

# PCID liées à l'intoxication tabagique

P. Fajadet, J. Giron, N. Sans, et le club thorax.

# Thorax et tabac

BPCO: Emphysème, bronchite chronique

KBP

Cardiopathie ischémique

Bronchiolite respiratoire, RB-ILD

DIP

HLP

UIP, NSIP

SEF

AEP

# PCID chez un tabagique

Liée au tabac ?

Implications cliniques et thérapeutiques ?

arrêt tabac, corticoïdes, I° Suppresseurs

Biopsie chirurgicale ?

Pb associations: amiante, PHS, BBS.

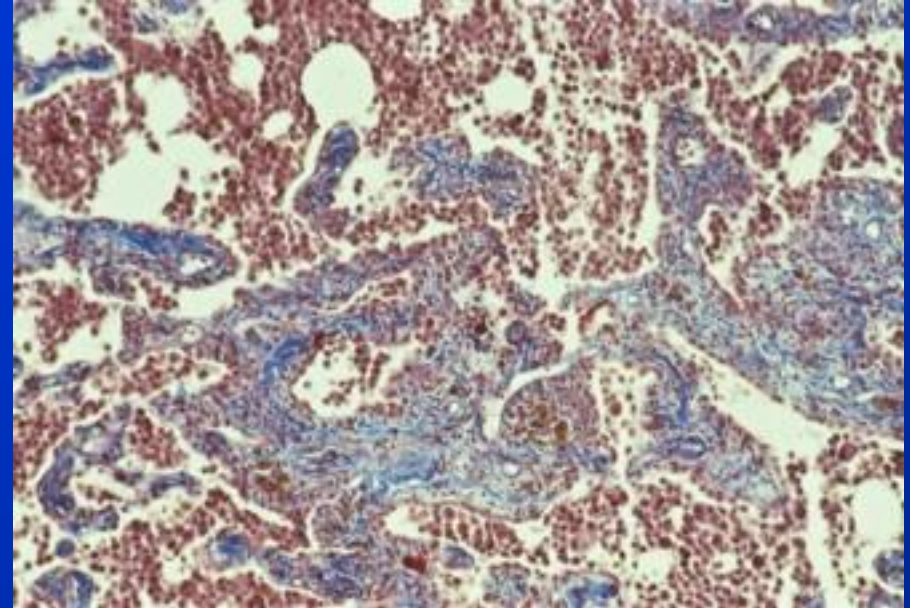
Dalphin JC, Debieuvre D, Pernet D, et Prevalence and risk factors for chronic bronchitis and farmer's lung in French dairy farmers. Br J Ind Med 1993; 50:941-944

# PCID et Tabac .

Démembrement Histologique .

« Macrophage-related lung diseases »

Spectre large: RB, RB-ILD,  
DIP, HX, Emphysème



Paul Caverivière: DIP

# Cigarette Smoke

Increased numbers of cells and secretions

Macrophage

Attracts  
Neutrophils  
Monocytes  
Eosinophils  
CD8+ lymphocytes

Elastolysis  
Reactive oxygen species

TGF-Beta 1  
CTGF

Tissue destruction resulting in  
emphysema

Fibrosis of  
bronchioles and alveolar walls

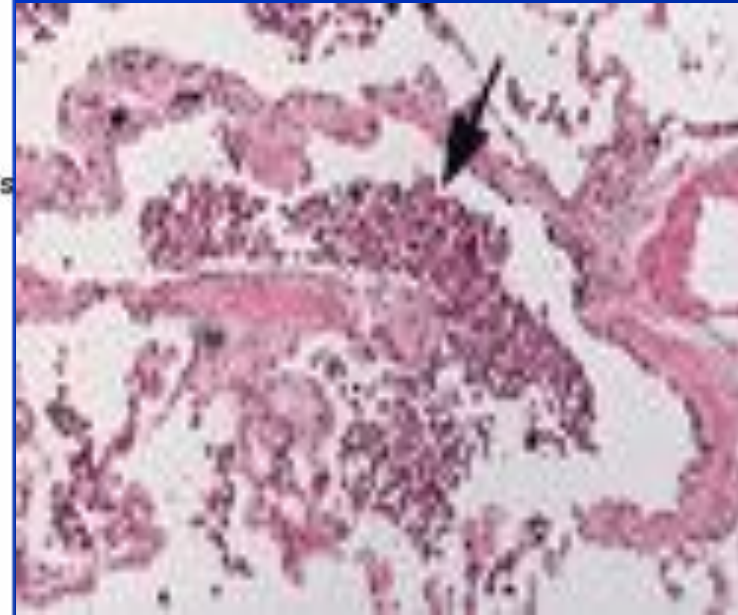
Smokers with RB

± emphysema, airway fibrosis, alveolar wall fibrosis

RB-ILD

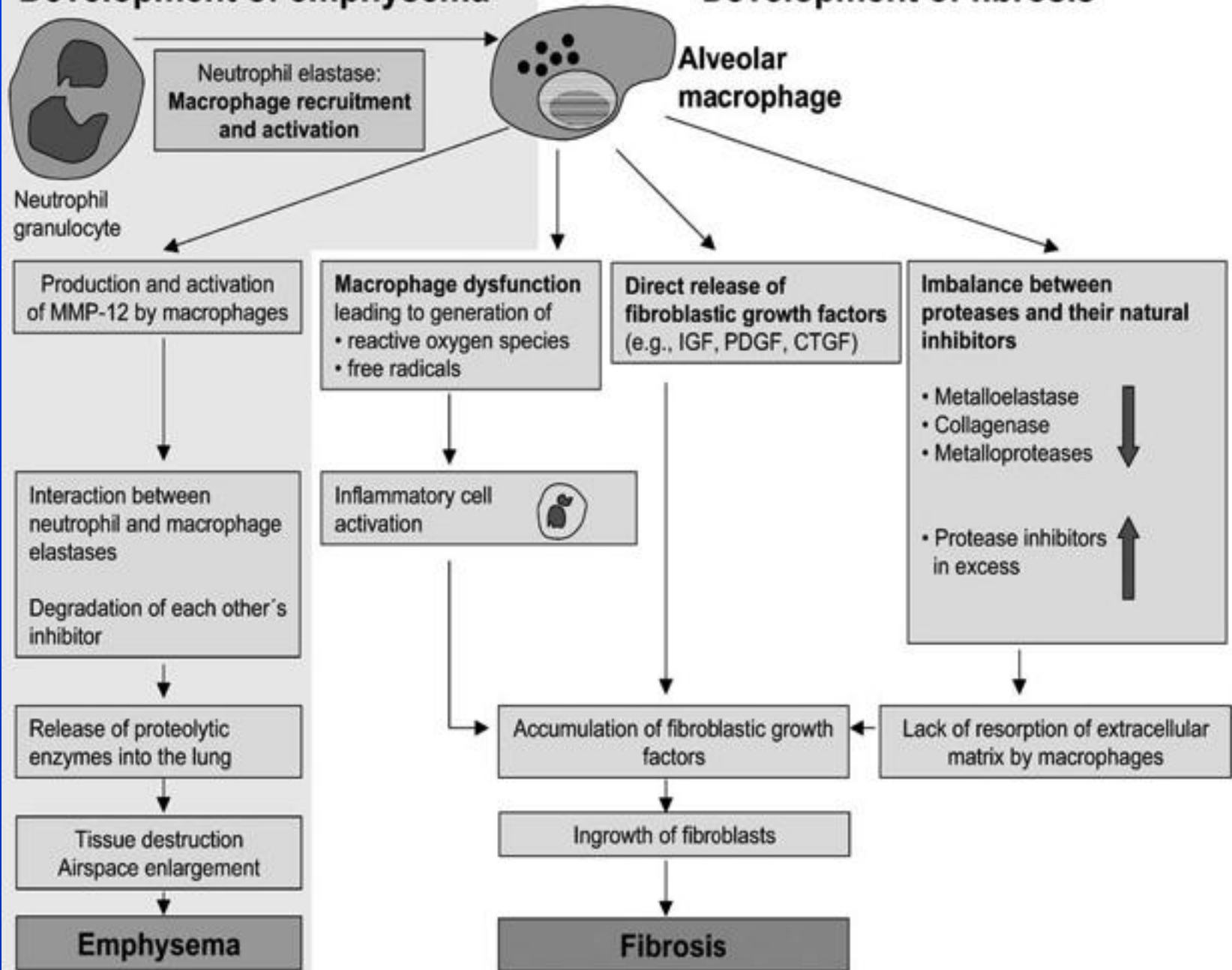
DIP

PLCH



## Development of emphysema

## Development of fibrosis



# Thorax et tabac ( hors K et BPCO)

Bronchiolite respiratoire, RB-ILD

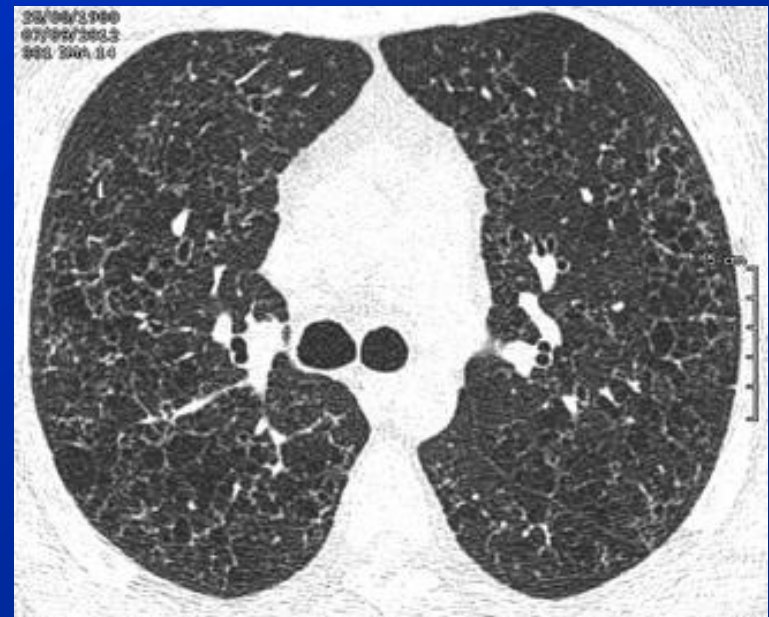
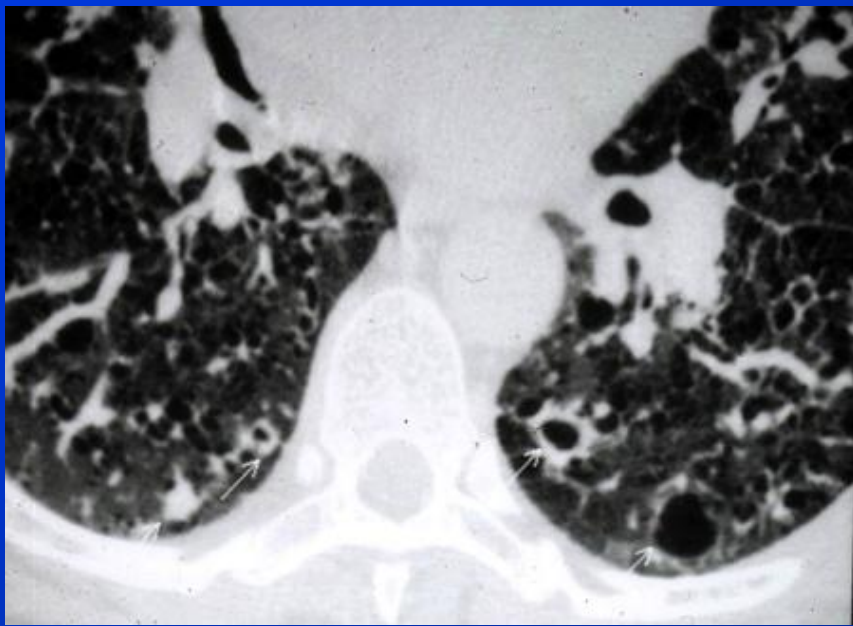
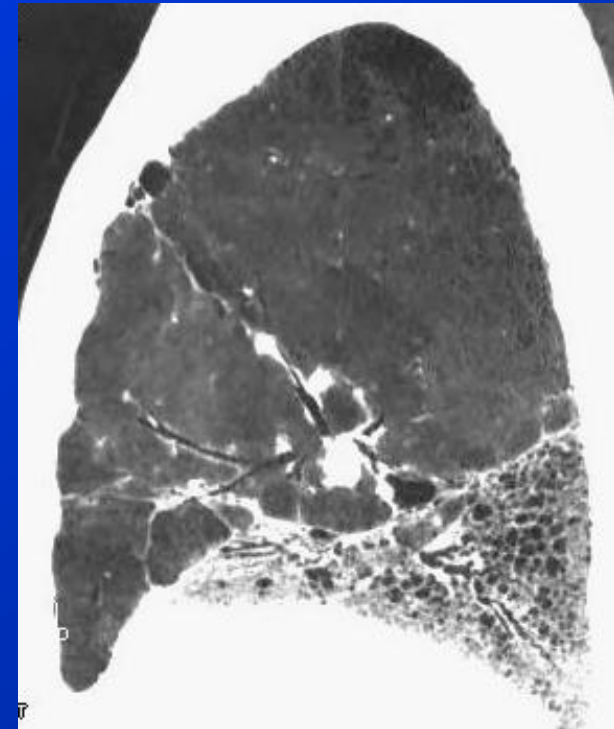
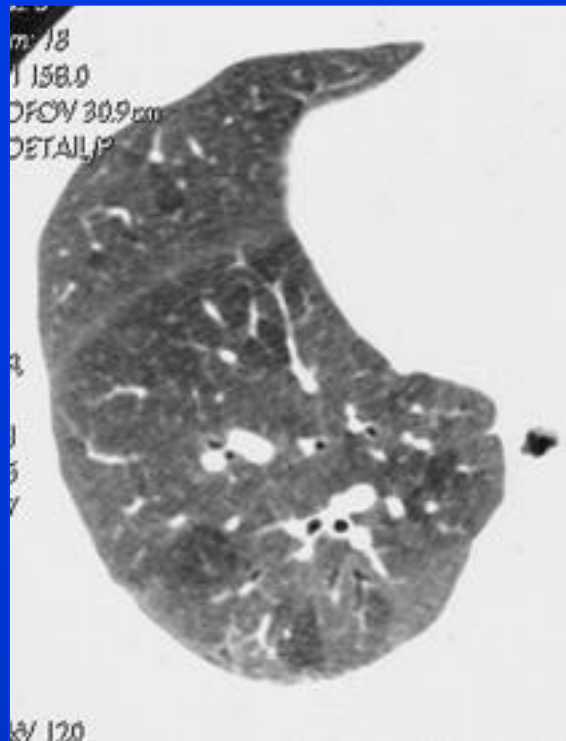
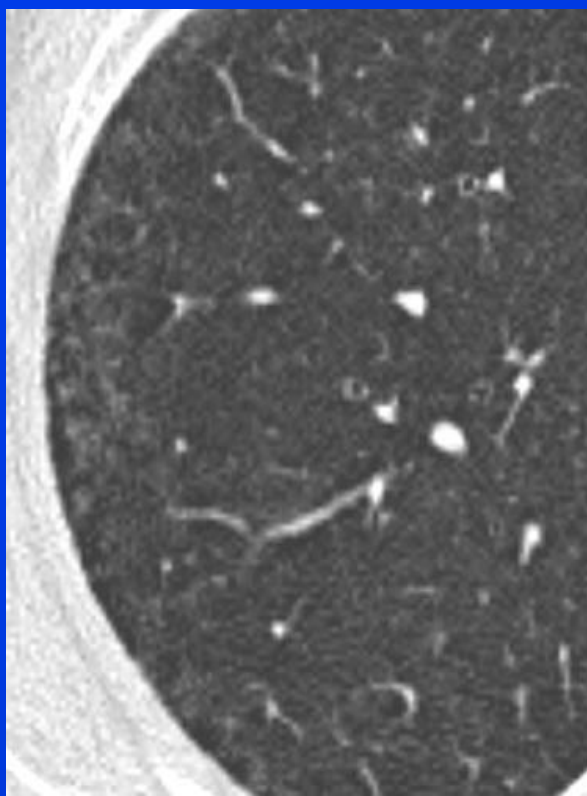
DIP

