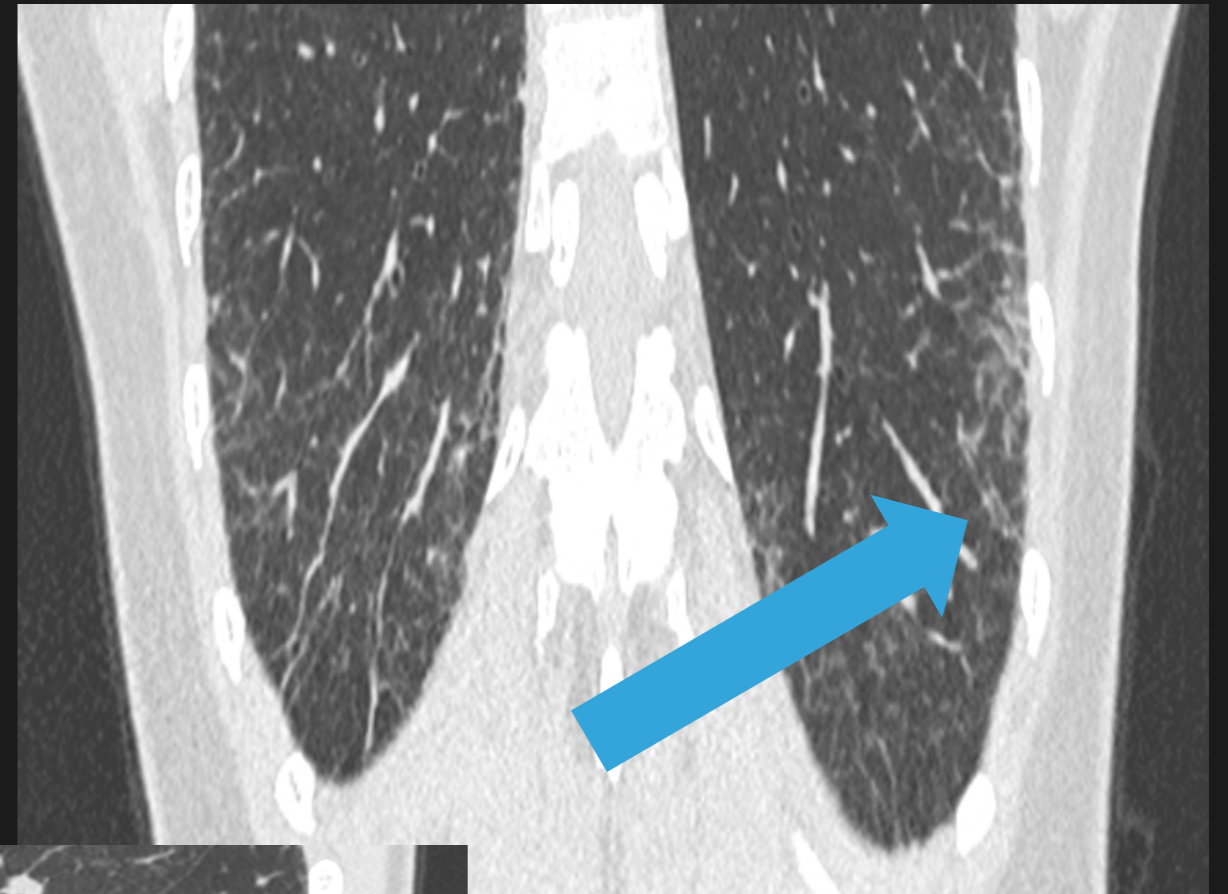
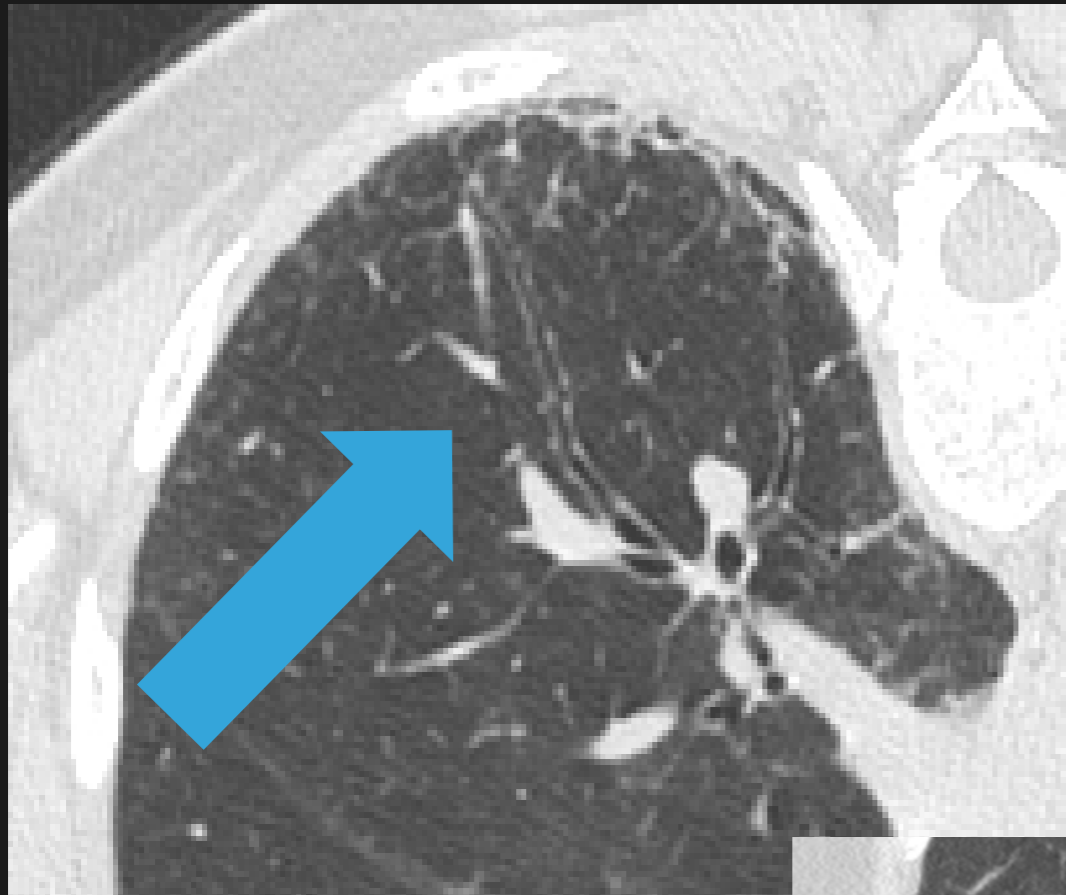
- Predominantly subpleural and basal
- Often heterogeneous distribution
- **Reticular pattern with peripheral traction bronchiectasis or bronchiolectasis**
- May have mild GGO

