

Con il Patrocinio di:



Ospedale  
**San Giuseppe**  
MultiMedica S.p.A.

Sistema Sanitario



Regione  
Lombardia



# Uno strano caso di interstiziopatia

Una diagnosi clinica – radiologica

Dott.ssa E. Uslenghi

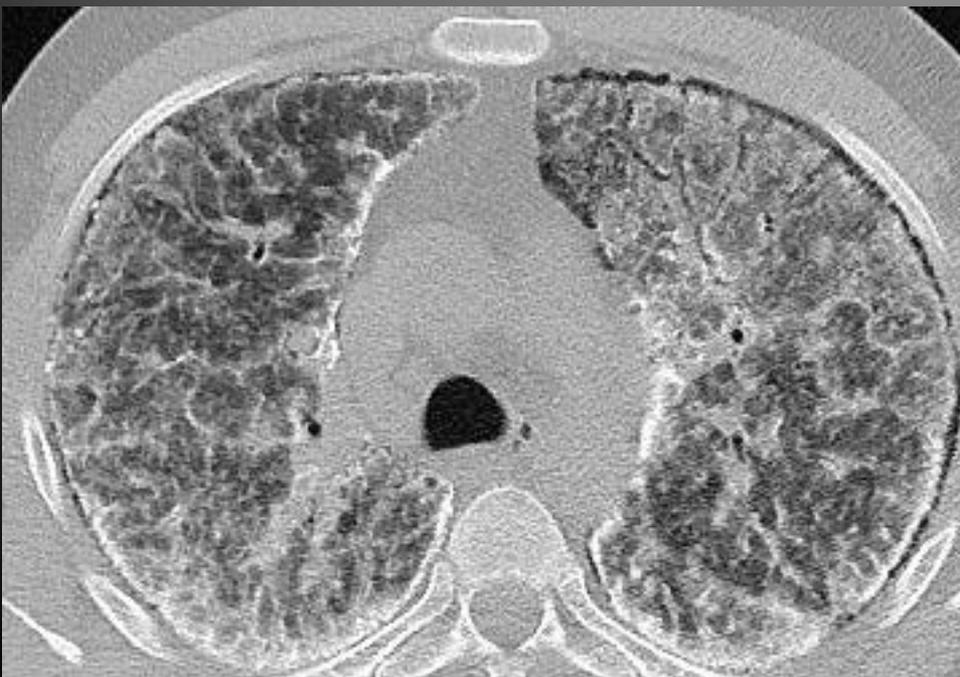
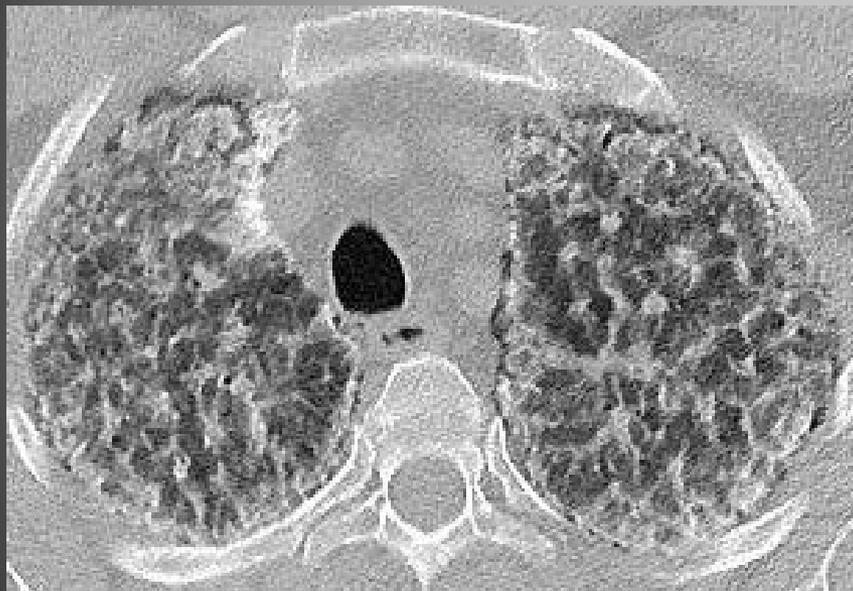
Ospedale San Giuseppe, MultiMedica  
Milano

# Caso Clinico

Uomo di 45 anni

- Dispnea ingravescente
- Tosse secca
- Perdita di peso
- RX Torace Patologico per interstiziopatia

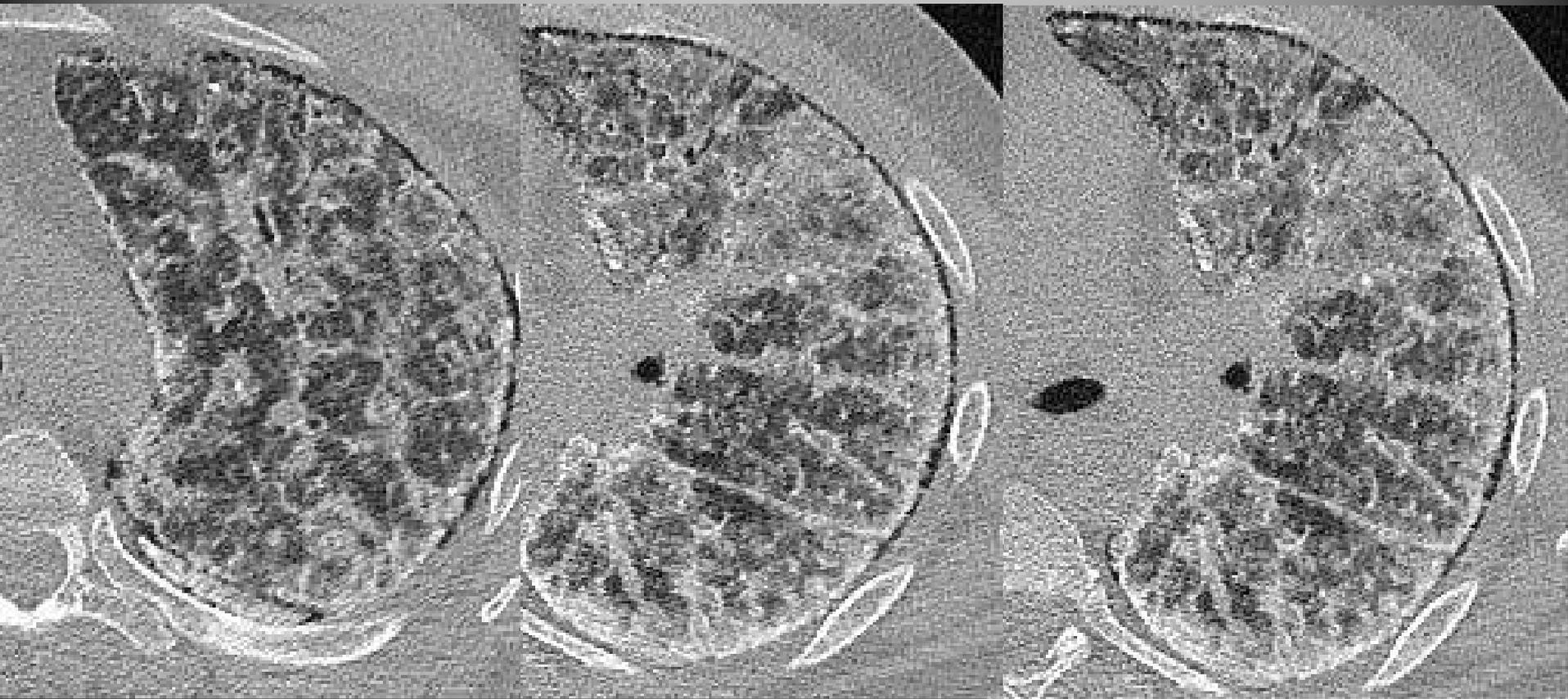






- .Calcificazioni grossolane subpleuriche**
- . Ispessimento dei setti interlobulari con calcificazioni**
- . Microcalcificazioni centrolobulari random**
- . Distruzione del parenchima subpleurico**
- . Aree a vetro smerigliato diffuse**





# **Pulmonary Alveolar Microlithiasis**

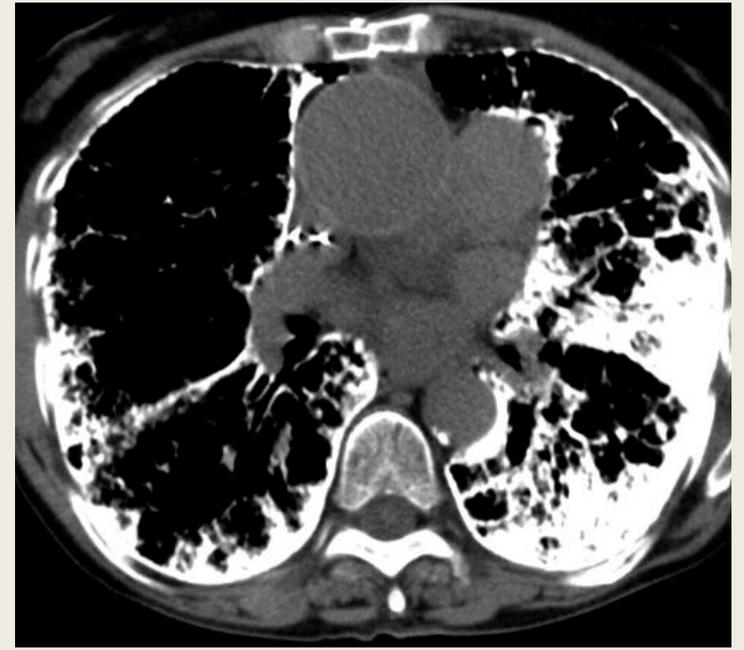
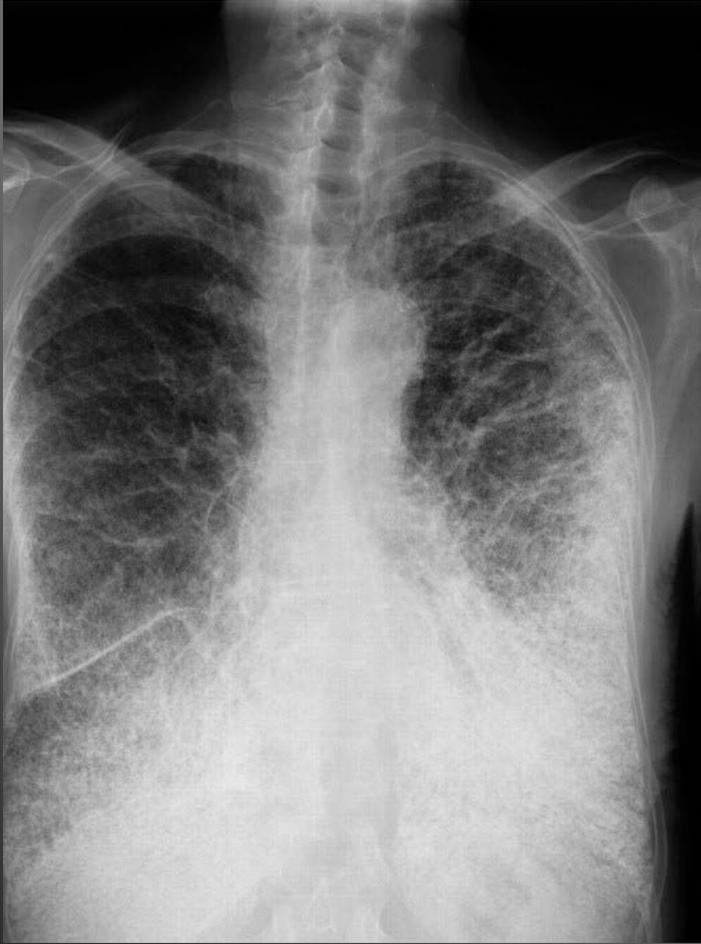
## **PAM**