HX

UIP, NSIP

SEF

AEP





# Bronchiolite Respiratoire et RB ILD

R.B. : Fumeurs +++

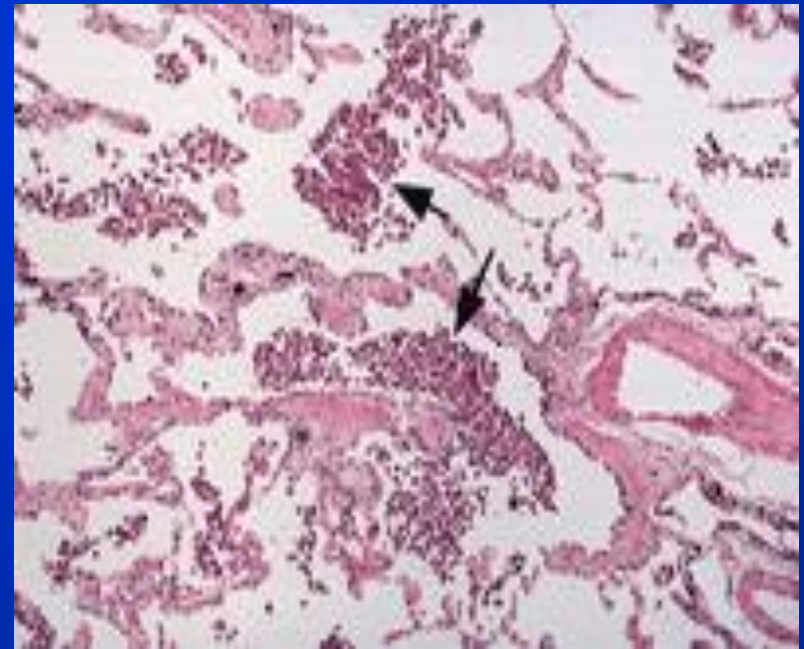
Modérée, focale .

Asymptomatique

Macrophages pigmentés  
alvéoles + B. R. .

Infla.péri B.R.

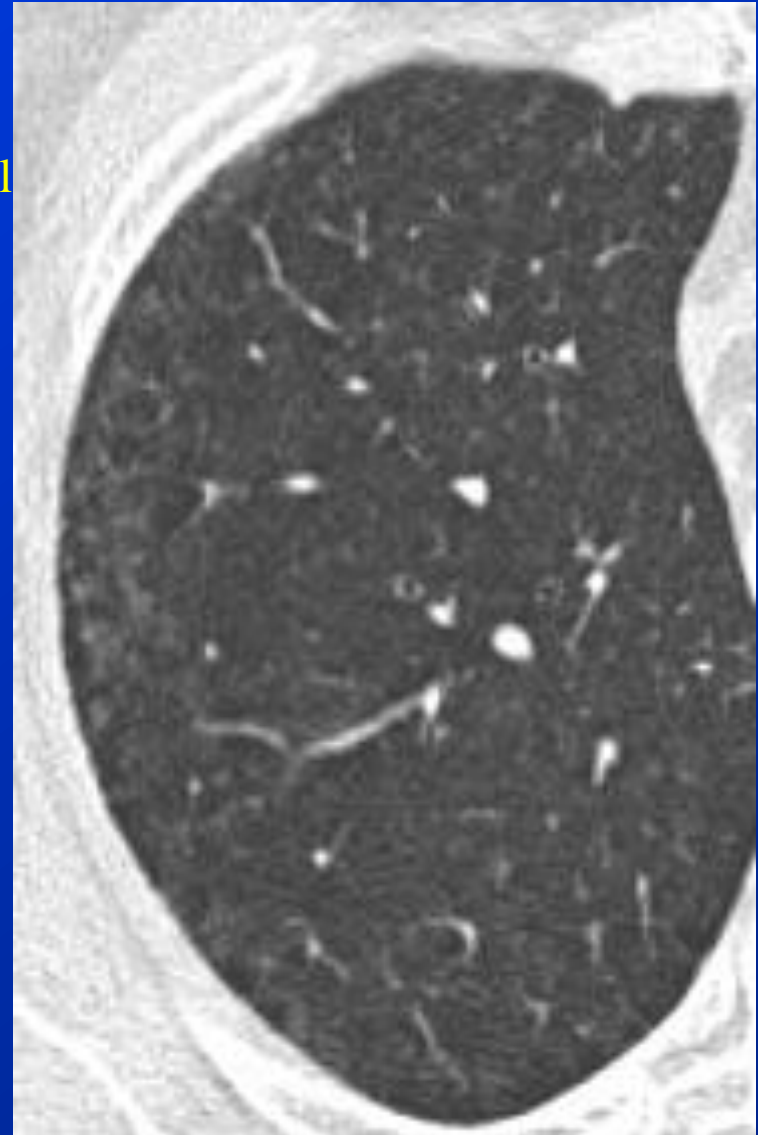
Bronchiolisation septa  
alvéolaires .

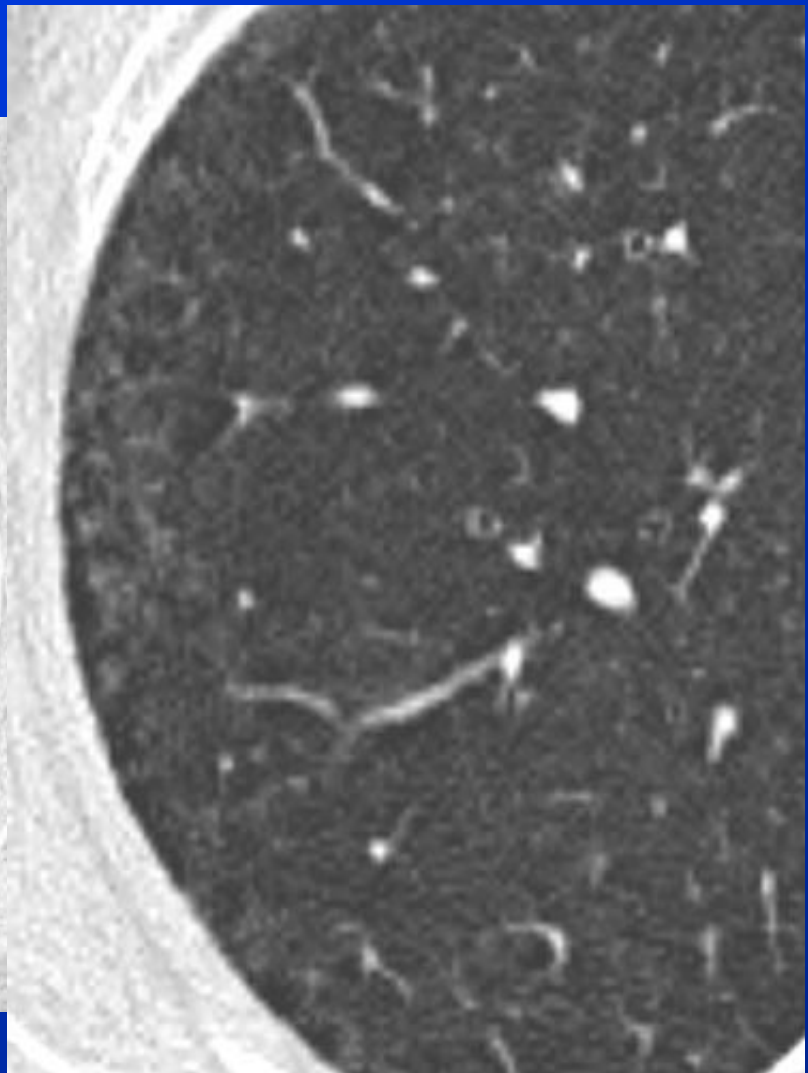


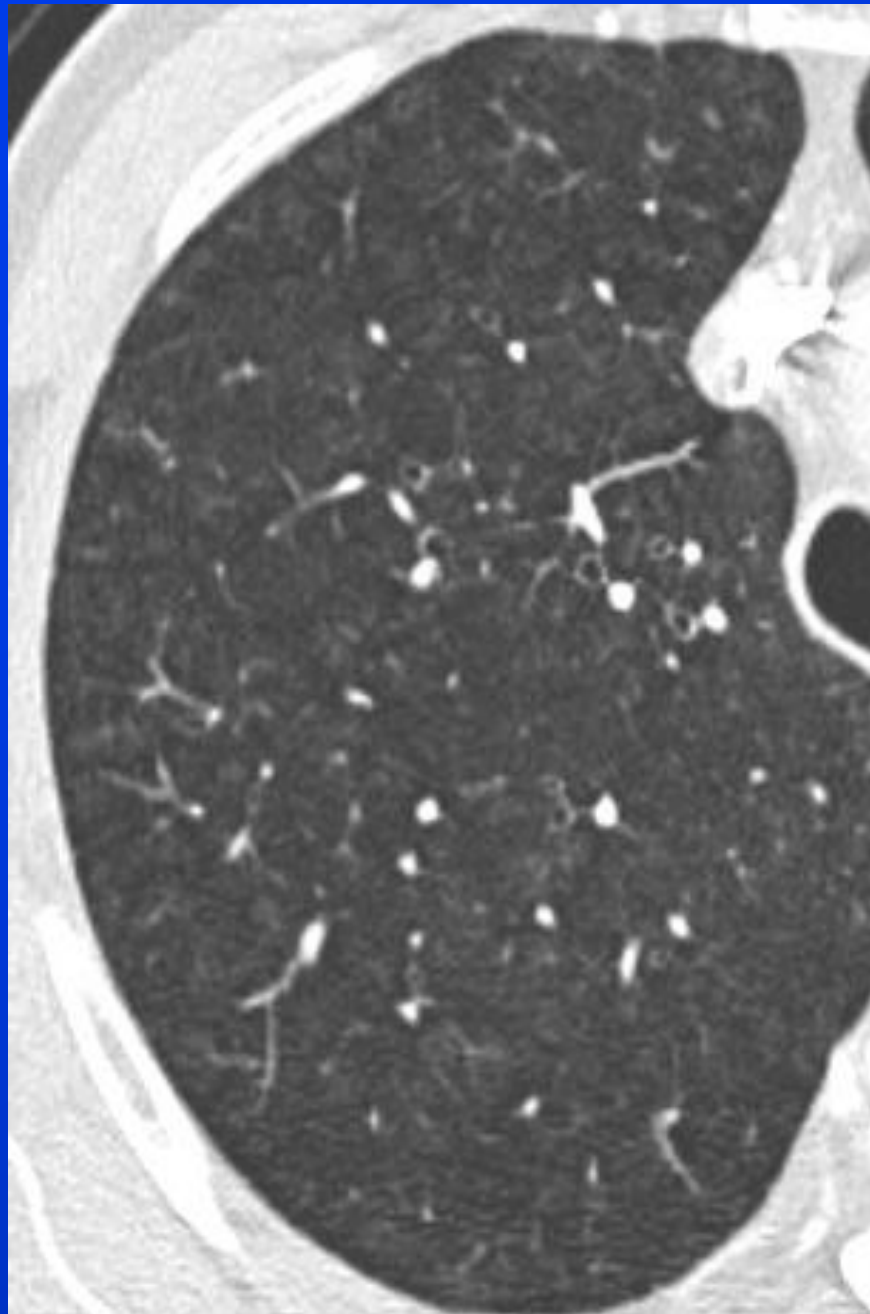
# Bronchiolite Respiratoire

Lobe SUP. ++  
Micro nodules C.L.  
Ep. Bronchiolaire  
VD  
Trappage expiratoire  
Pas de fibrose  
Emphysème

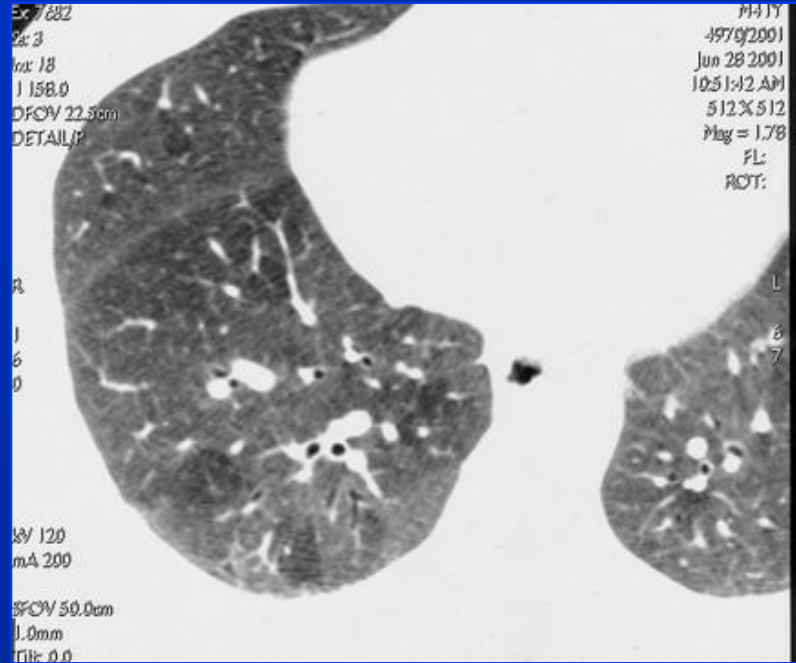
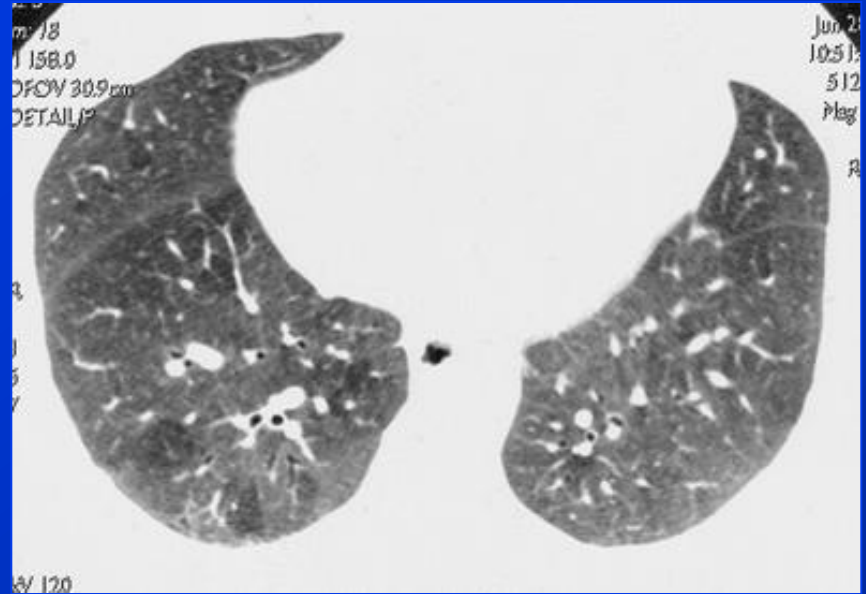
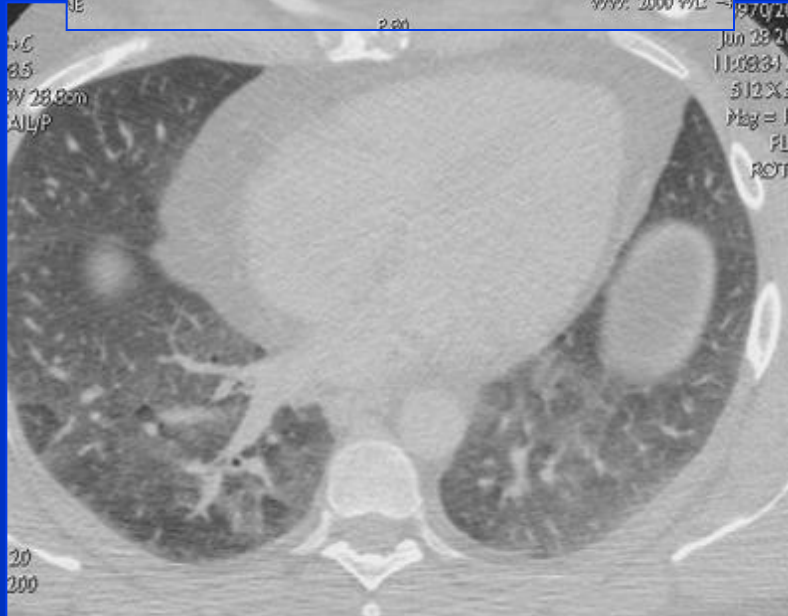
Rémy-Jardin M Radiol. 1993