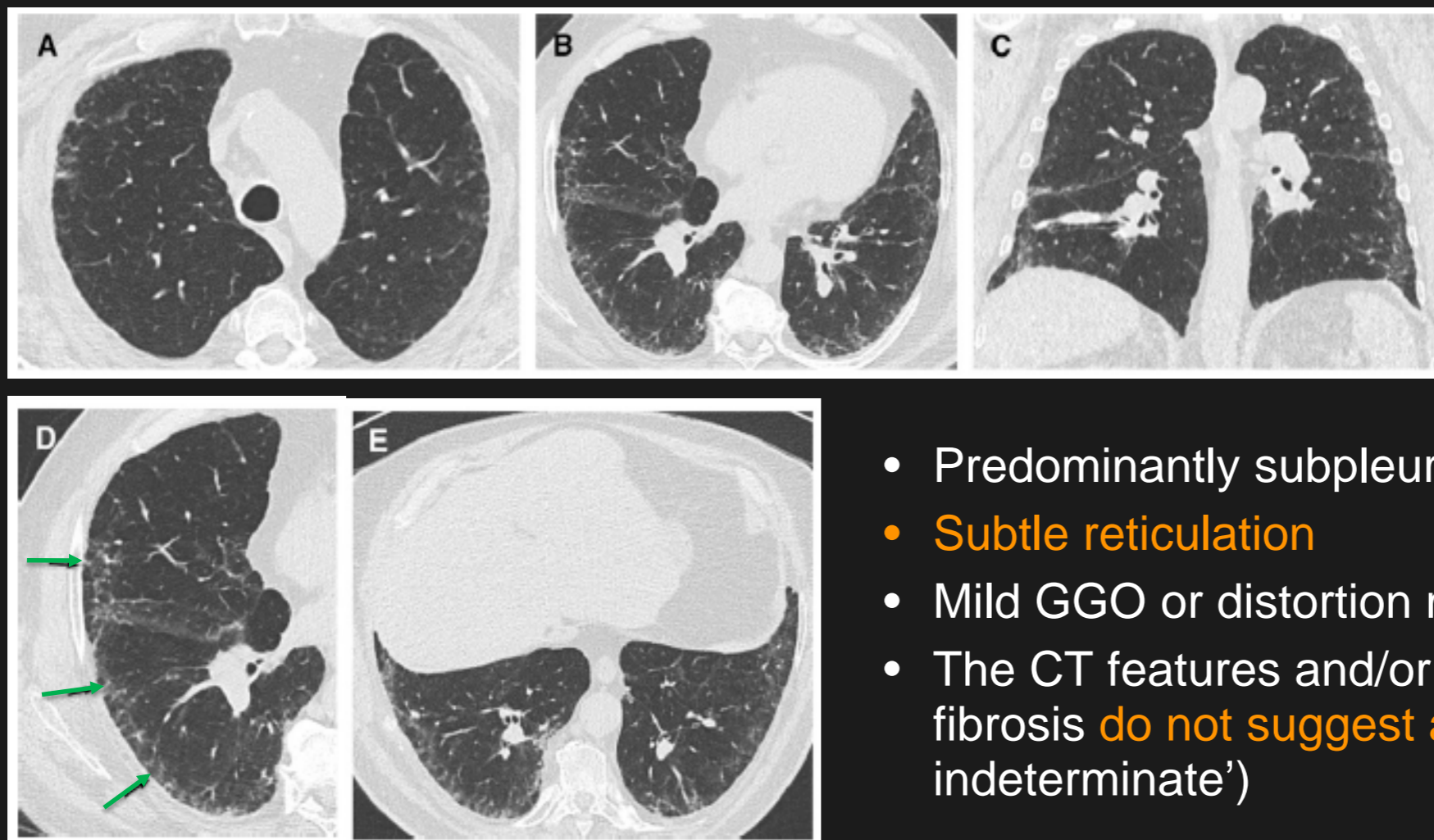
UIP PROBABLE

- Donna, 52 anni
- Familiarità per IPF
- Infermiera. Nega esposizione a sostanze tossiche, allergeni, farmaci, nega fumo
- Autoimmunità negativa
- Asintomatica