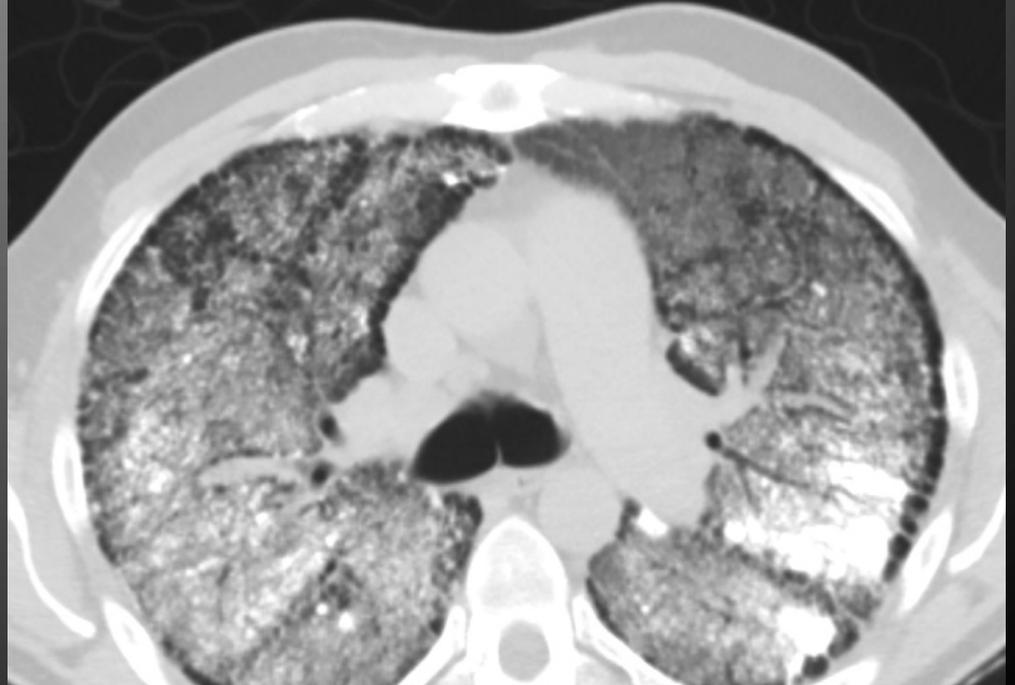
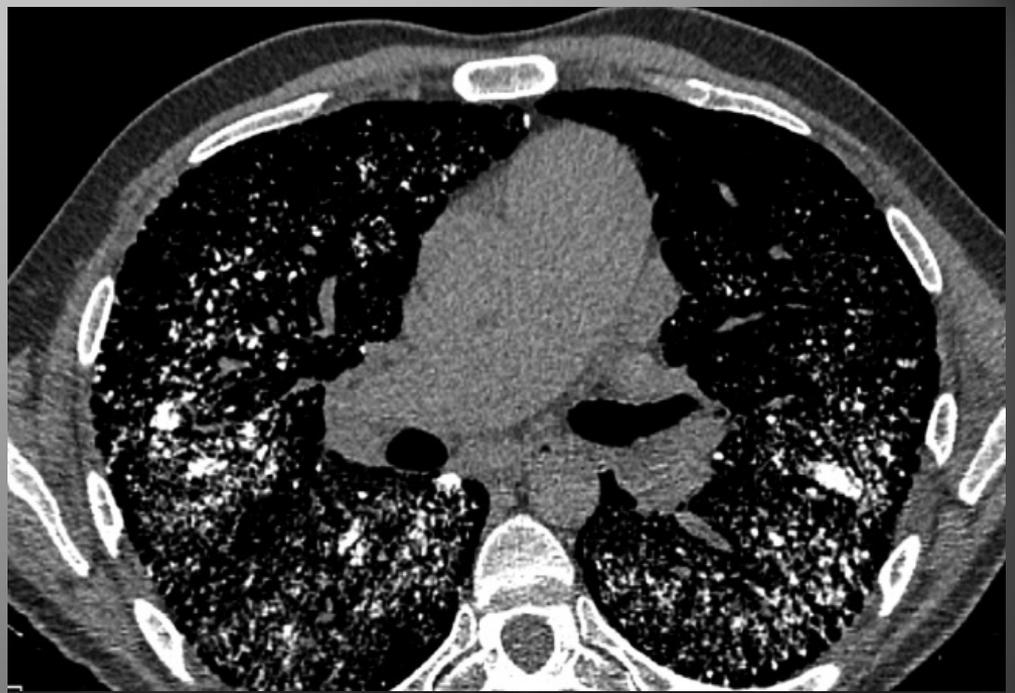
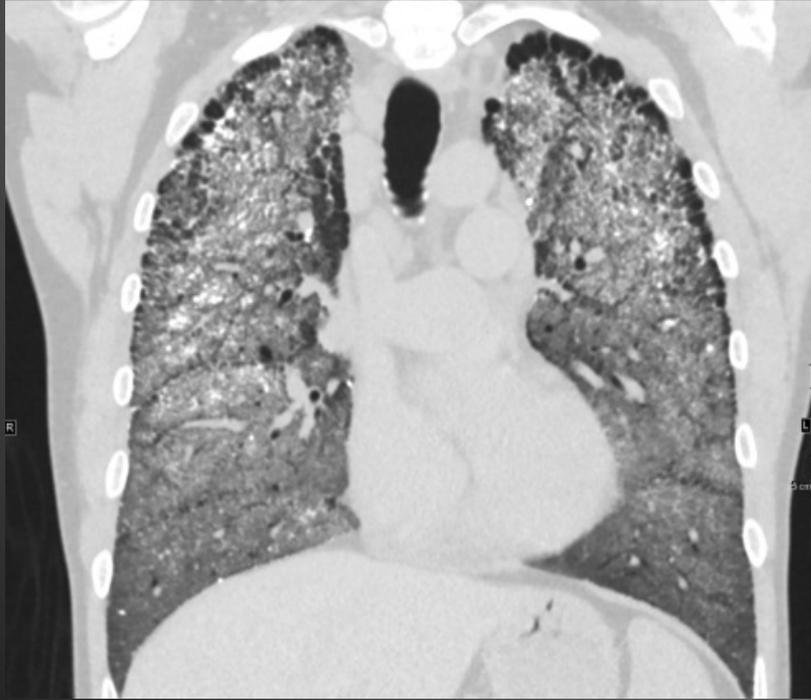
# MICROLITIASI ALVEOLARE POLMONARE

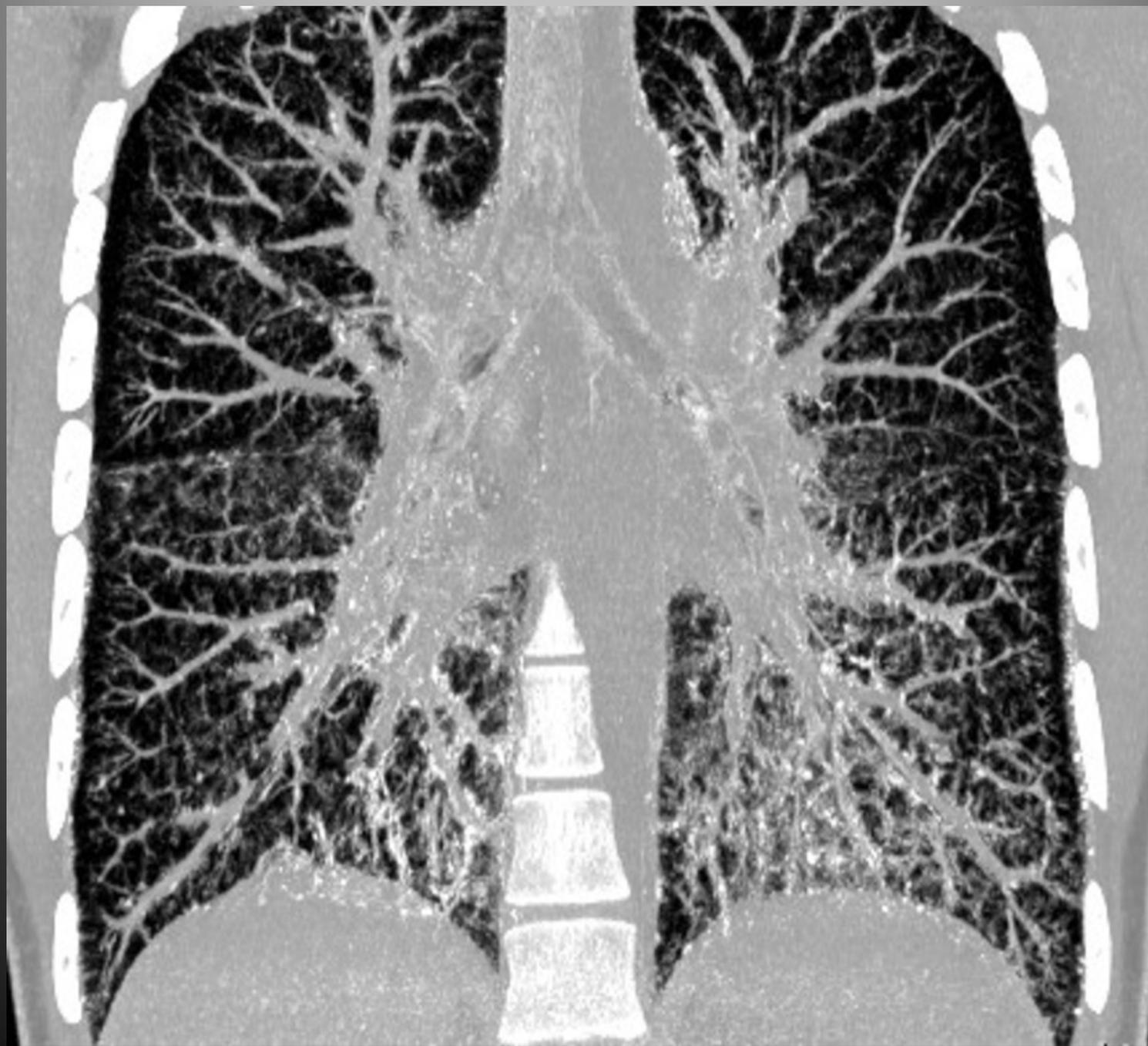
- Microncalcalcificazioni centrolobulari, bilaterali, a tappeto **“sandstorm”**
- Calcificazioni subpleuriche
- Aree a vetro smerigliato
- Adenopatie mediastiniche