# RBILD: VD et trappage

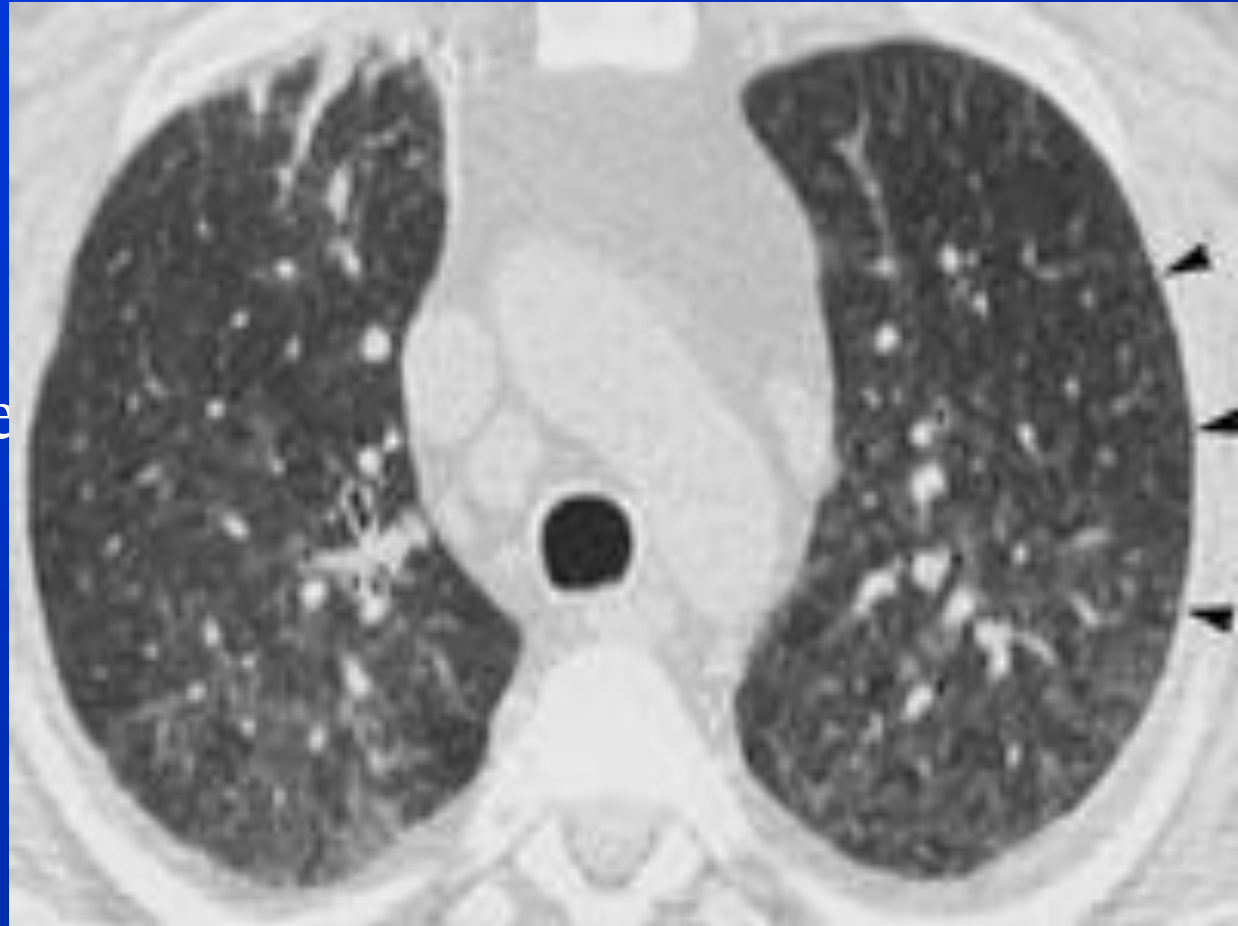


# RB-ILD

1 TDM

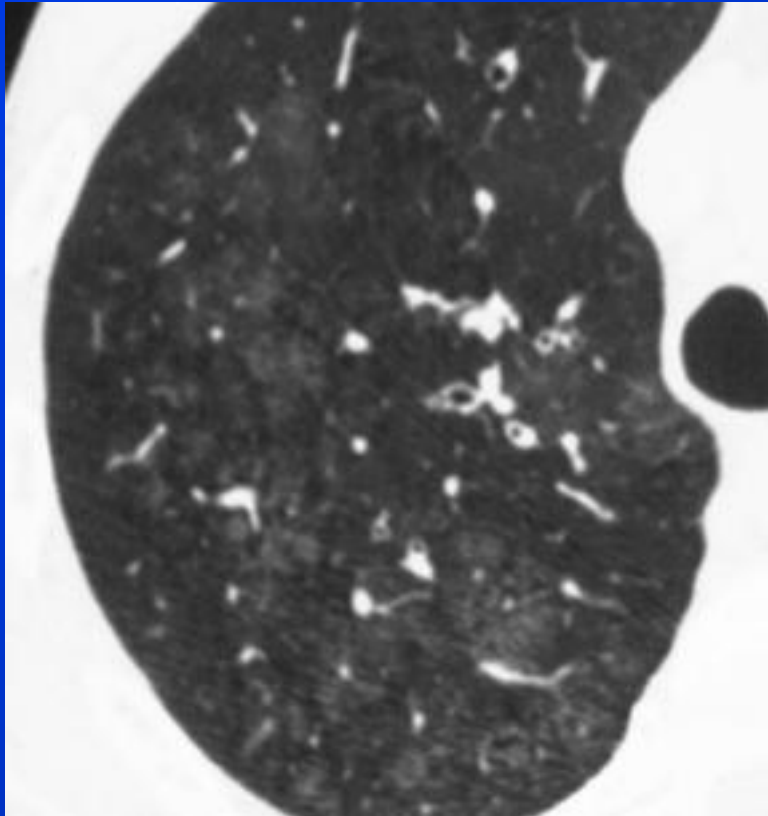
1 V.D.

1 +/- Opacités linéaire

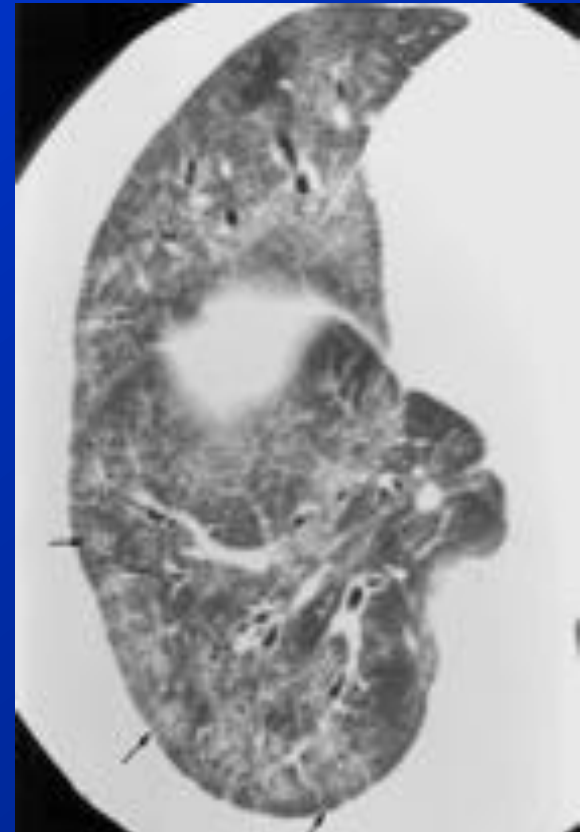


# RB-ILD : Dg Différentiel .

PHS



NSIP



# DIP

Liebow 1965 .

Fumeurs +++

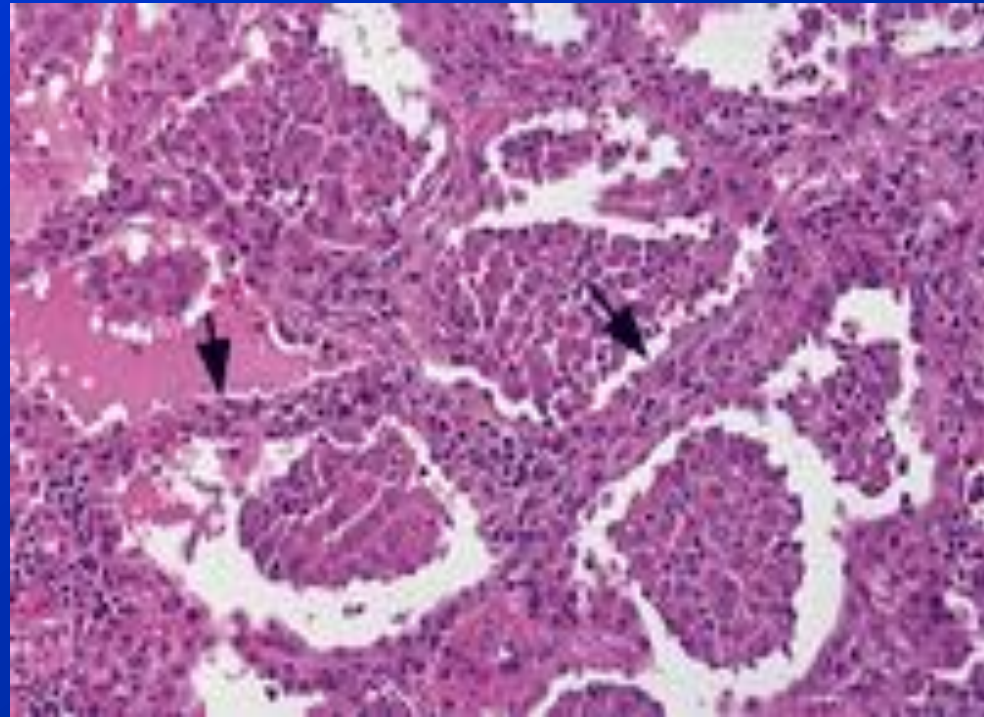
Dyspnée + toux sèche .

Accumulation Intra-  
alvéolaire de  
Macrophages

Fibrose septo-Alv.  
Modérée

Stop tabac + corticoTh.  
= Amélioration -Stab.  
= 75 %

Pas de Tt = Aggrav. Ds  
60 %



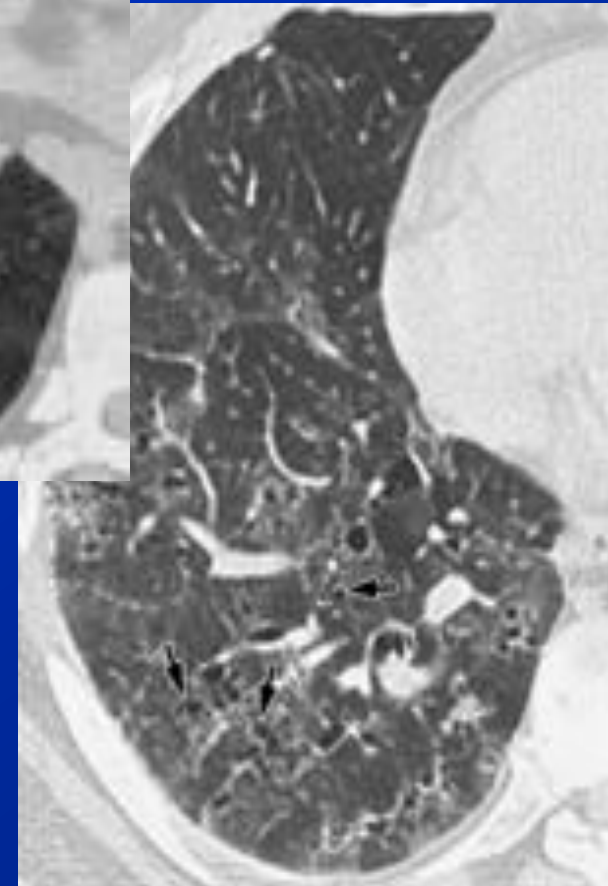


# DIP: TDM

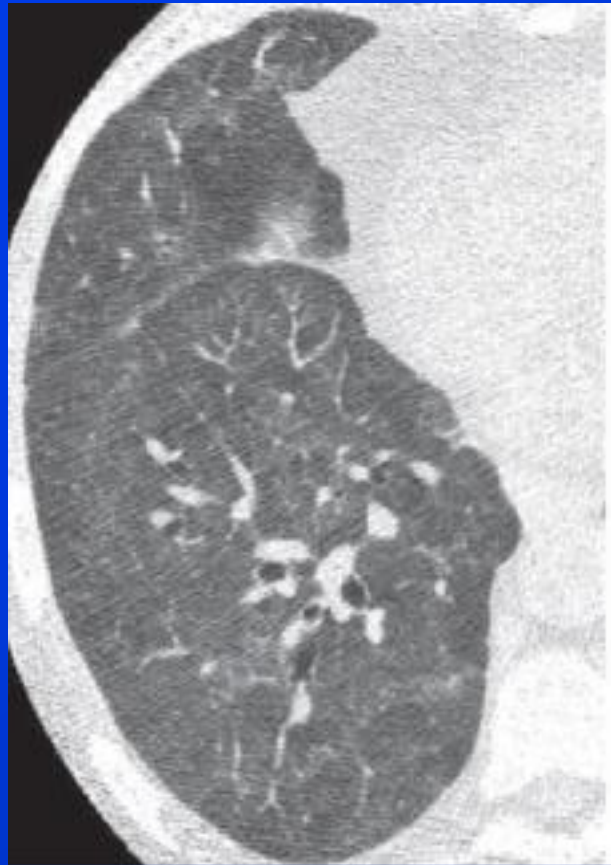
Remplissage Alv.  
Macrophagique = V.D.  
diffus ou hétérogène .