UIP PROBABLE

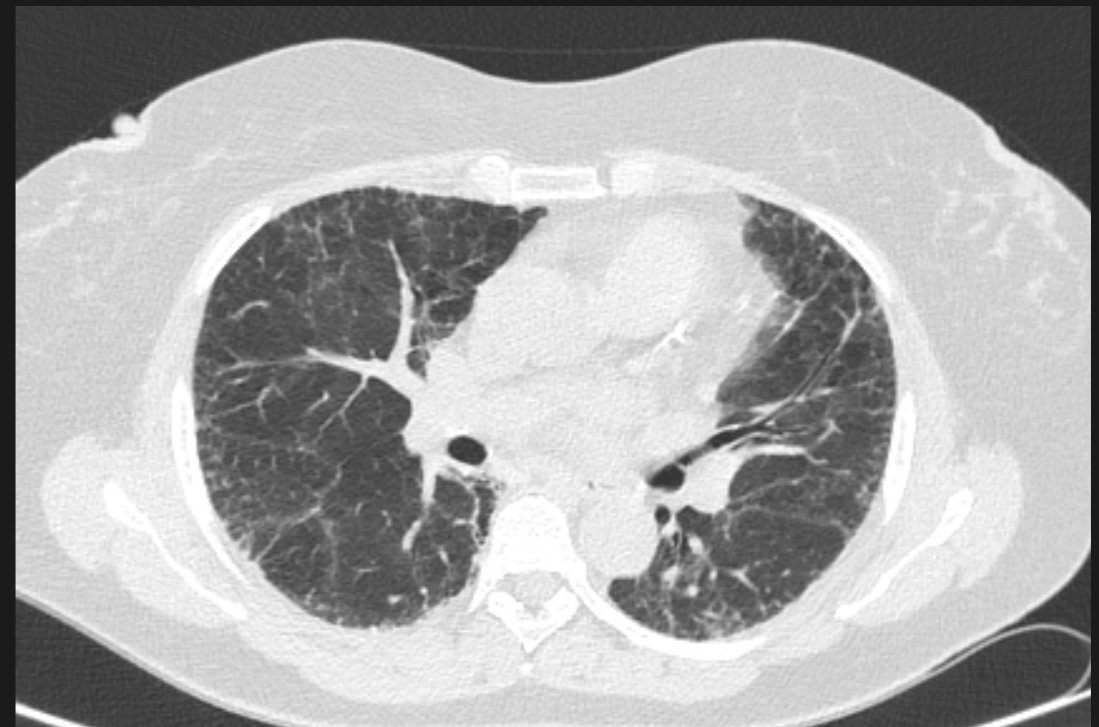
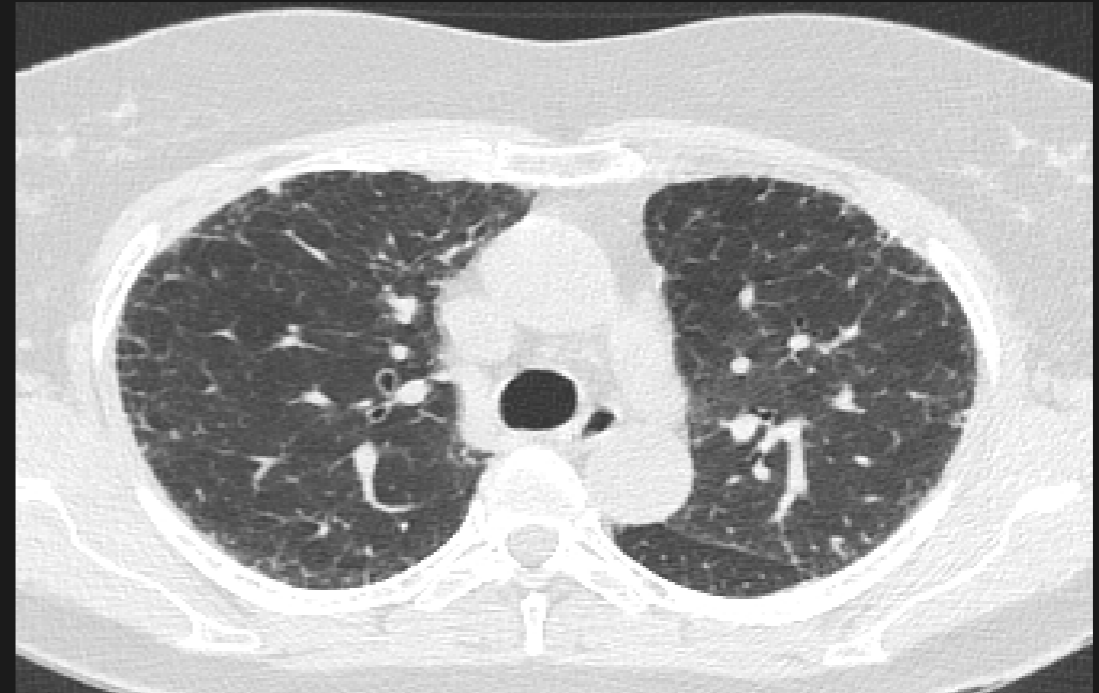