# MICROLITIASI ALVEOLARE POLMONARE

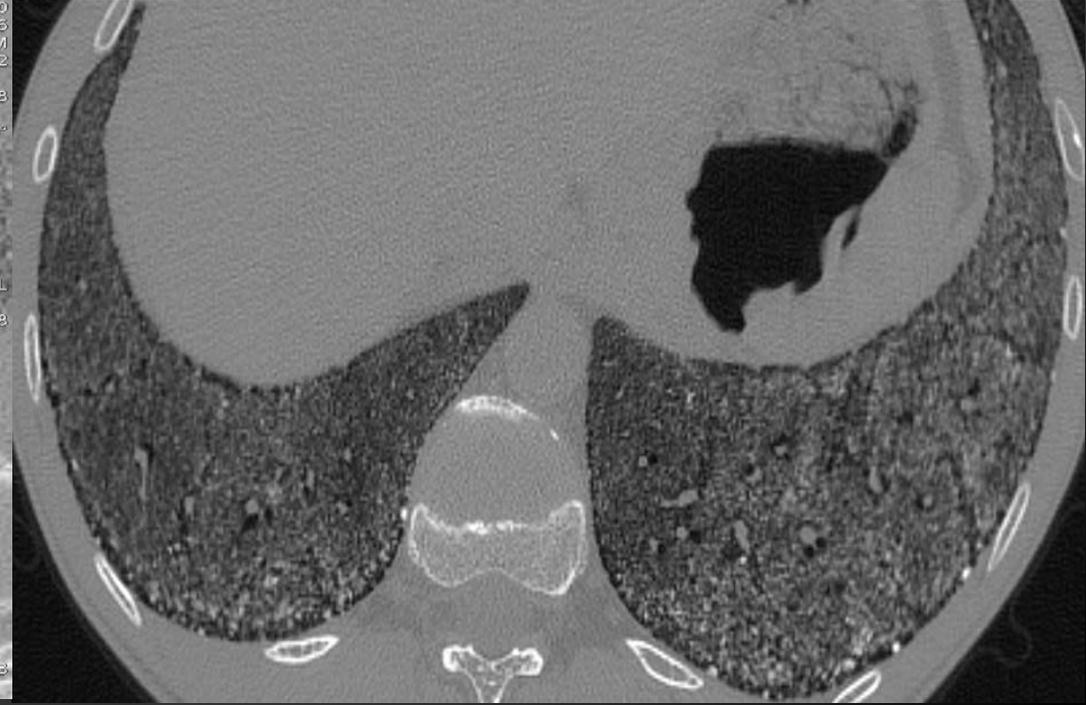
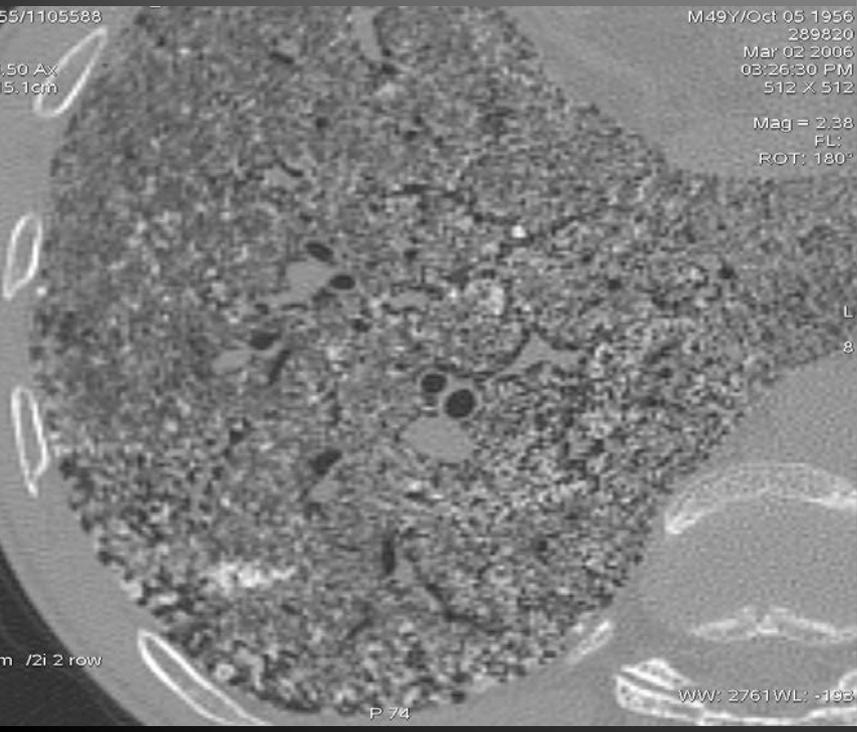
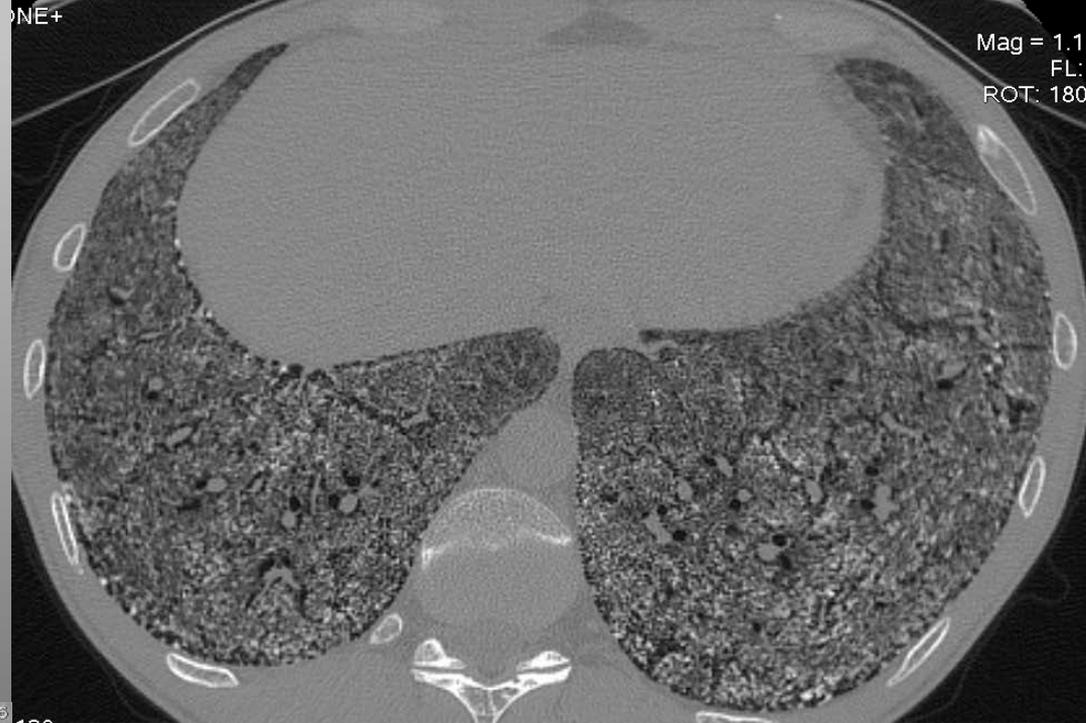
- Ispessimento dei setti interlobulari con calcificazioni
- Distruzione del parenchima subpleurico **Black pleura**
- Calcificazioni pleuriche
- Interfaccia pleuro-parenchimale irregolare
- Calcificazioni valvole cardiache







Gent. Concessione Prof.Zompatori



# MICROLITIASI ALVEOLARE POLMONARE

## Epidemiologia

- Malattia cronica rara, nel 2014 circa 1264 casi in 64 paesi
- Forme familiari in Turchia, Italia, USA
- Malattia autosomica recessiva
- Mutazione del gene SLC34A2
- Deficit pompa che rimuove i fosfati di sodio dagli spazi aerei

# MICROLITIASI ALVEOLARE POLMONARE

## Fisiopatologia

- Alterato metabolismo del fosforo negli alveoli con deposito di fosfati di calcio e formazione di sfere di calcio intra alveolari
- Calcificazione dei setti interalveolari
- Alterazioni parenchimali infiammatorie secondarie, croniche

# MICROLITIASI ALVEOLARE POLMONARE

## Decorso clinico

- Diagnosi tra i 20-40 anni
- Dispnea, tosse secca, espettorato, progressivo peggioramento delle condizioni generali
- Evoluzione verso la fibrosi
- Insufficienza respiratoria restrittiva
- Ipertensione polmonare e cuore polmonare cronico