Fibrose Par. Alv. = V.D. +  
Rétic. I. Lob. (+ Kystes ).

Topo. : Sup + INF +++



Hartman TE, Primack SL, Swensen SJ, et al. Desquamative interstitial pneumonia: thin-section CT findings in 22 patients. *Radiology*. 1993;187:787-790.

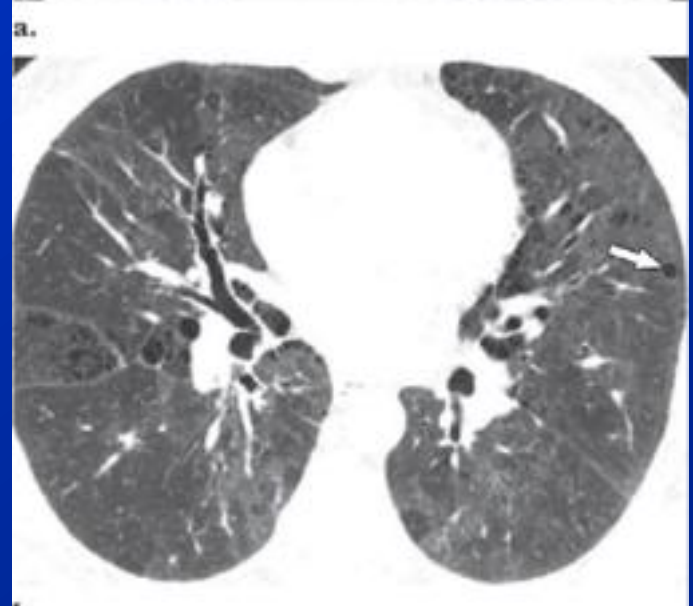
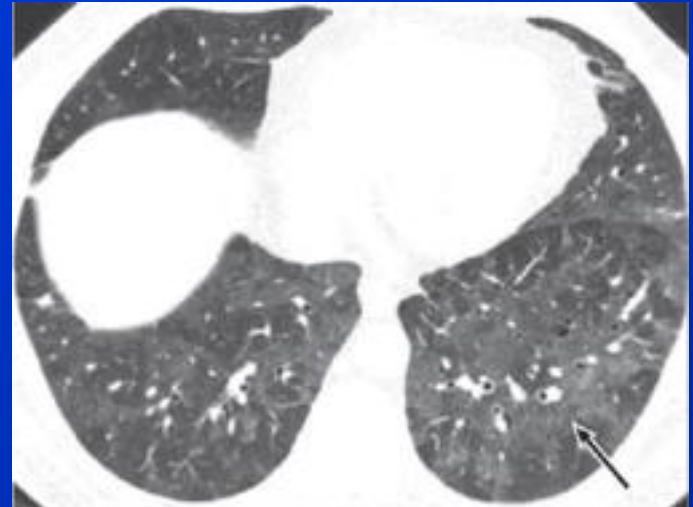


# DIP vs RB-ILD

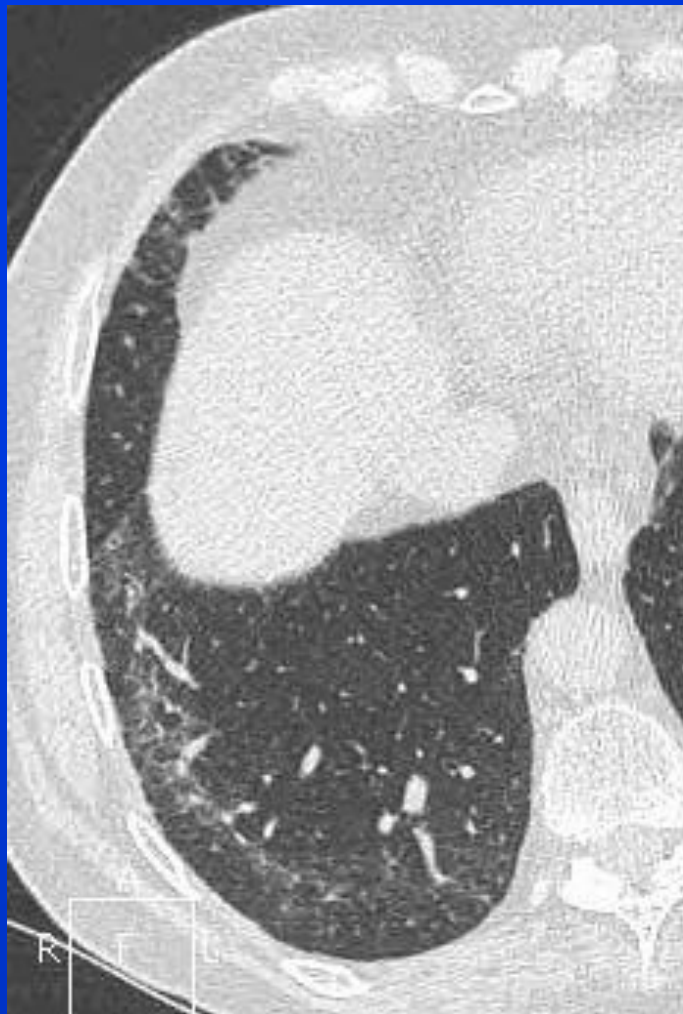
VD + diffus

Peu nodulaire

LI >> LS



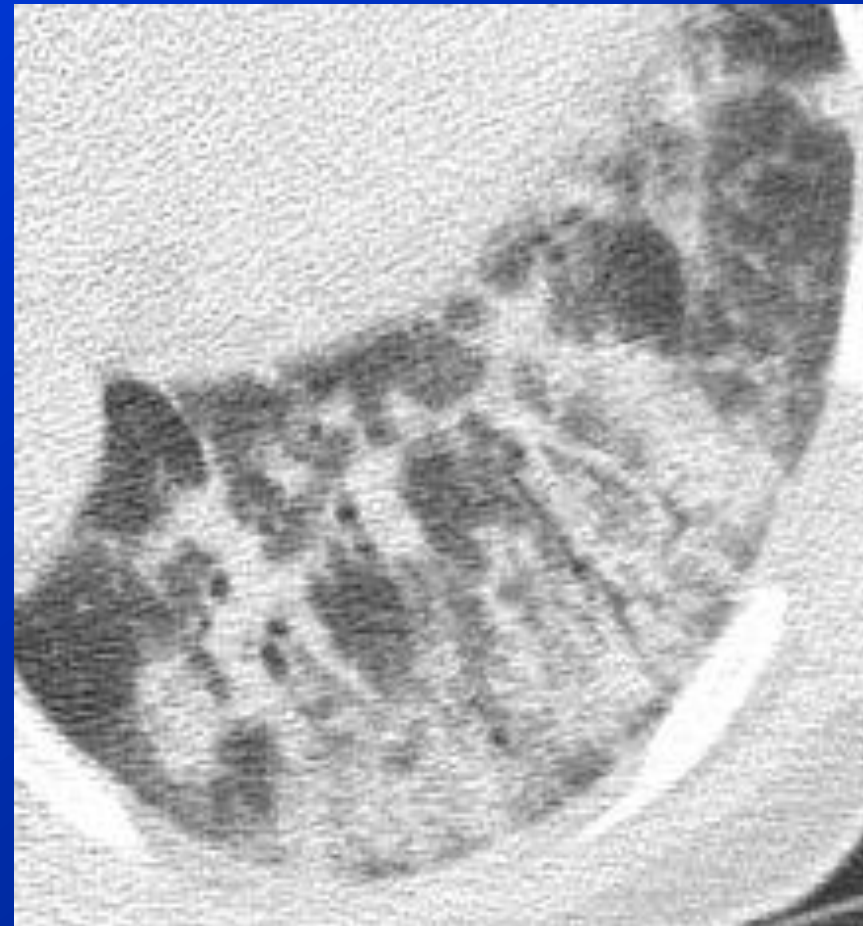
# DIP:Dg Différentiel



PHS

NSIP

Inf.: PCP



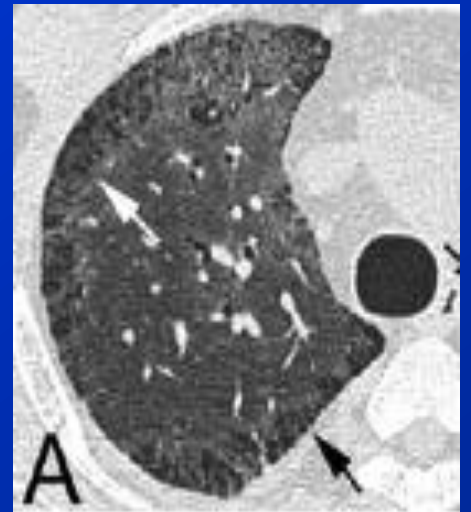
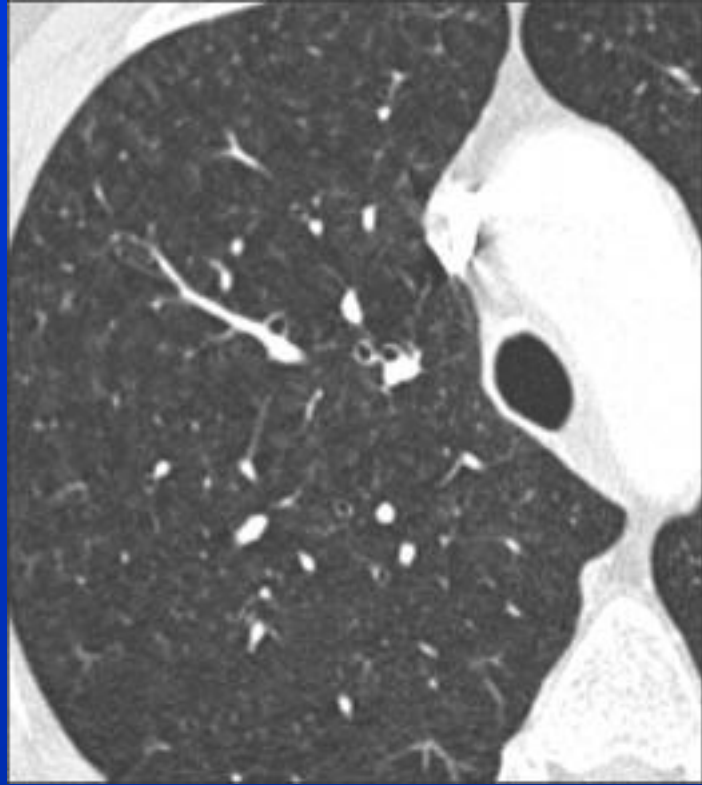
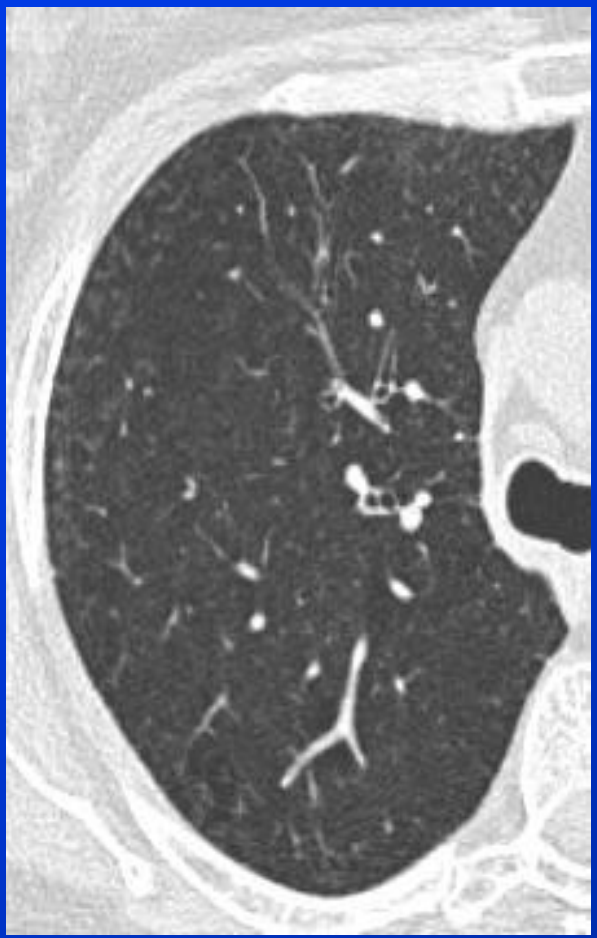
# Le continuum des Atteintes P. liées au TABAC .

Condition	Symptoms and Physiologic Impairment	Pathologic Feature	CT Feature	
			Ground-Glass Opacification	Centrilobular Nodules
RB*	Uncommon	Bronchiolocentric	Small patches	Mild
RB-ILD	Severe	Macrophages extend into peribronchiolar region	Extensive	Extensive
DIP	Severe	Diffuse intraalveolar macrophages	Extensive	Uncommon

Heyneman LE, Ward S, Lynch DA, et al. Respiratory bronchiolitis, respiratory bronchiolitis-associated interstitial lung disease, and desquamative interstitial pneumonia: different entities or part of the spectrum of the same disease process?

Am J Roentgenol. 1999;173:1617–1622.

# Le continuum des Atteintes P. liées au TABAC .



# Cas clinique

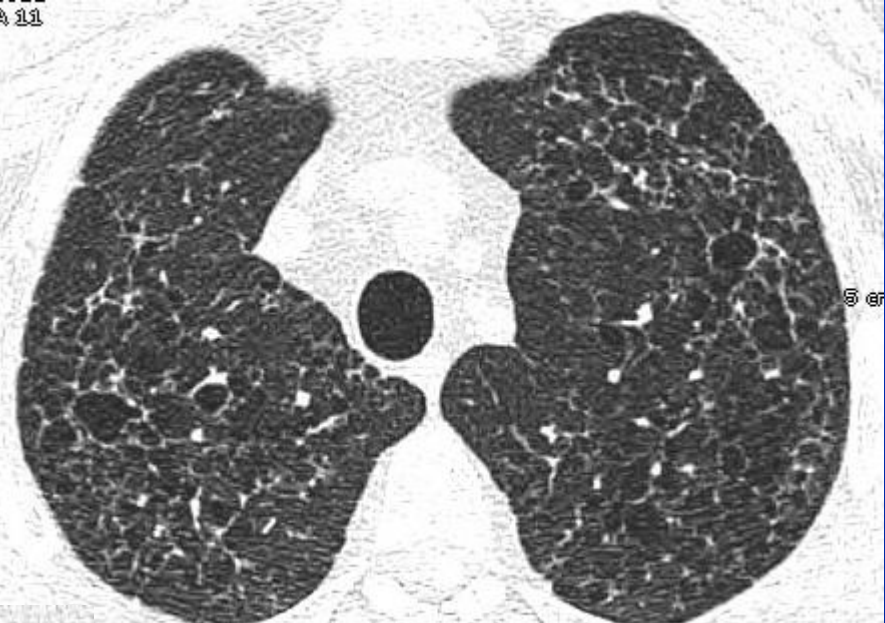
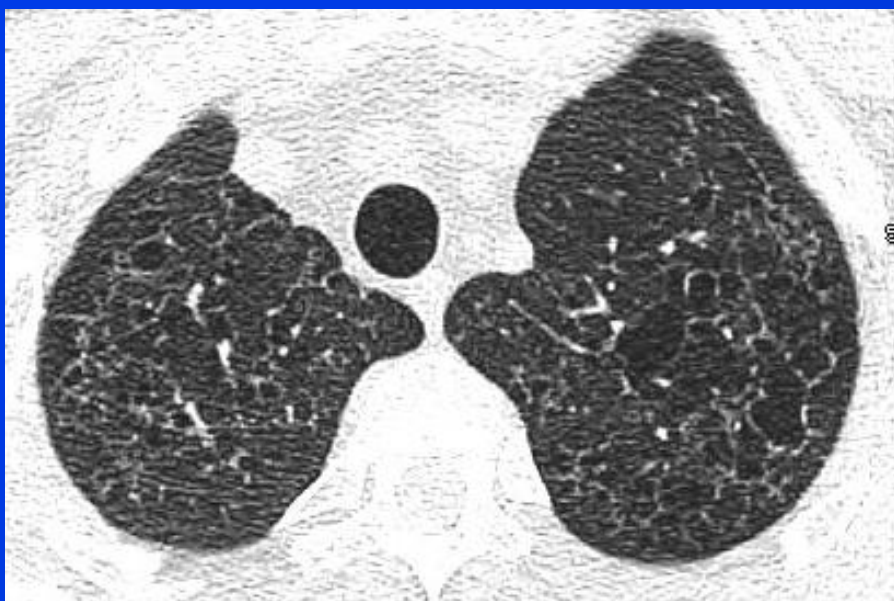
Homme 32 ans