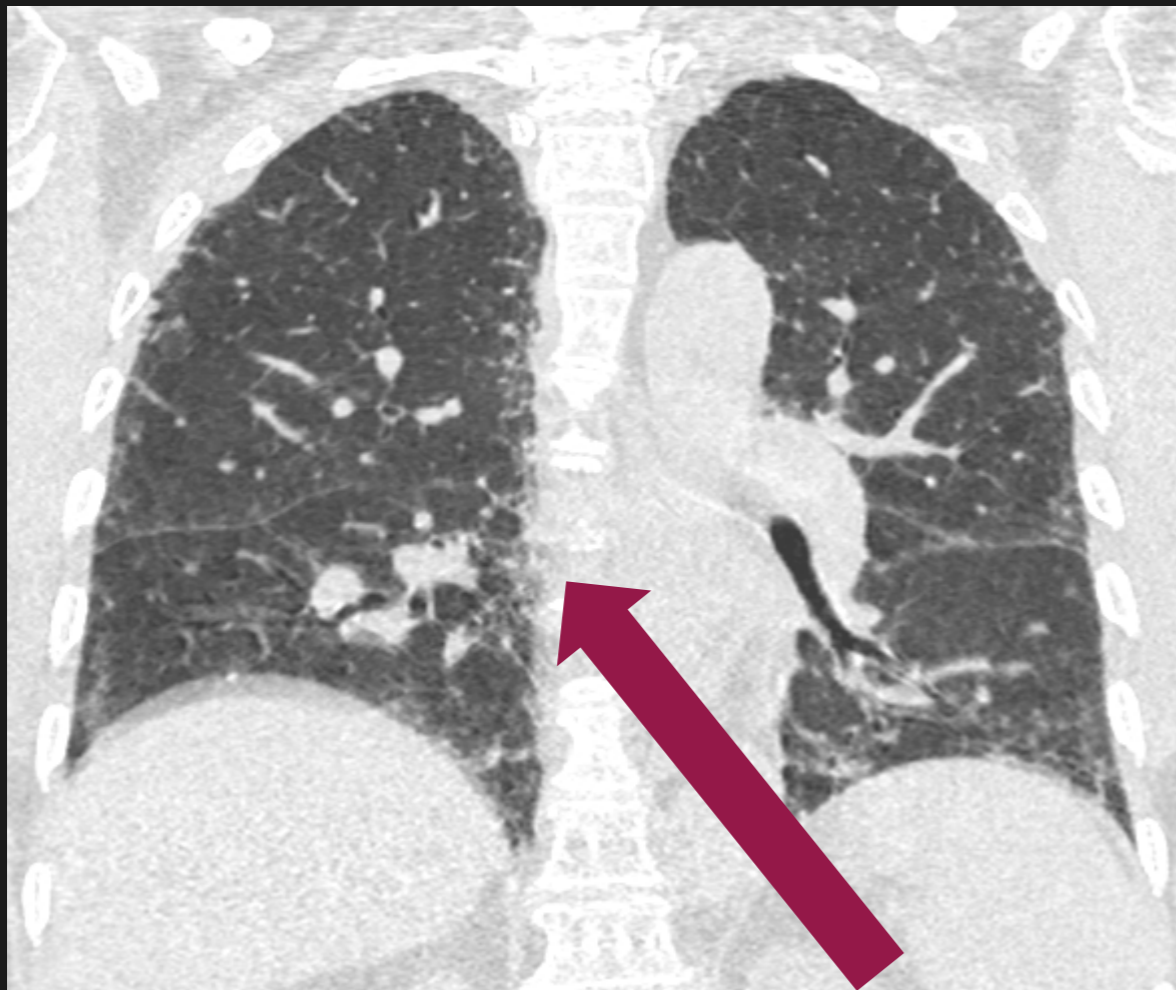
- Predominantly subpleural and basal
- **Subtle reticulation**
- Mild GGO or distortion may be present
- The CT features and/or the distribution of lung fibrosis **do not suggest any specific etiology** ('truly indeterminate')