**DIAGNOSI CLINICA RADIOLOGIA**

# MICROLITIASI ALVEOLARE POLMONARE

## Trattamento

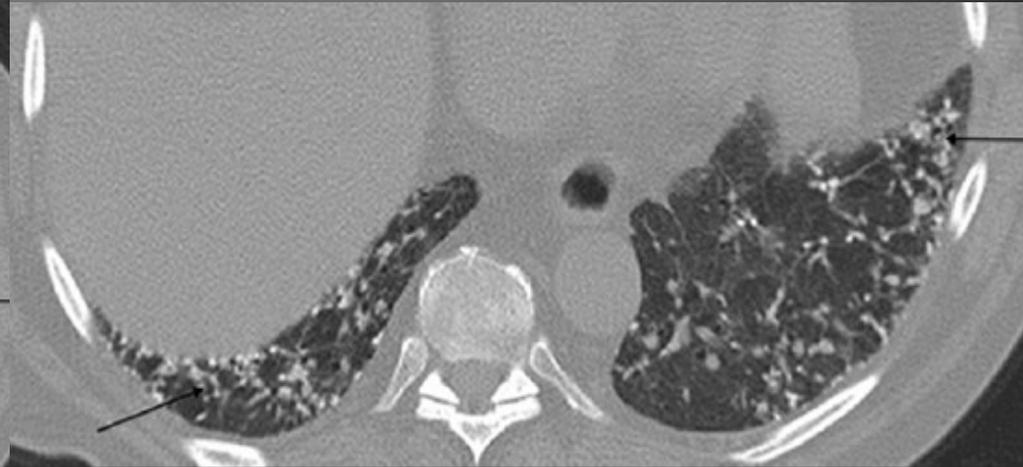
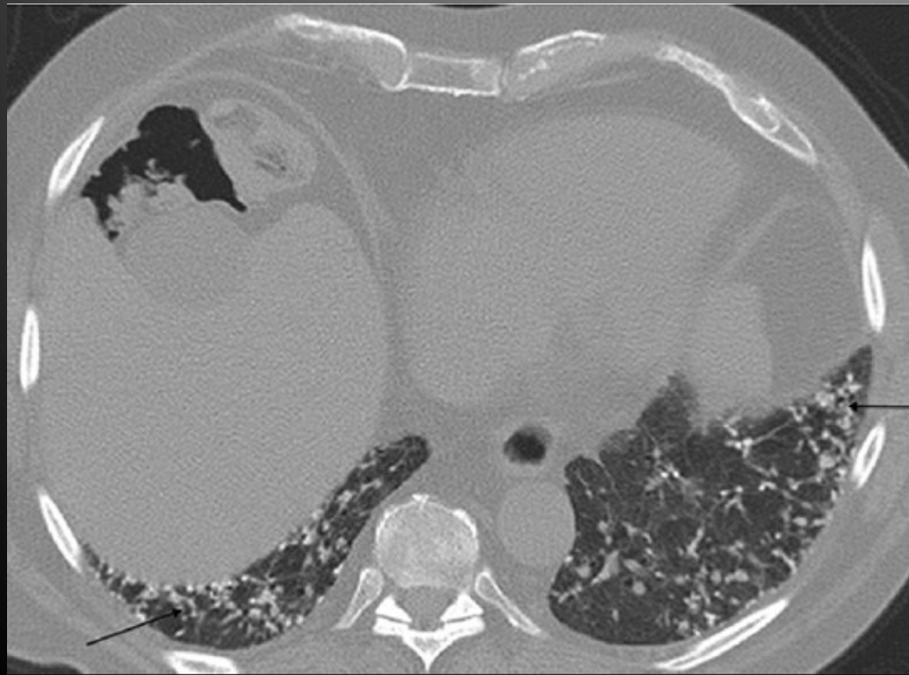
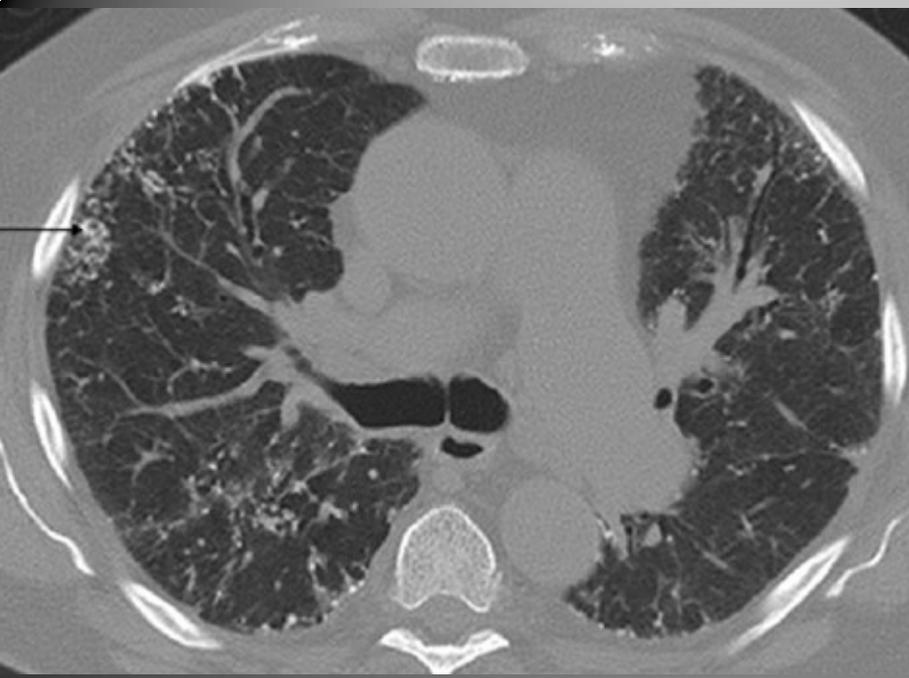
- Sopravvivenza media dal momento della diagnosi 10-15 anni
- Non c'è relazione tra dati funzionali e distruzione del parenchima
- Terapia medica....
- Trapianto

# DIAGNOSI DIFFERENZIALI

- Ossificazione polmonare idiopatica
- Depositi di calcio secondari ad ipercalcemia
- Amiloidosi
- Silicosi
- Varicella
- Histoplasmosi
- TBC
- Sarcoidosi
- *Metastasi calcifiche* (sarcoma ,ca tiroide)

# Ossificazione polmonare idiopatica

- ossificazione metaplasica del polmone
- noduli parenchimali e ramificazioni ossee lungo le vie bronchiali distali
- si associa alla fibrosi polmonare con progressiva perdita di volume polmonare



Ex: 26159/901816417  
Se: 2  
Im: 141  
C7 I129.25 Ax  
DFOV 16.6cm  
BONE+

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Mag = 2.17  
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ROT: 180°

R  
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4  
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kV 120  
mA 330

SFOV 50.0cm  
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Tilt: 0.0  
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WW: 2596WL: -150

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P 152

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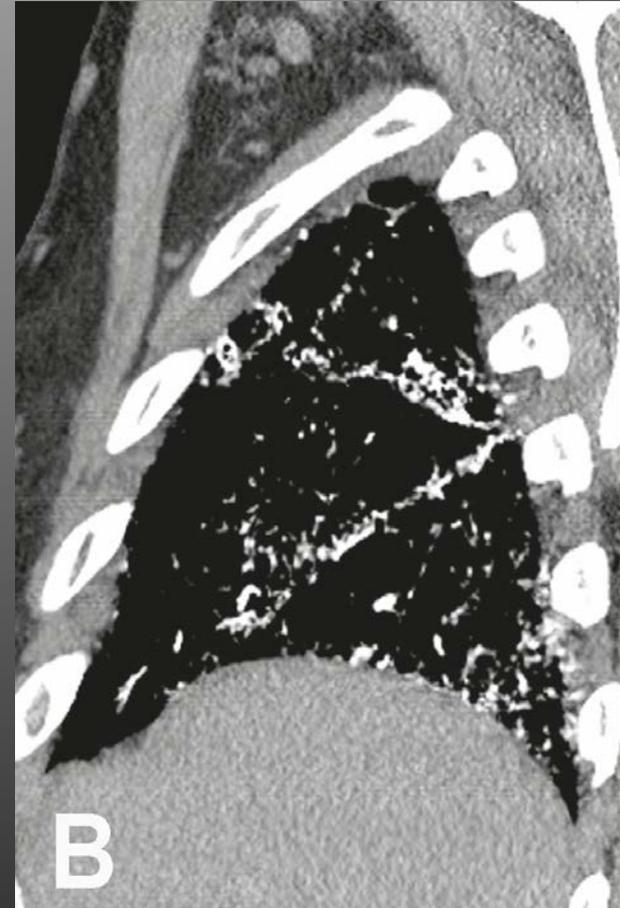
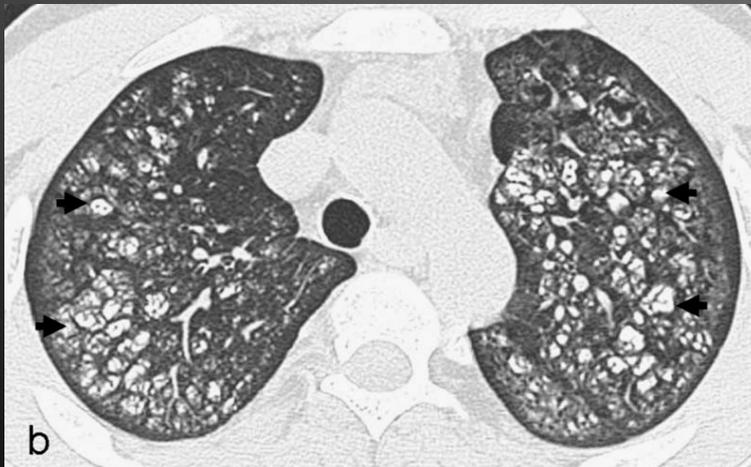
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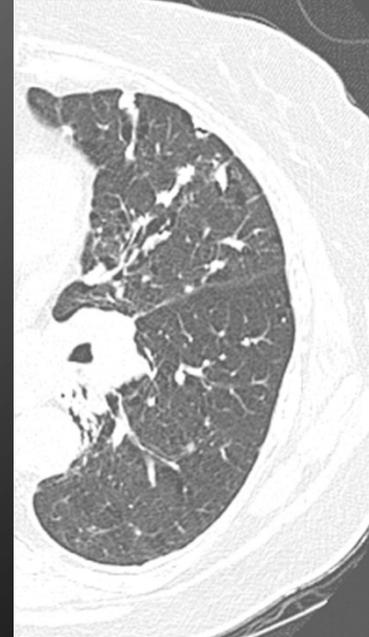
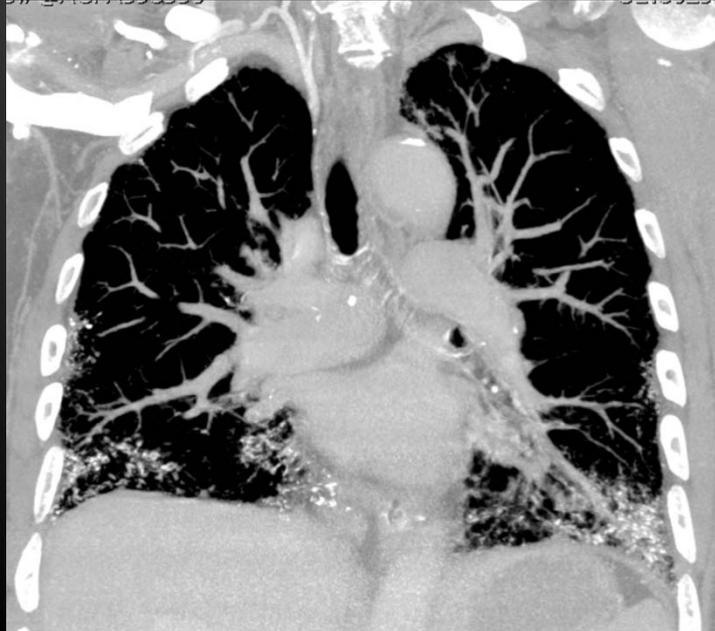
# Metastatic Pulmonary Calcification