Tabagisme +++

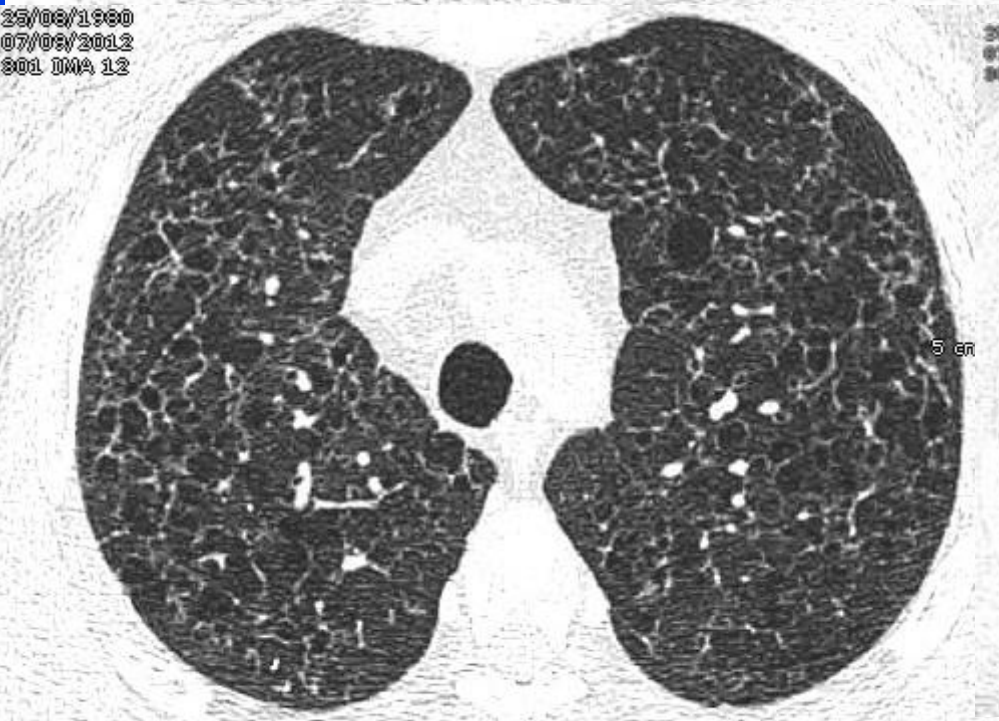
Dyspnée d'effort

EFR: Sd mixte

IMA 11



25/08/1980  
07/08/2012  
801 IMA 12

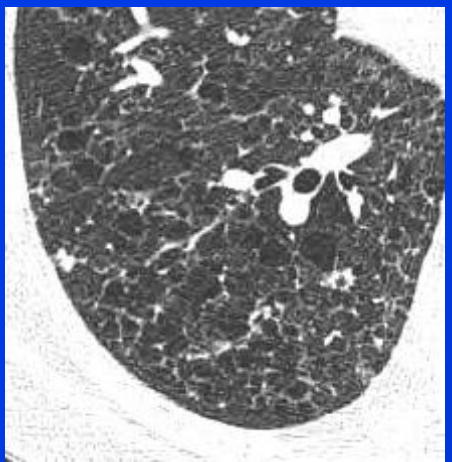


25/08/1980  
07/08/2012  
801 IMA 12

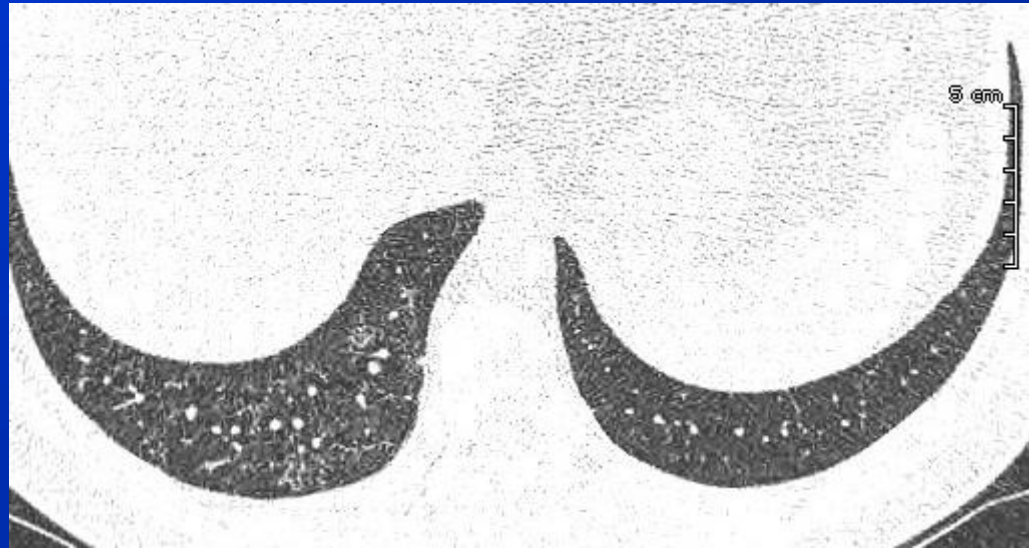
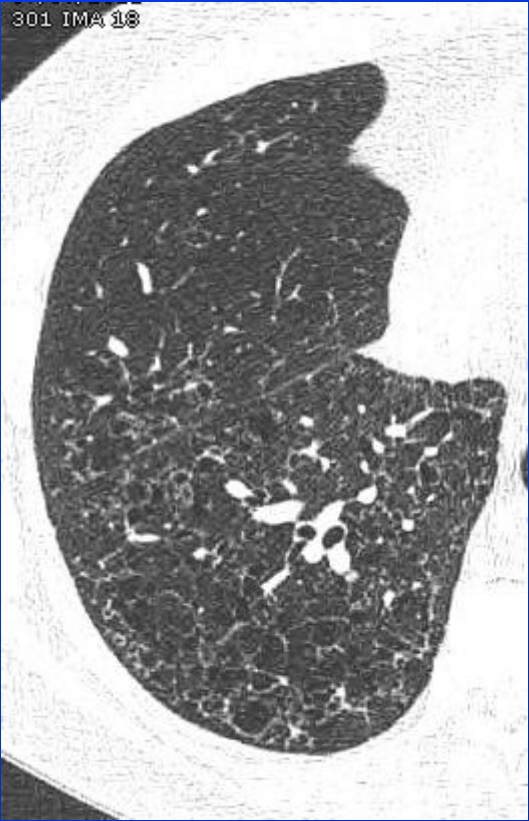




35/04/1990  
07/04/1992  
000 300A 10



301 IMA 18



# Histiocytose langerhansienne pulmonaire (HLP)

Etiologie inconnue : rare 3,4 % des PCID

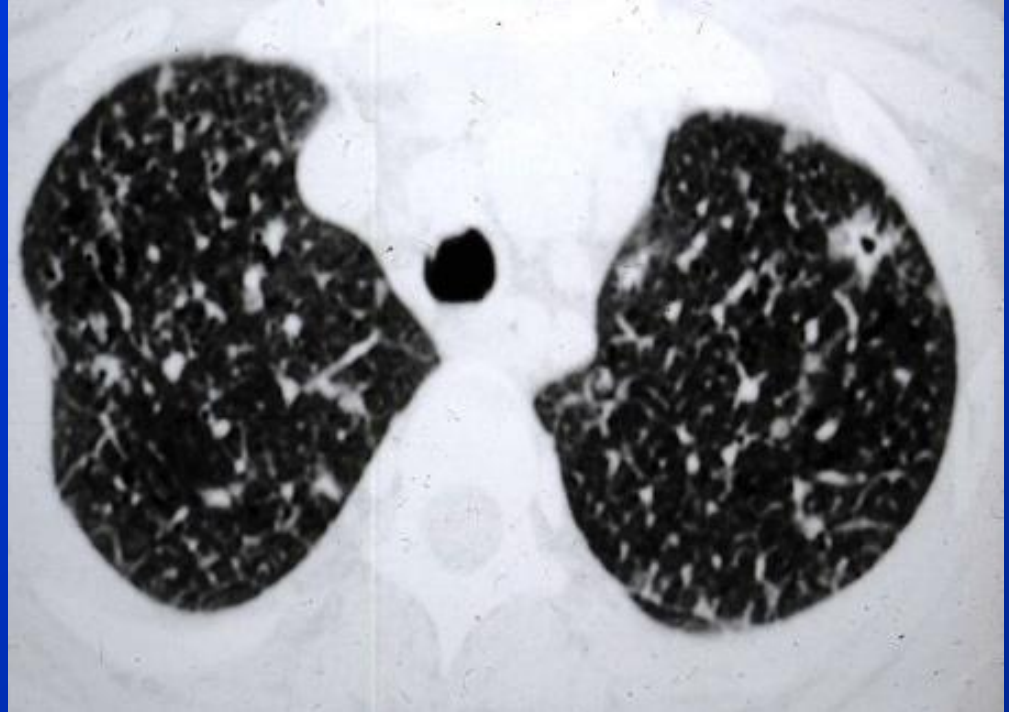
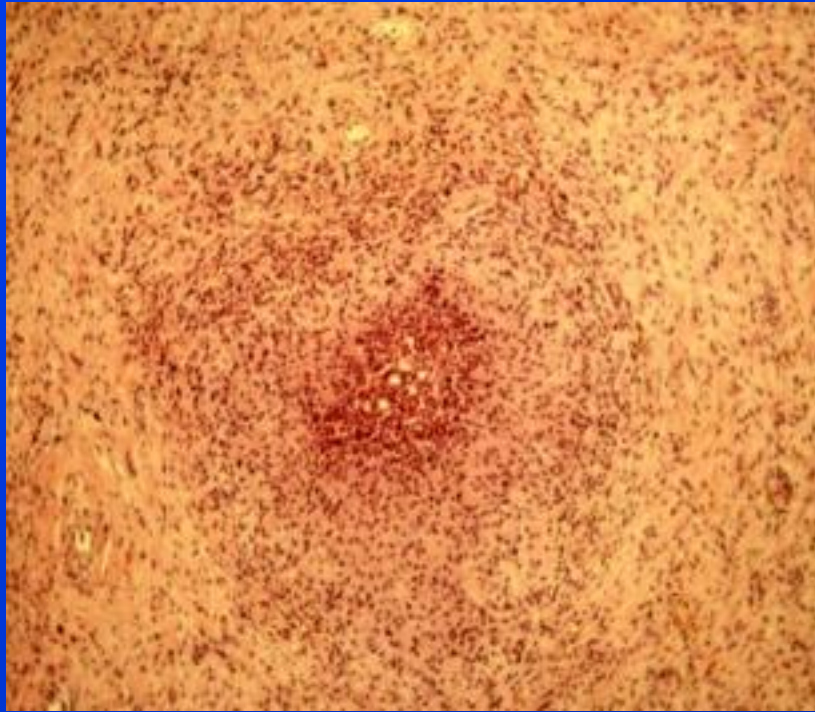
( GAENSLER )

Age moyen - H = F

Tabagisme ( 90 % )

Toux - Dyspnée - PNO ( 20 % )