UIP INDETERMINATE

- Donna, 72 anni
- Casalinga, nega esposizione a sostanze tossiche, allergeni, farmaci, nega fumo
- Nega familiarità
- Autoimmunità negativa ad eccezione di fattore reumatoide debolmente positivo
- Esordio con febbre e tosse resistente a terapia antibiotica



UIP INDETERMINATE



HRTC: NON UIP/ ALTERNATIVE DIAGNOSIS



CT features:

- Cysts
- Marked **mosaic attenuation**
- Predominant GGO
- Profuse **micronodules**
- Centrilobular nodules
- Nodules
- **Consolidation**

Predominant **distribution**:

- Peribronchovascular
- Perilymphatic
- Upper or mid lung

Other:

- Pleural plaques (consider asbestosis)
- Dilated esophagus (consider CTD)
- Distal clavicular erosions (consider RA)
- Extensive lymph node enlargement (consider other etiologies)
- Pleural effusions, pleural thickening (consider CTD/drugs)

ALTERNATIVE DIAGNOSIS

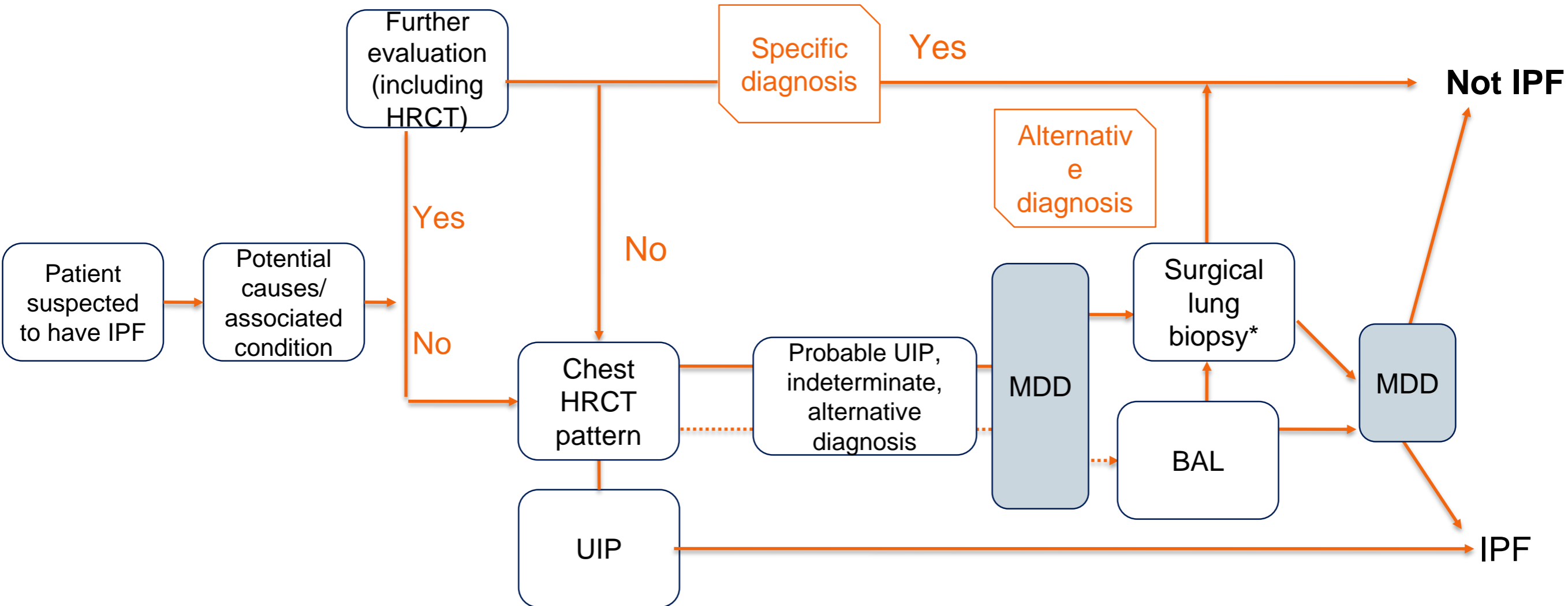


Diagnostic algorithm for IPF

Excluding other causes of ILD

HRCT patterns

Patients categorized as probable UIP, indeterminate for UIP or alternative diagnosis at HRCT



TERAPIE

Agent	2015 guidelines
Nintedanib	Conditional recommendation for use *
Pirfenidone	Conditional recommendation for use *
Anticoagulation (warfarin)	Strong recommendation against use*
Combination prednisone + azathioprine + N-acetylcysteine	Strong recommendation against use†
Selective endothelin receptor antagonist (ambrisentan)	Strong recommendation against use†
Imatinib, a tyrosine kinase inhibitor with one target	Strong recommendation against use*
Dual endothelin receptor antagonists (macitentan, bosentan)	Conditional recommendation against use†
Phosphodiesterase-5 inhibitor (sildenafil)	Conditional recommendation against use*
Antiacid therapy	Conditional recommendation for use ‡
N-acetylcysteine monotherapy	Conditional recommendation against use†
Antipulmonary hypertension therapy for idiopathic pulmonary fibrosis-associated pulmonary hypertension	Reassessment of the previous recommendation was deferred