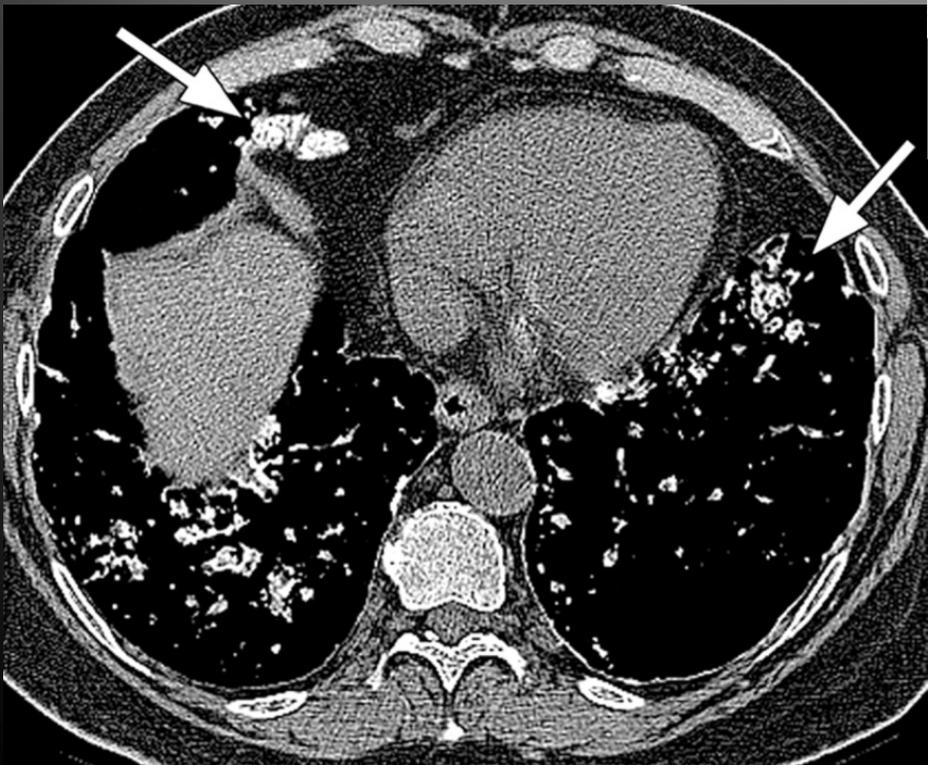
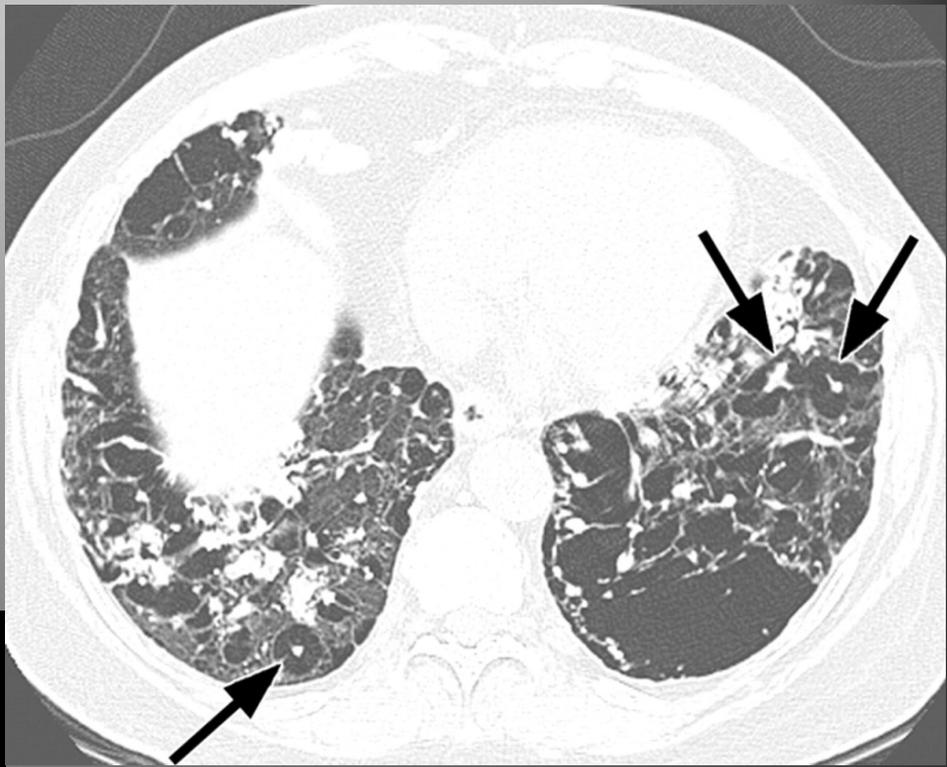
- malattia cronica renale o malattie delle paratiroidi
- interessamento dei setti alveolari, bronchioli ed arteriole
- calcificazioni centrolobulari , aree di consolidazione patchy , ground glass
- calcificazioni vasali e cardiache
- lobi superiori



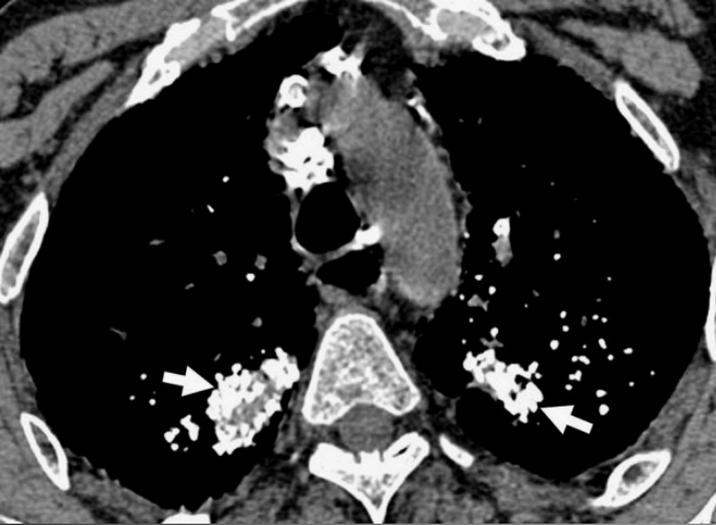
# Amiloidosi

- . deposito di materiale amorfo con a volte calcificazioni ed ossificazioni
- . tracheobronchiali, nodulare parenchimale ed interstiziale
- . Bilaterale, terzo medio ed inferiore
- . volume polmonare normale
- . interessamento di cuore e reni