LBA: macrophages , histiocytes CD1a > 5%



# HLP : RT

Réticulo-Nodulaire et/ou Rayon de Miel

Atteinte bilatérale

Respect des angles costo-  
diaphragmatiques

LACRONIQUE J. et al Thorax 1982 ; 37 : 104-9

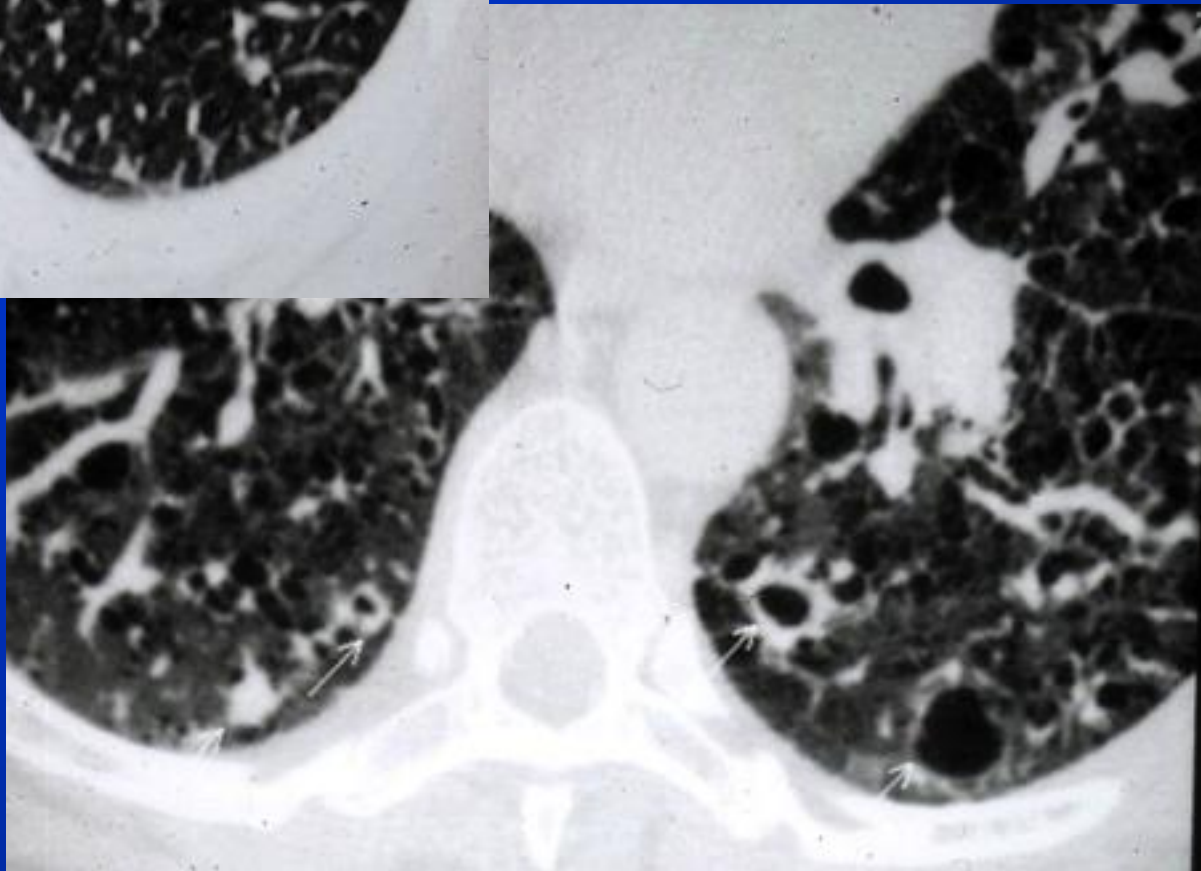
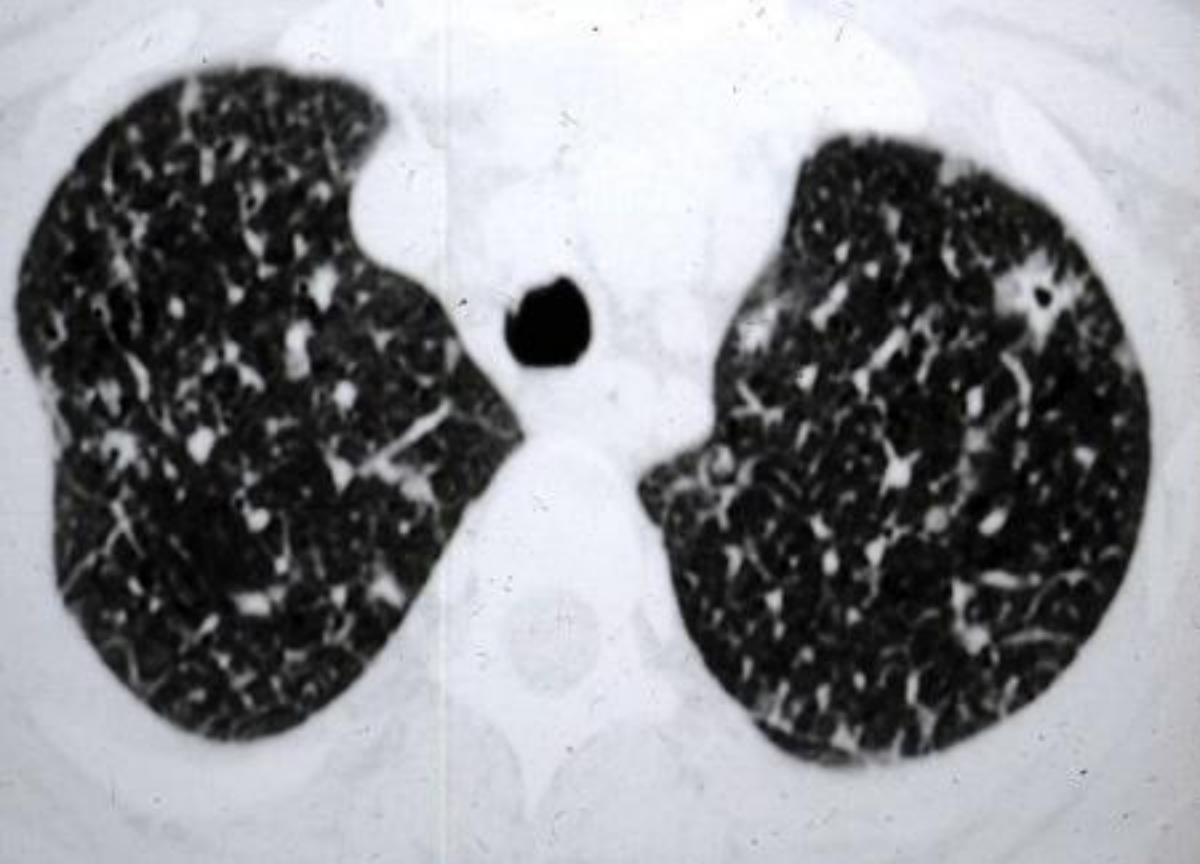
FRIEDMAN Medicine 1981 ; 60 : 385-96

# HLP : ASPECT TDM - HR

KYSTES +++++

TRIADE : Nodule - Nodule troué - Kyste

- GIRON J. Ann. Radiol. 1990 ; 33 : 31-8
- BRAUNER M. Rad. 1989 ; 172 : 255-8



# Dg Diff.: Métastase kystique (surtout si os ++)

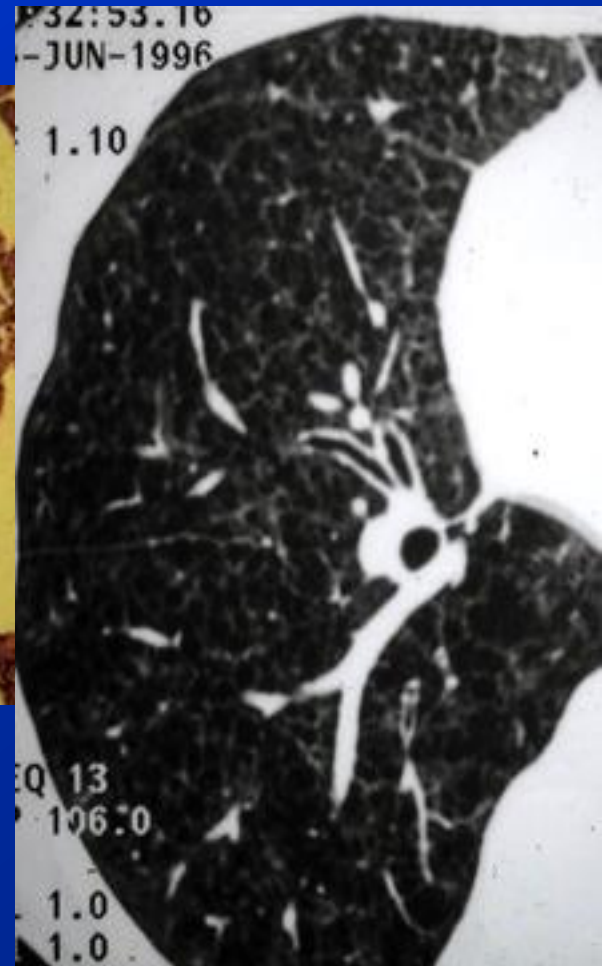
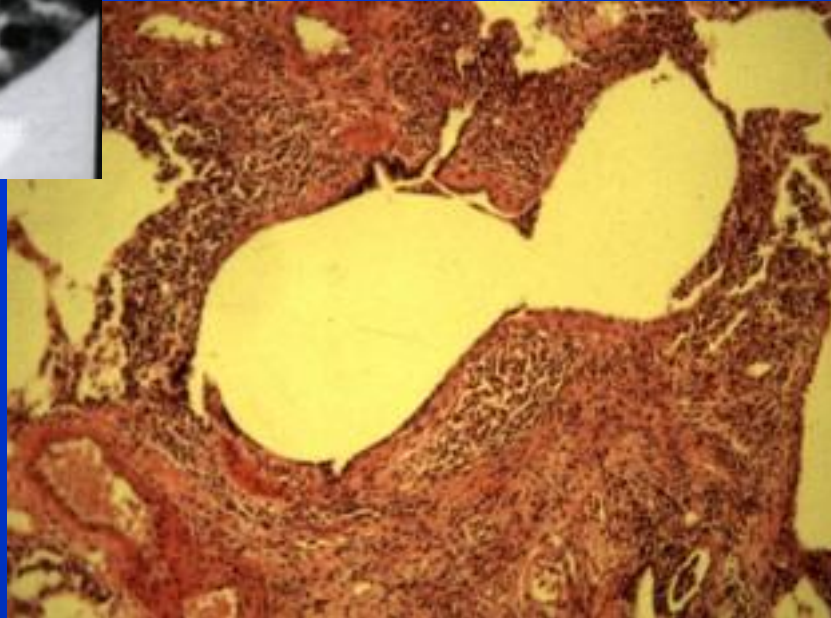
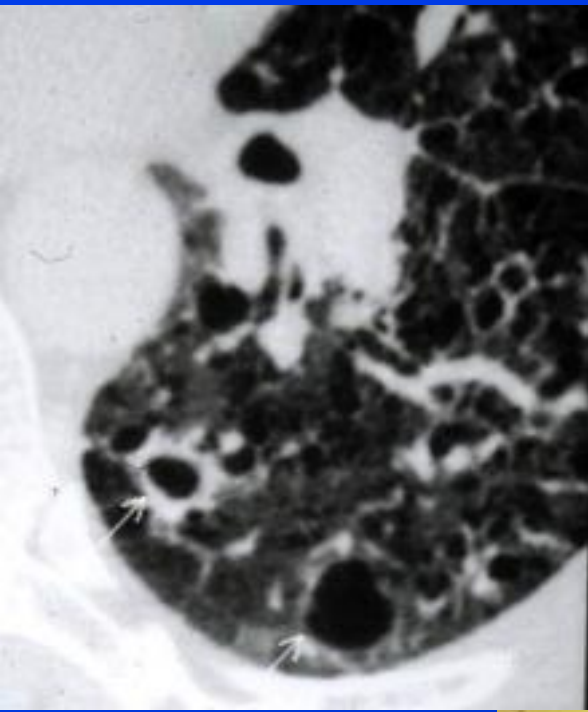


## HLP et kystes

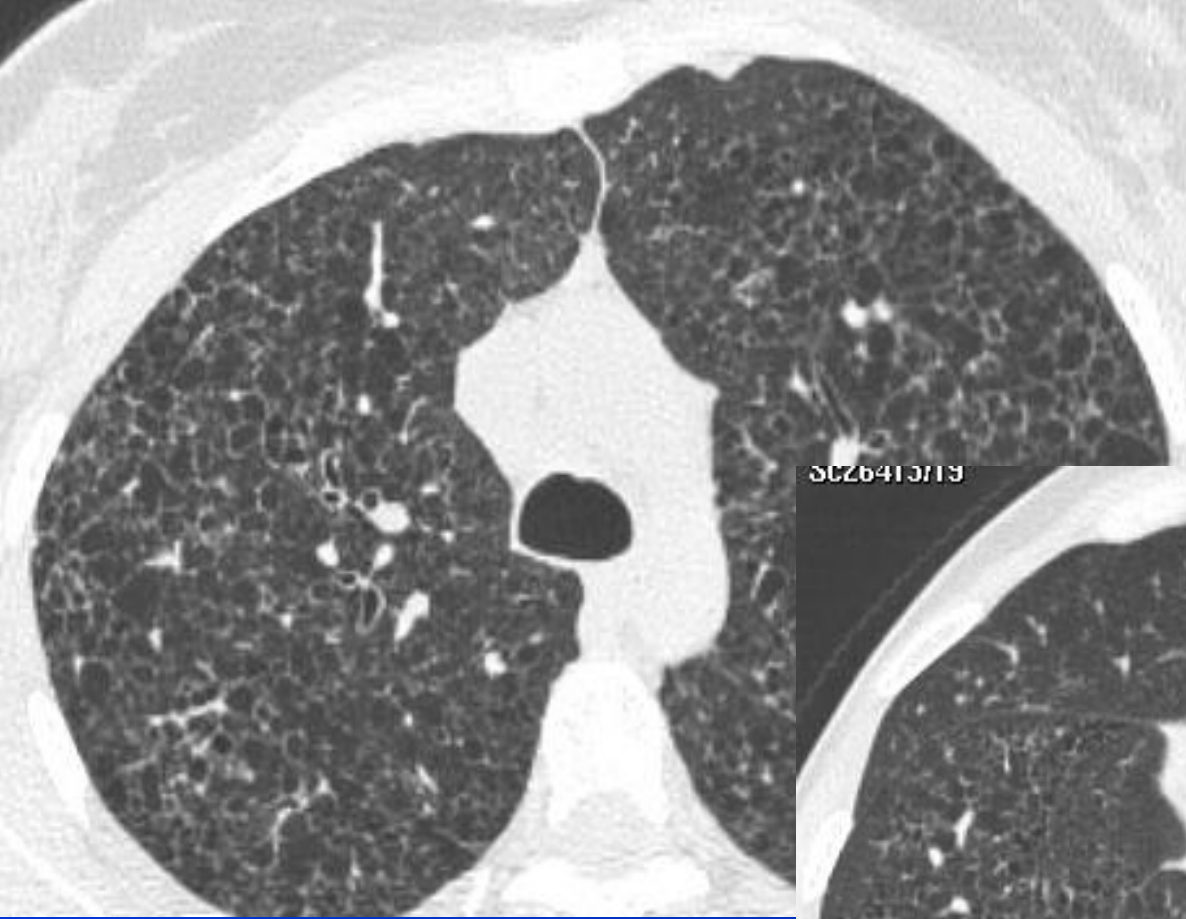
Kystisation des nodules

Effet « check valve » ( LAM)