Lung transplantation: single vs bilateral lung transplantation	Formulation of a recommendation for single vs bilateral lung transplantation was deferred

Importanza di conoscere quali sono i farmaci fortemente **SCONSIGLIATI**, come Prednisone, Azatioprina, N-acetilcisteina.

TAKE HOME MESSAGE

SCHEDA RACCOLTA DATI PER PATOLOGIE INFILTRATIVE DIFFUSE POLMONARI

Nome _____ Cognome _____

Data di nascita: _____ Sesso: F M

ANAMNESI

Fumatore N° pacchetti al giorno: _____ Da (età inizio): _____

Ex fumatore (>3 aa) Da (età di interruzione): _____

Non fumatore

Attività lavorativa (specificare mansioni) _____

Esposizione a (specificare): Silice Asbesto Metalli duri _____

Sostanze inorganiche _____ Sostanze organiche _____

Assunzione farmaci (specificare quali): _____

Assunzione sostanze di abuso (specificare quali): _____

Infezioni respiratorie: In atto Da quanto tempo: _____

Pregresse

Datesi allergica: No

Si Specificare: _____

Malattie del connettivo e/o autoimmuni note: No

Si Specificare: _____

Altre malattie note: No

Si Specificare: _____

Sintomatologia attuale: No

Si Specificare: _____

Familiarità: No

Si Specificare: _____

Eventuali diagnosi istologiche precedenti: No

Si Specificare: _____

FUNZIONALITA' RESPIRATORIA

Normale

Alterata: Ostruttiva Restrittiva Mista

Specificare: TLC (% pred): _____ DLCO (%): _____ PaO2 (mmHg): _____

FVC (% pred): _____ FEV1 (% pred): _____ FEV1/FVC (%): _____

BIBLIOGRAFIA

AMERICAN THORACIC SOCIETY DOCUMENTS

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Review



Diagnostic criteria for idiopathic pulmonary fibrosis: a Fleischner Society White Paper

David A Lynch, Nicola Sverzellati, William D Travis, Kevin K Brown, Thomas V Colby, Jeffrey R Galvin, Jonathan G Goldin, David M Hansell, Yoshikazu Inoue, Takeshi Johkoh, Andrew G Nicholson, Shandra L Knight, Suhail Raoof, Luca Richeldi, Christopher J Ryerson, Jay H Ryu, Athol U Wells