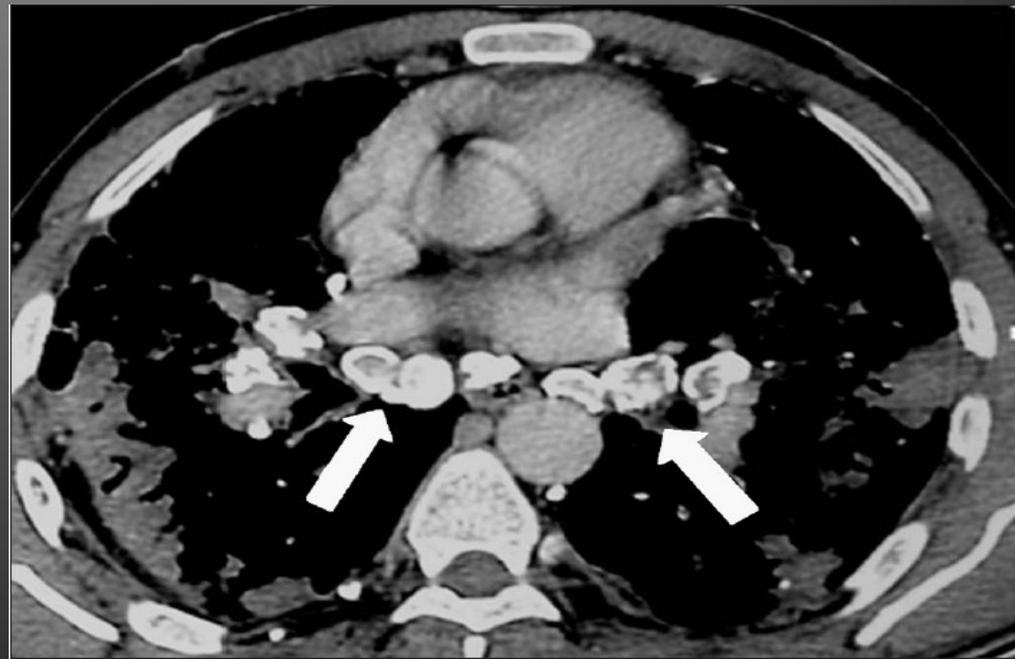
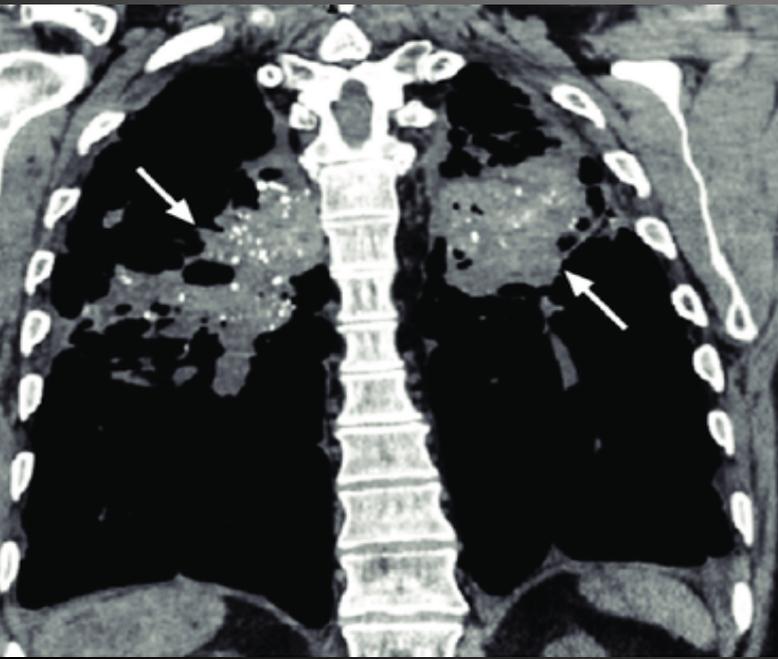


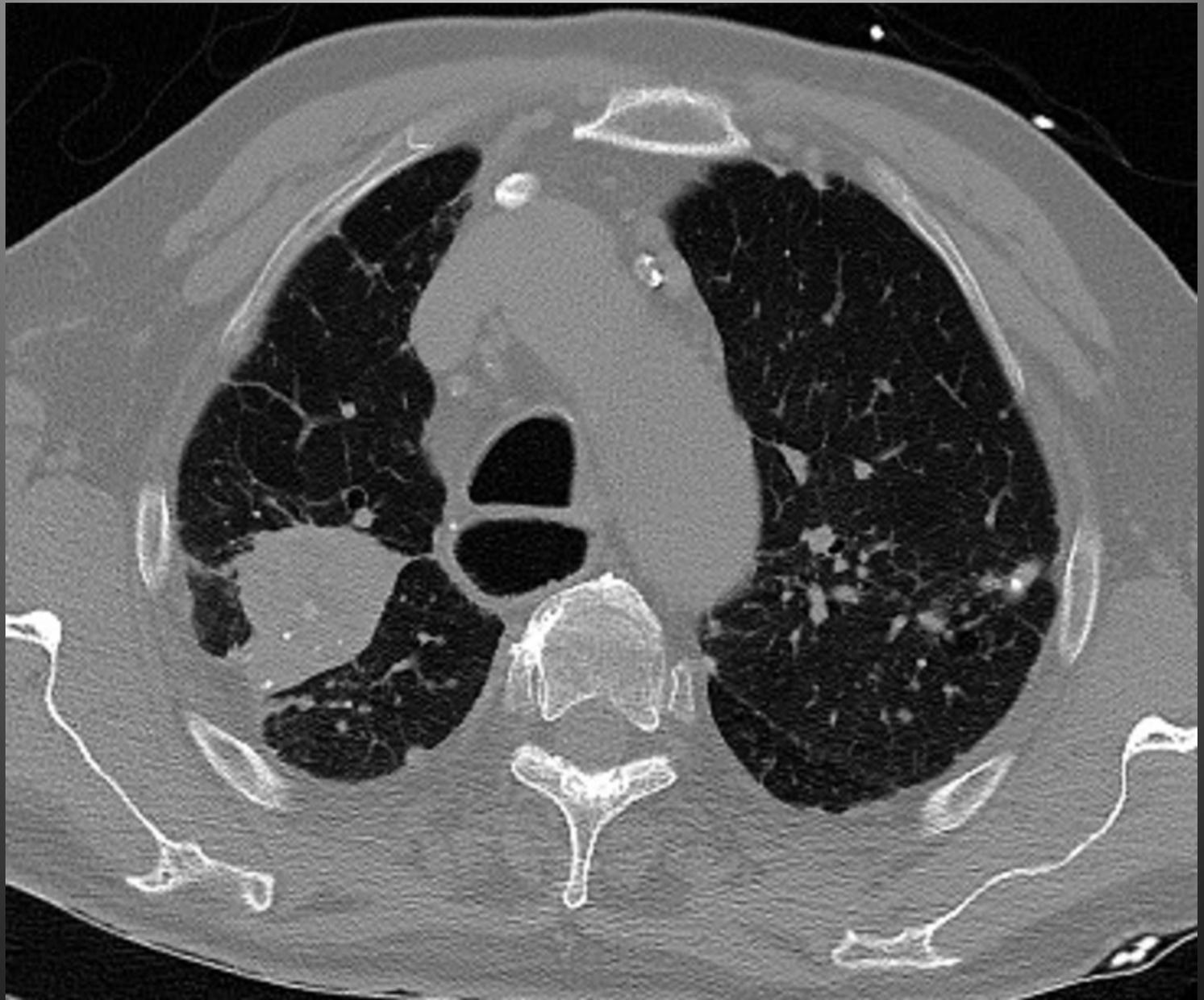


# SILICOSI



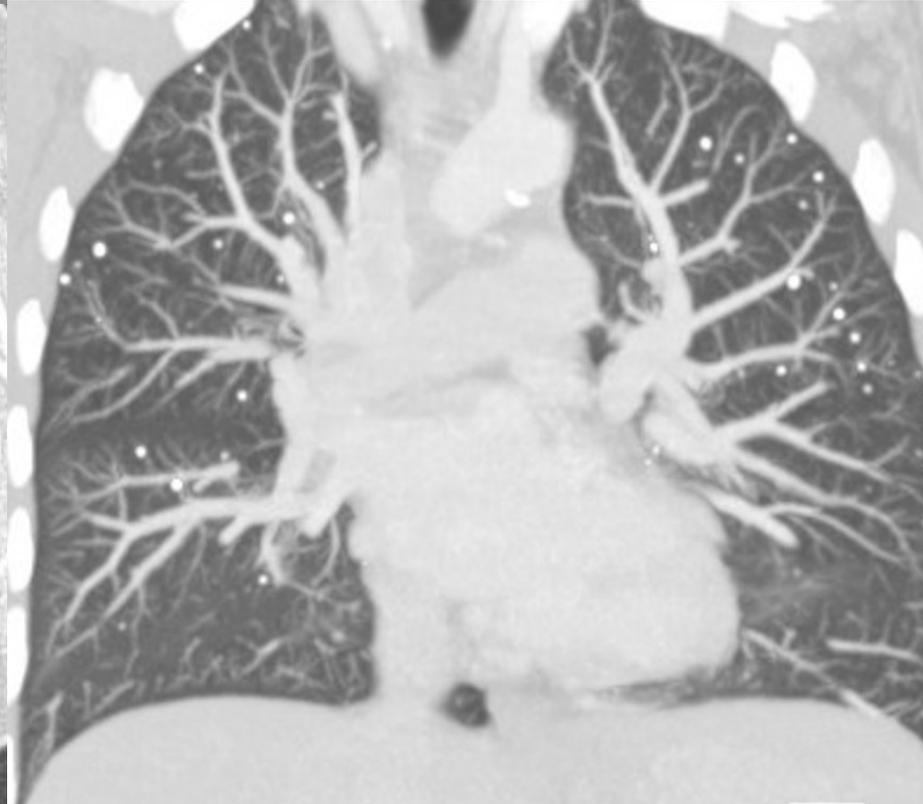
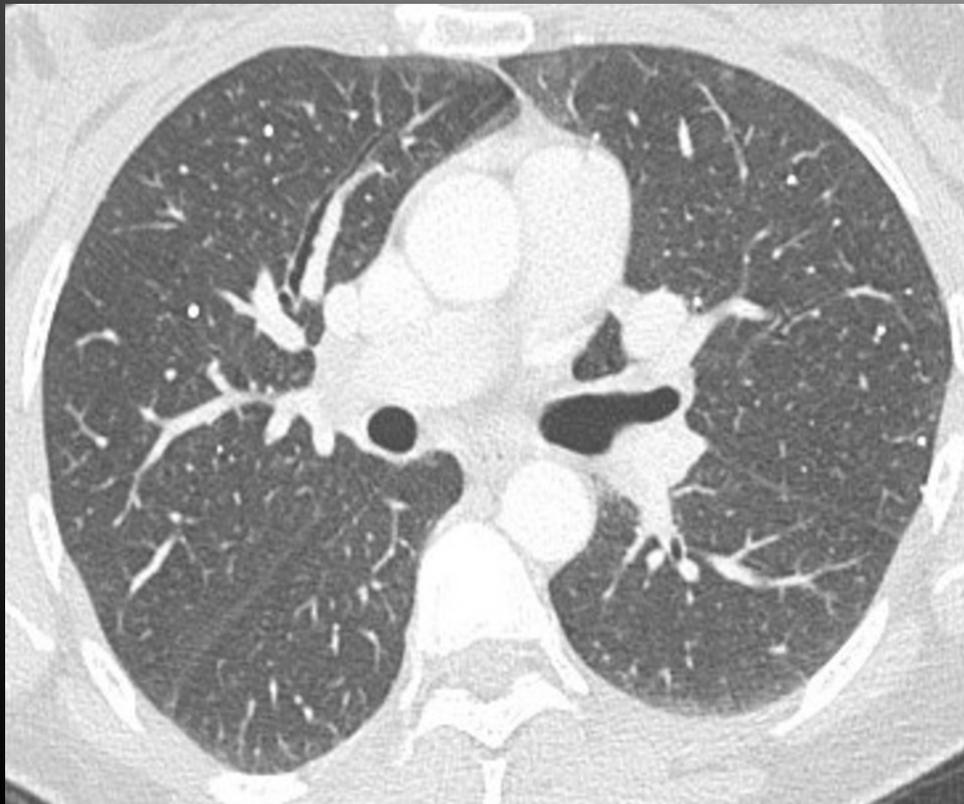
- . inalazione cronica di polveri
- . noduli ben definiti centro lobulari, subpleurici, parasettali, peribroncovasali
- . ai lobi superiori, noduli confluenti con calcificazioni
- . pseudopiacche pleuriche
- . adenopatie calcifiche a guscio d'uovo
- . tendenza alla fibrosi