Démaillage - remodelage de la trame alvéolaire+++





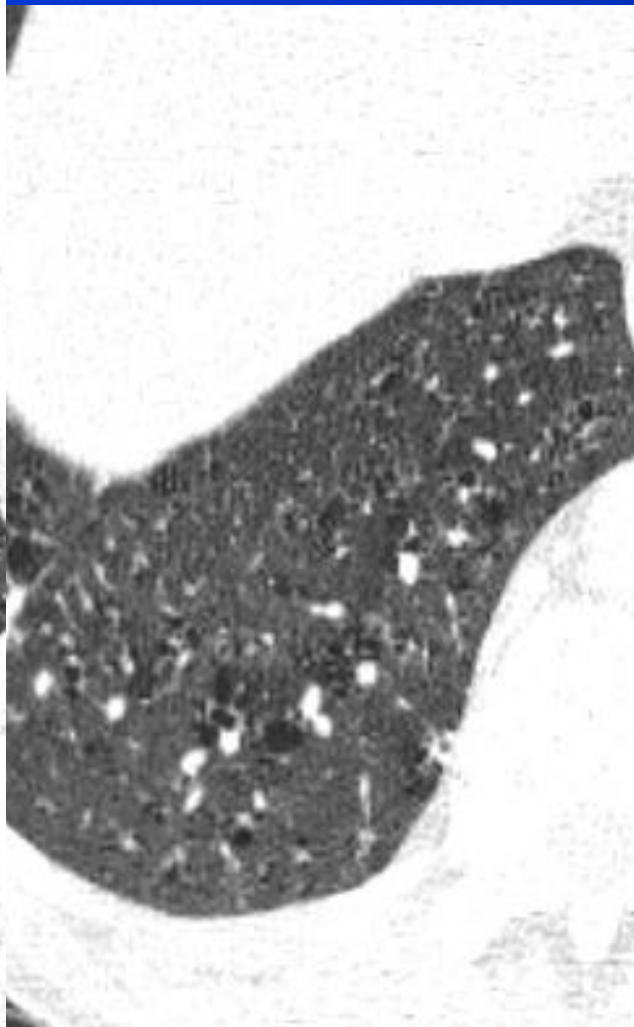
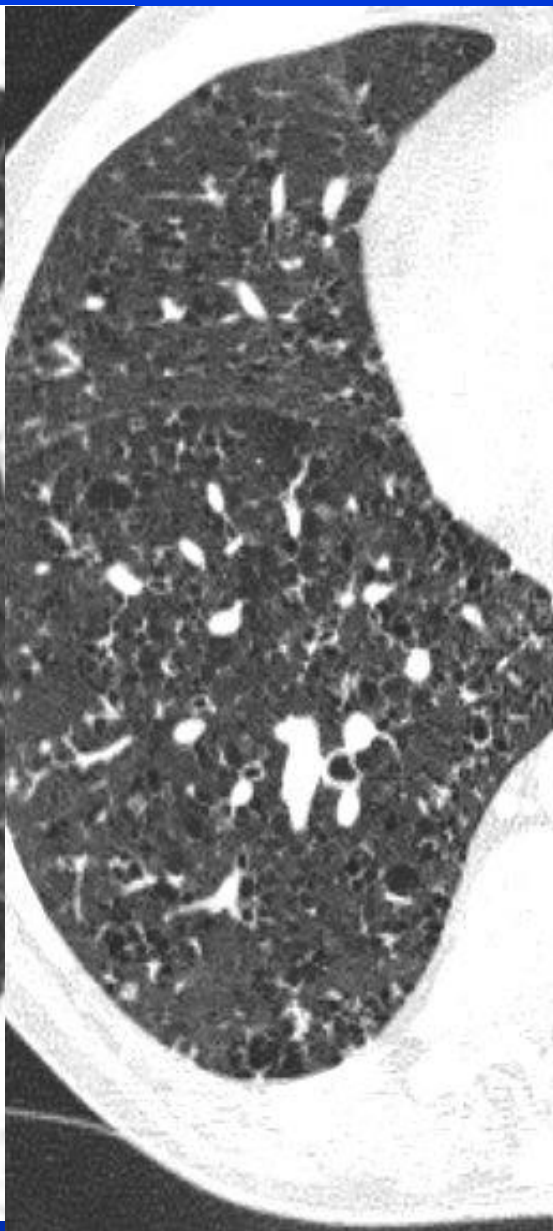
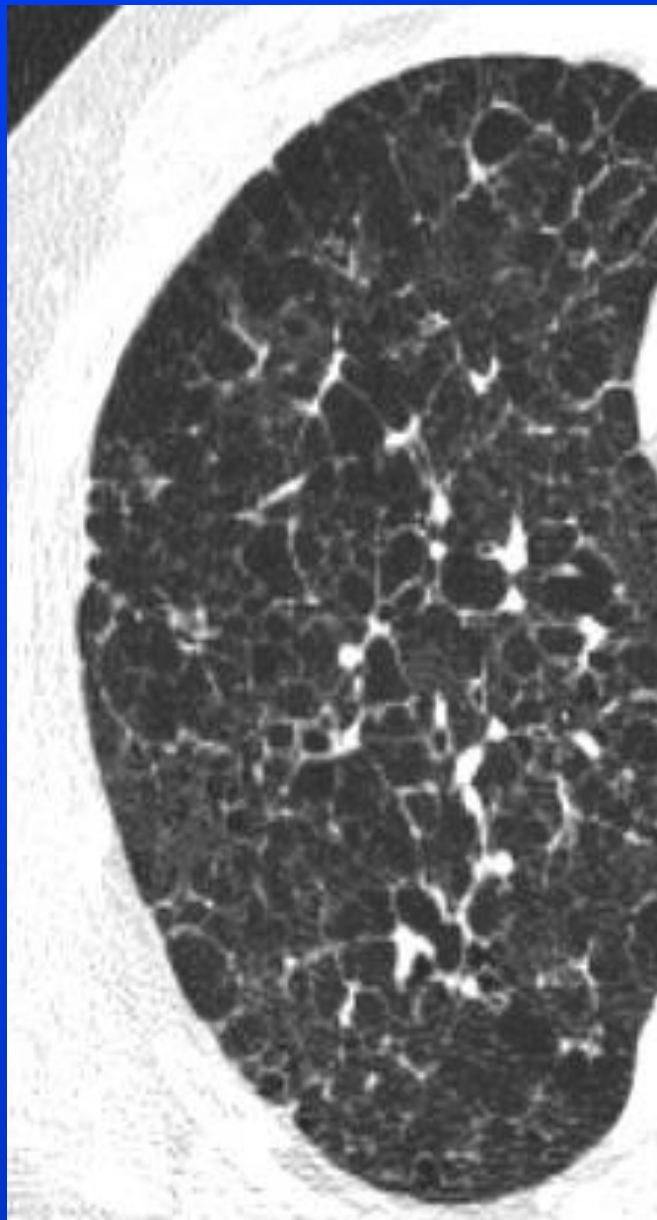


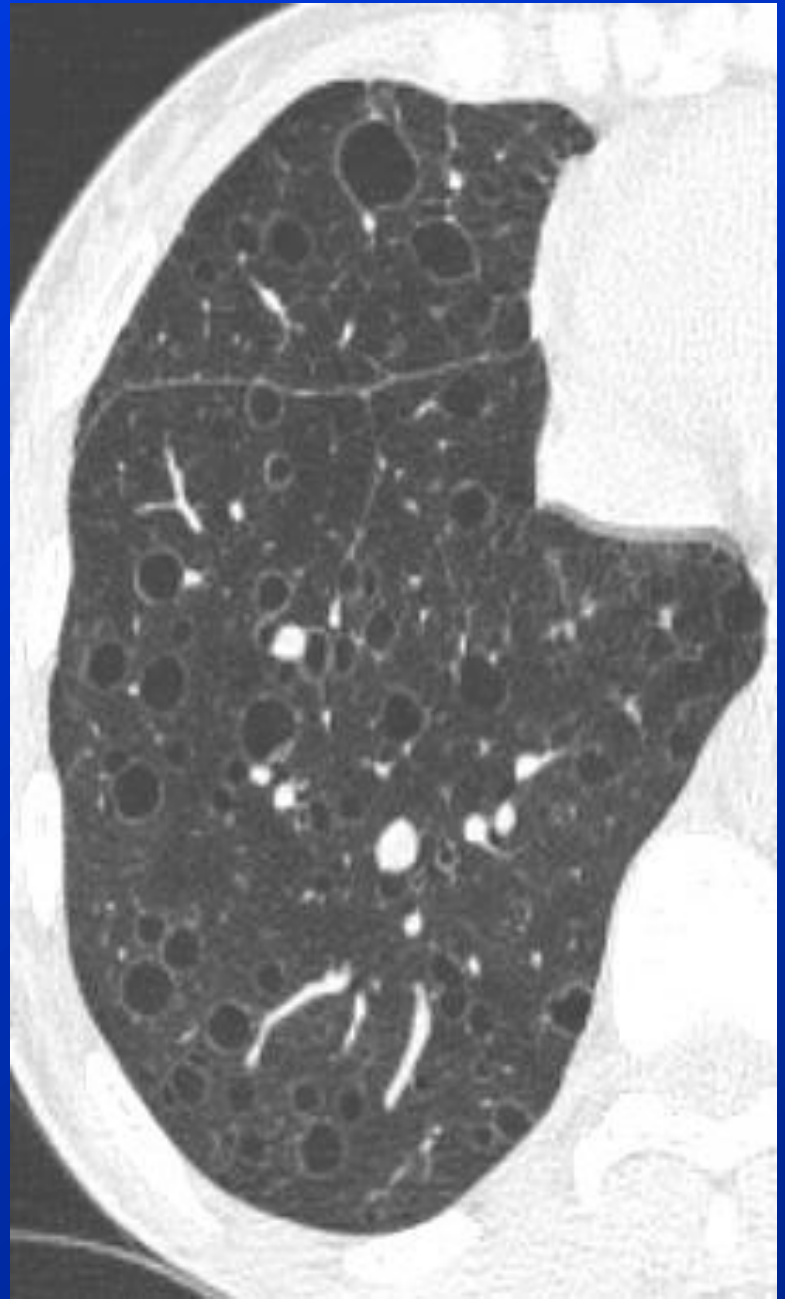
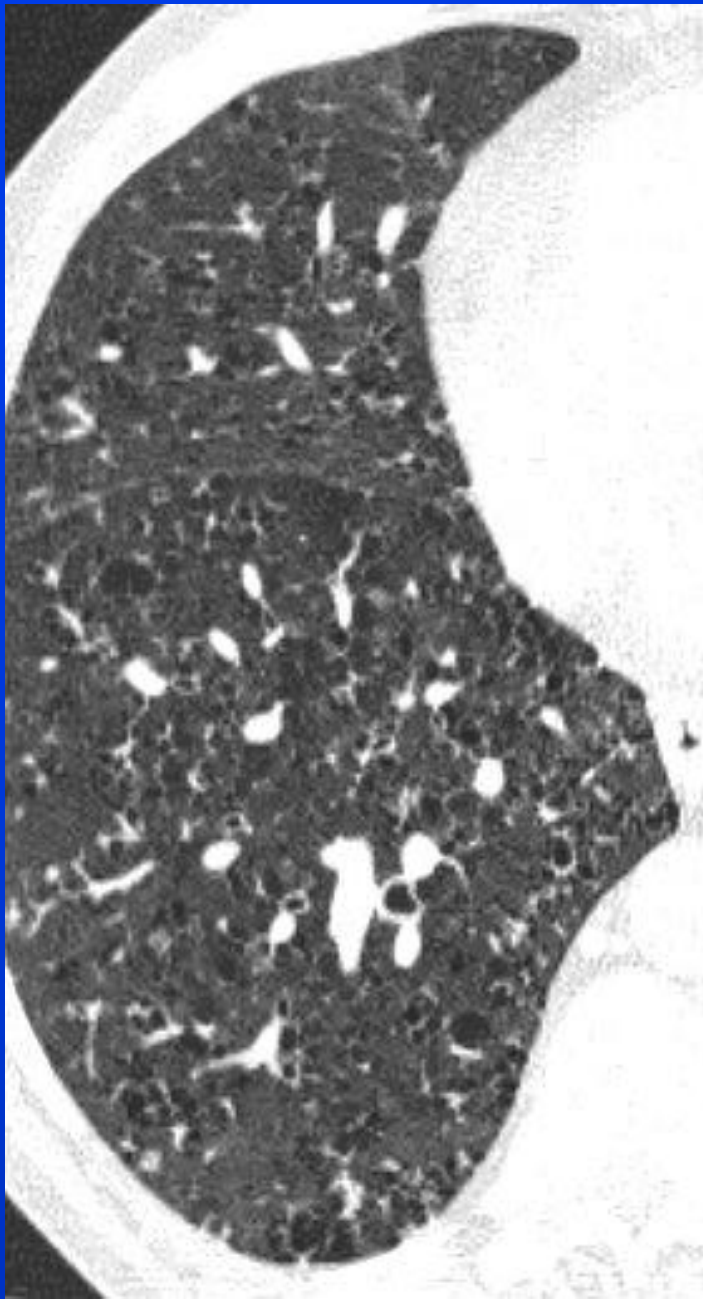
# HLP VS LAM

NODULE

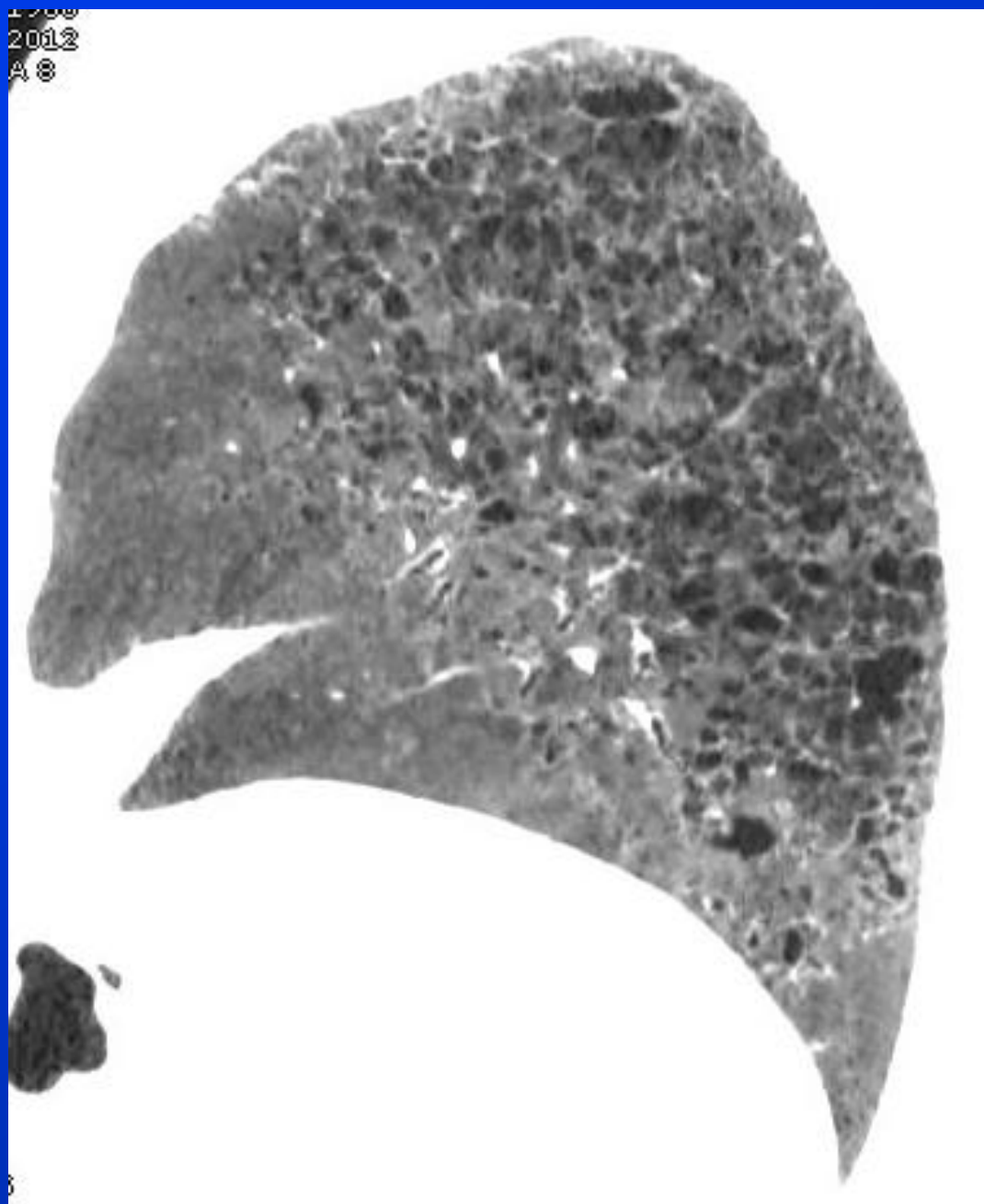
KYSTES IRREGULIERS ,  
«BIZARRES»

RESPECT L I, POINTE L M +  
LINGULA

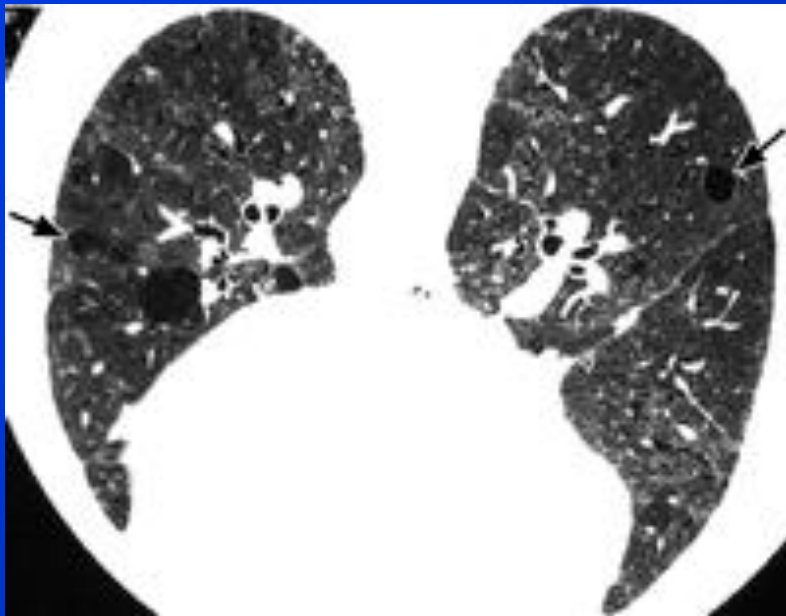




1300  
2012  
A 8



# DG Diff + rares: LIP (SGS) - Birt-Hogg Dubé



# HLP - LAM

## Corrélation TDM - EFR

- DLCO
- Obstruction

- ABERLE D. Rad. 1990 ; 176 : 381-7

## TDM +++ Extension - Distribution - Détection

HLP: Evolution favorable ?