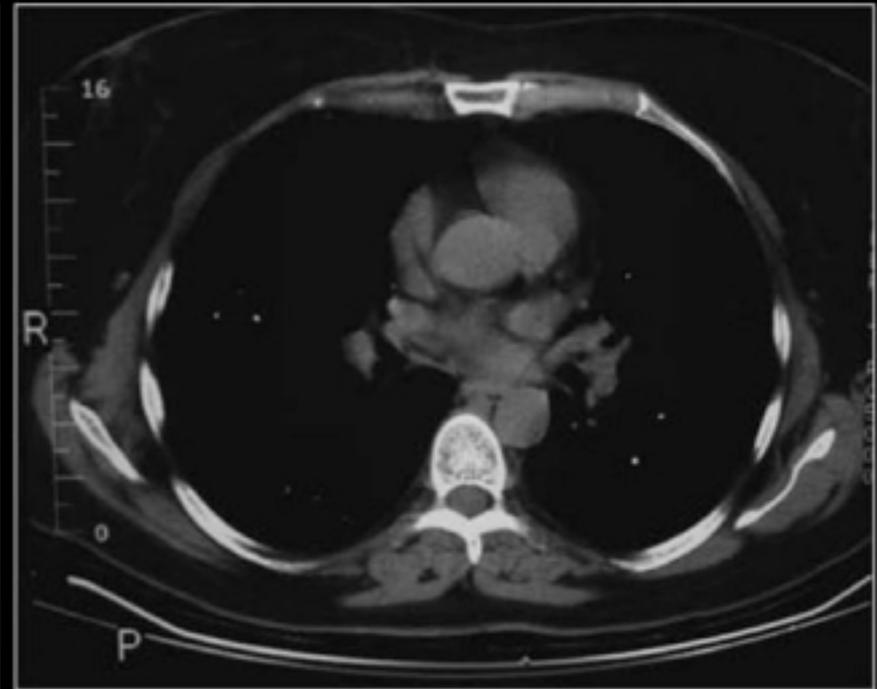
# Varicella

- Infiltrato infiammatorio interstiziale, essudato proteinoso intralveolare, edema ed emorragia
- Adulto immuno compromesso
- Noduli ben definiti random
- Noduli con ground glass, patch ground glass, confluenza di più noduli
- Esiti microcalcificazioni



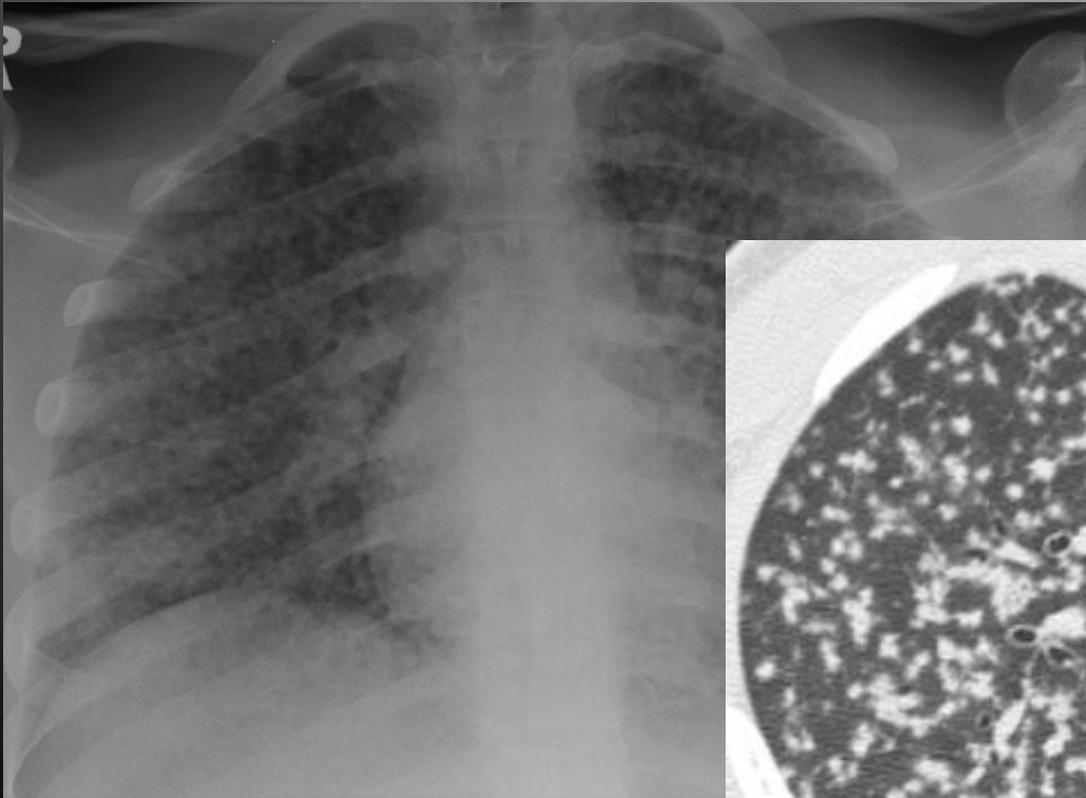
# Histoplasma capsulatum

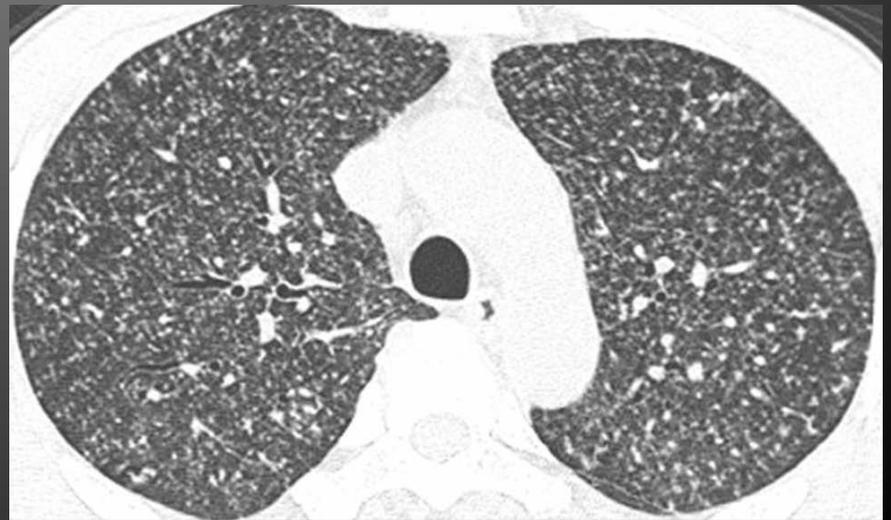
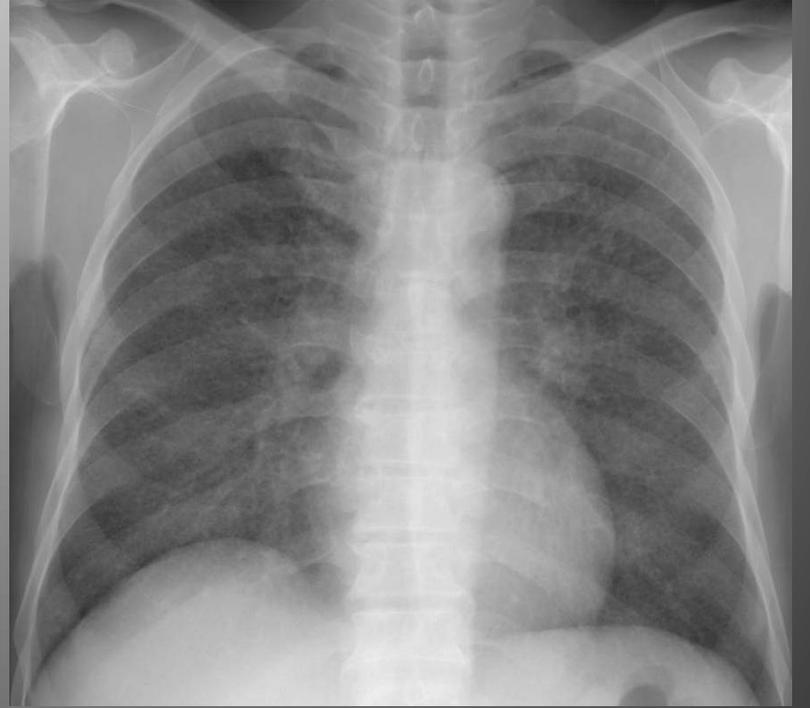
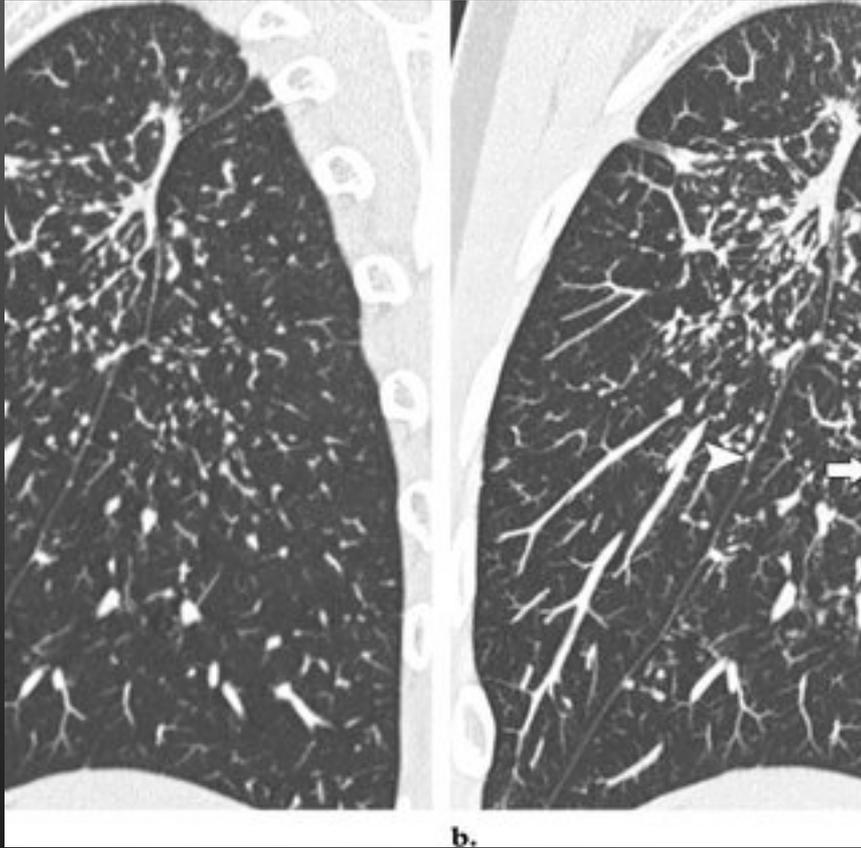
- Inalazione per lo più asintomatico america sud america asia
- Micronoduli adenopatie simil tbc
- Diffusione ematogena bronchiolare