# Cas clinique

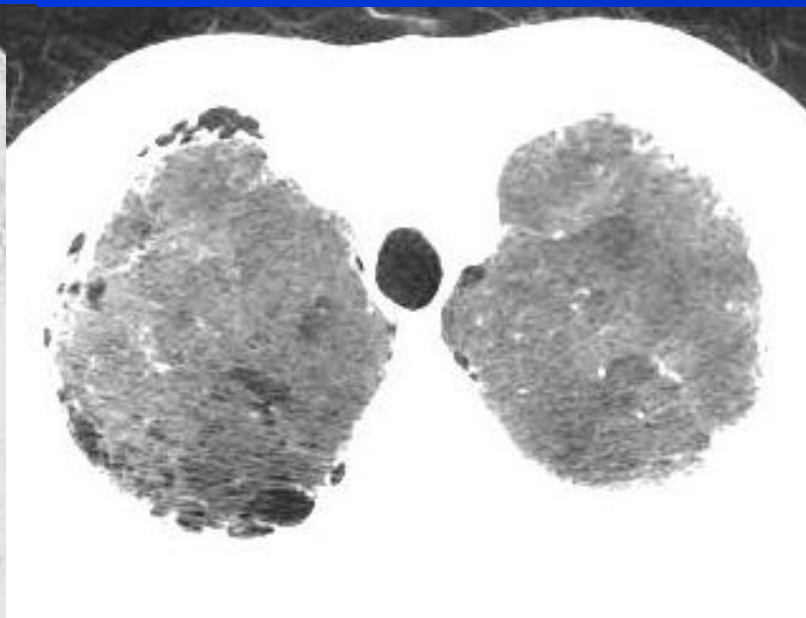
Homme 70 ans

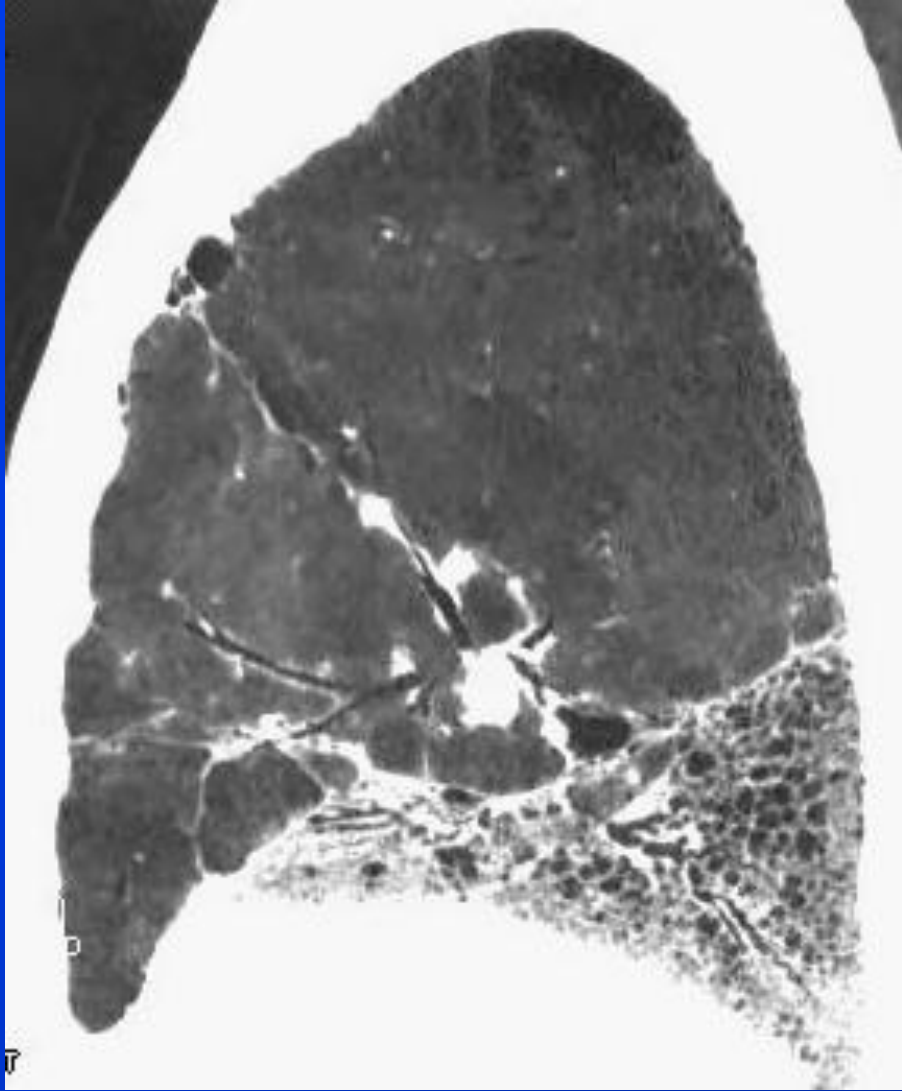
Ancien tabagique

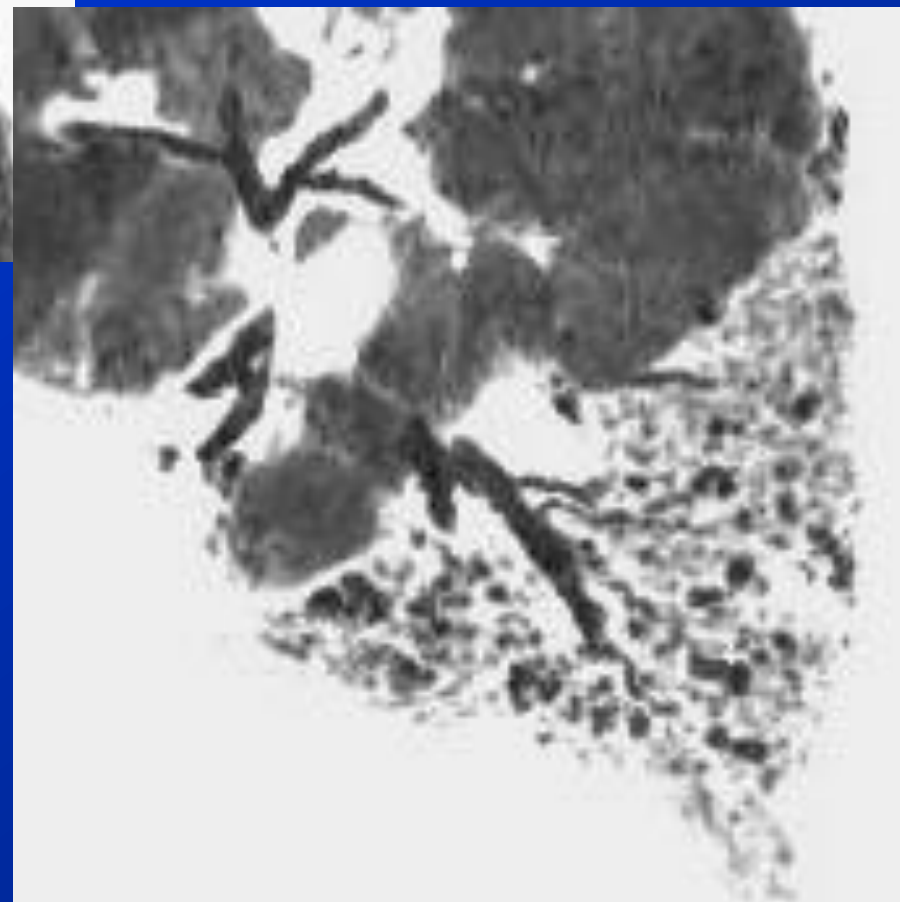
Dyspnée d'effort

Spirometrie sub N1e ( volumes et débits)

Baisse DLCO, SaO<sub>2</sub>, PaO<sub>2</sub>







# Syndrome Emphysème-Fibrose

1 Tabagisme +++

PR, Sclérodermie, mutation SFTPC, agents  
agrochimiques

1 Dyspnée d'effort sévère

1 Spirometrie sub Nle

1 Baisse DLCO

1 Risque d'HTAP pré capillaire: survie = 11 mois

Rev. Mal. Resp.: V. Cottin 2013, 2009 (G. Prévot)

# UIP – NSIP et tabac

Certaines NSIP F. fibreuse = F. tardive de DIP?

Hansell DM, Nicholson AG. Semin Respir Crit Care Med. 2003;24:377–392.

60% des UIP sont tabagiques

Travis WD, Colby TV, Koss MN, et al. Non-neoplastic Disorders of the Lower Respiratory Tract. 2002.

Effet néfaste du tabac sur la survie des UIP

Antoniou KM, Hansell DM, Rubens MB, et al. Idiopathic pulmonary fibrosis: outcome in relation to smoking status. Am J Respir Crit Care Med 2008;177:190–194.

# Pneumopathie éosinophilique Aigue

Relation avec tabac – claire que pour SRILD

Guerre Irak: 18 ppts tabagiques, 75% récents

Fièvre, dyspnée, hypoxémie

Eosinophiles: + LBA, - Sang le + souvent

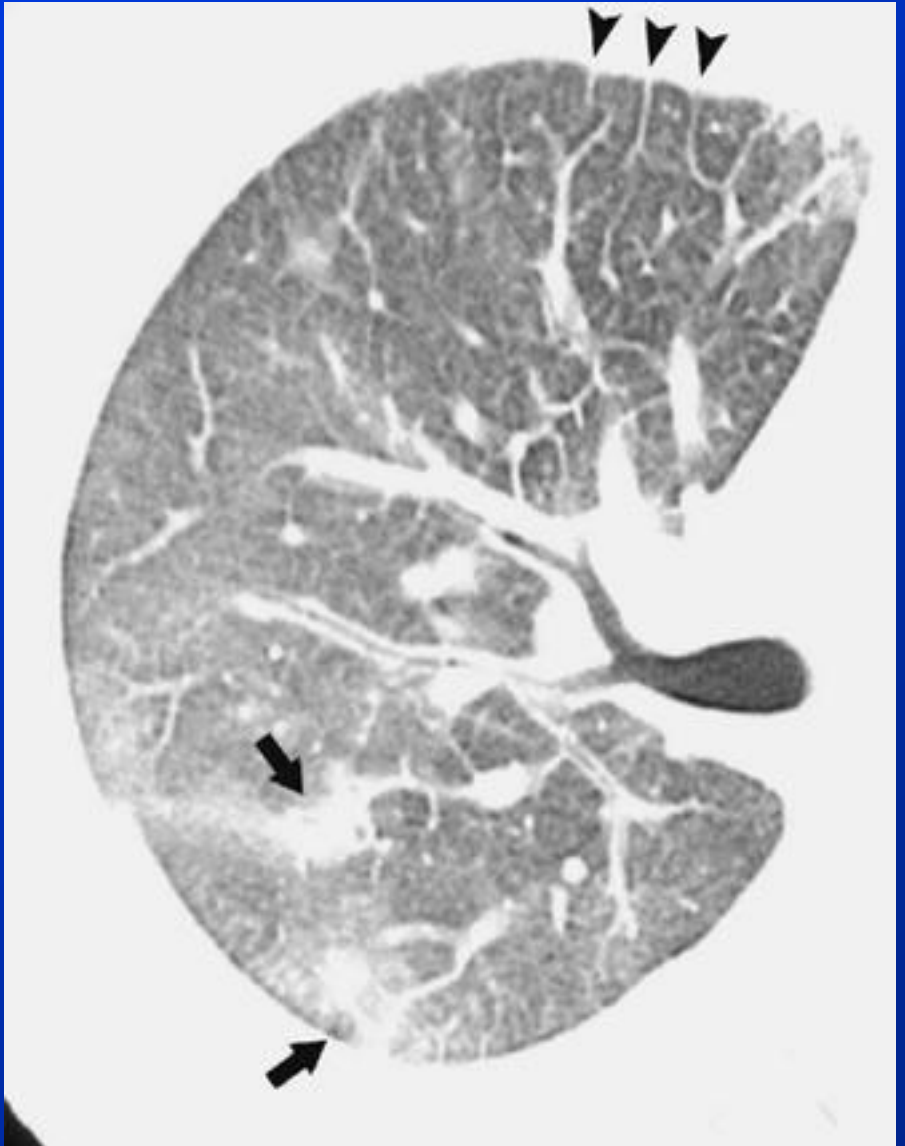
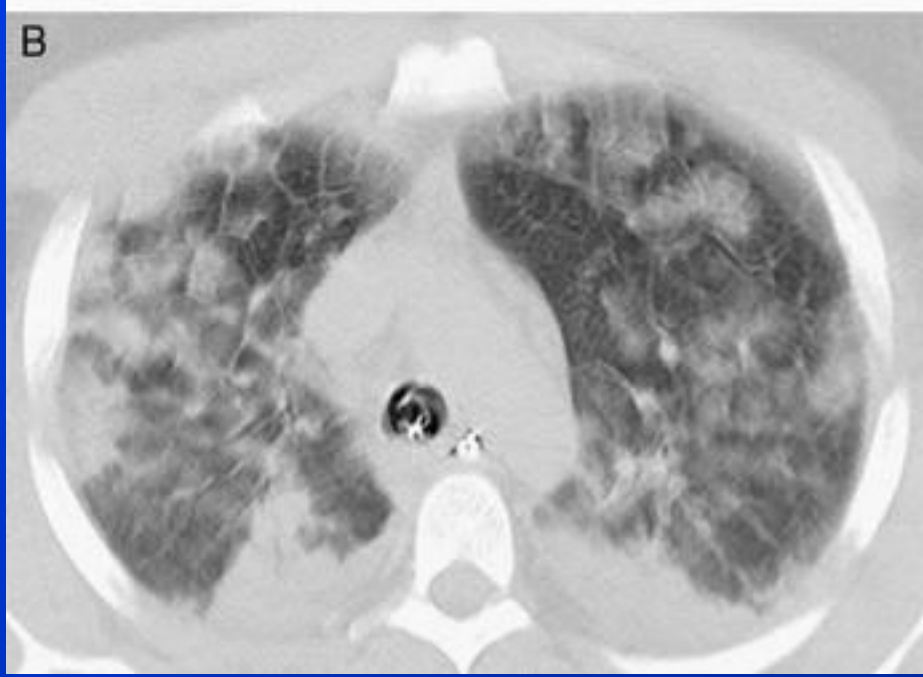
RT-TDM: « œdème pulmonaire à cœur N1 »

Corticoïdes, risque de SDRA

Shorr AF, Scoville SL, Cersovsky SB, et al. Acute eosinophilic pneumonia among US military personnel deployed in or near

Iraq.

JAMA. 2004;292:2997–3005.



Galvin JR, J Thorac Imaging 2009;



# Devant une PCID chez un tabagique

Liée au tabac ?

Biopsie chirurgicale ?

Implications cliniques et thérapeutiques ?

arrêt tabac, corticoïdes, I° Suppresseurs