# TBC miliare

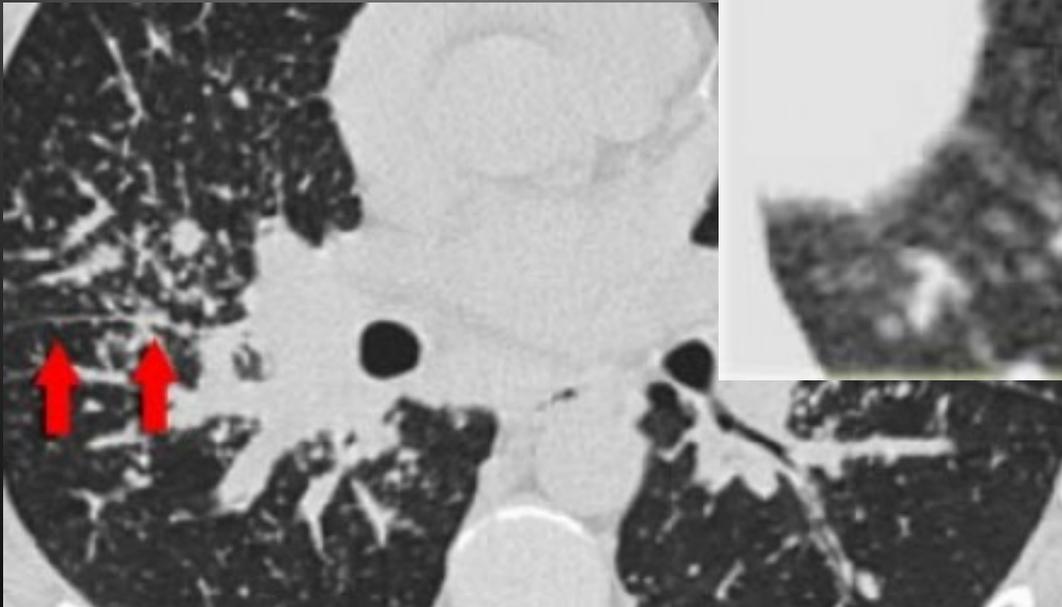
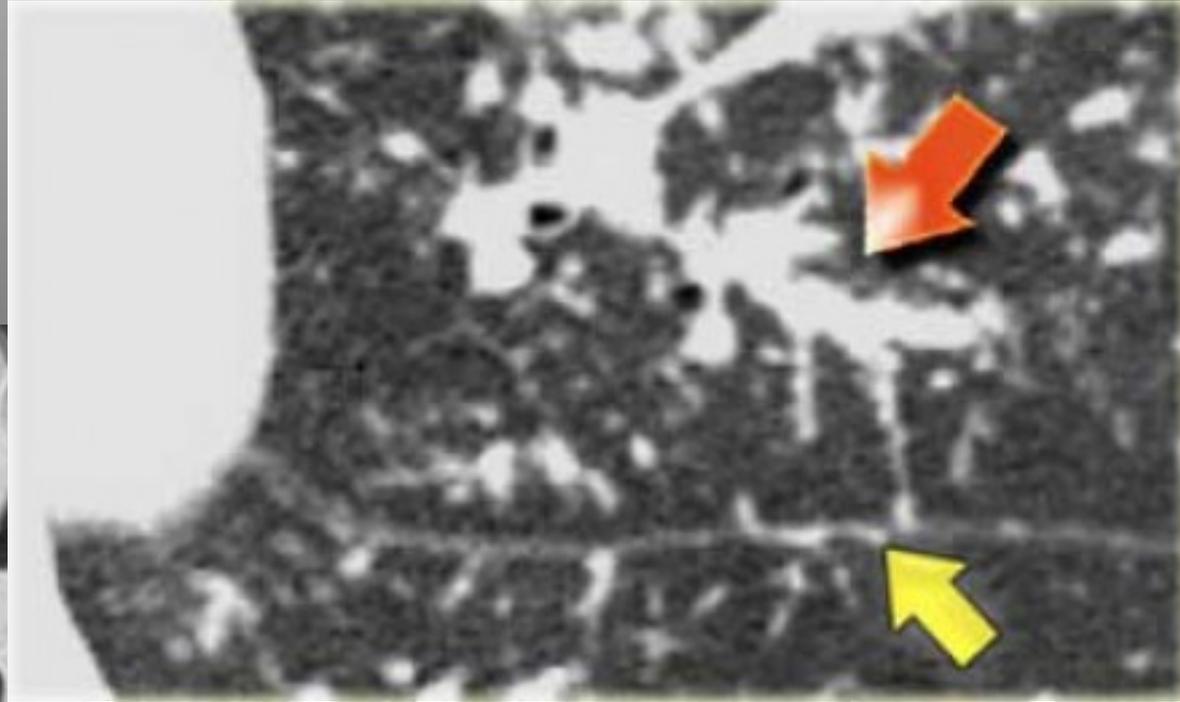
- Rara sia primaria che secondaria, via ematogena
- Adenopatie
- Interessa più organi





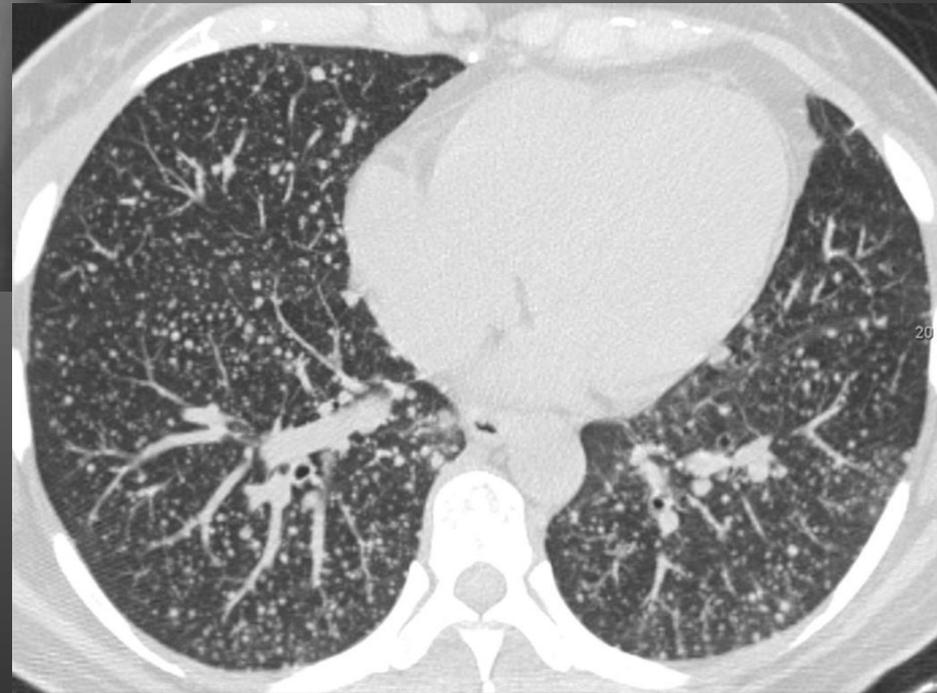
# Sarcoidosi

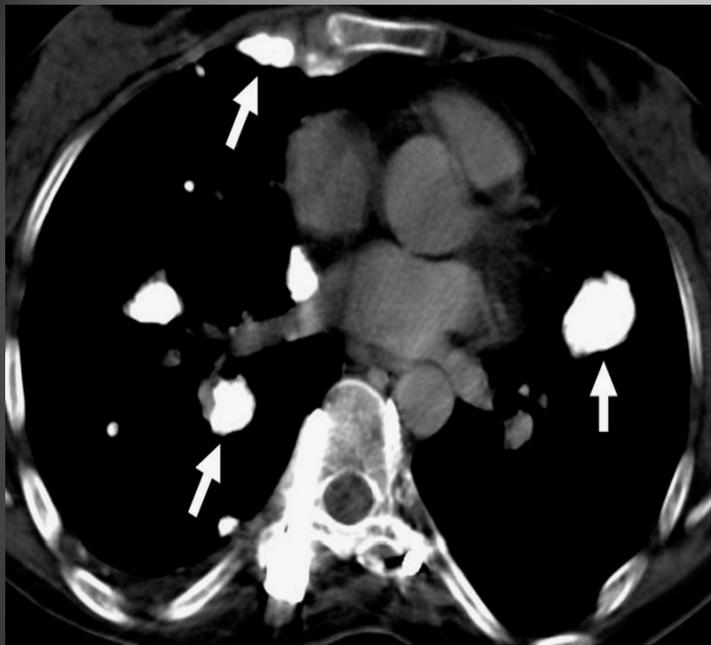
- Granulomi perilinfatici
- Adenopatie calcifiche
- Multi organo
- Miliare calcifica rara



# Secondarismi Polmonari Calcifici

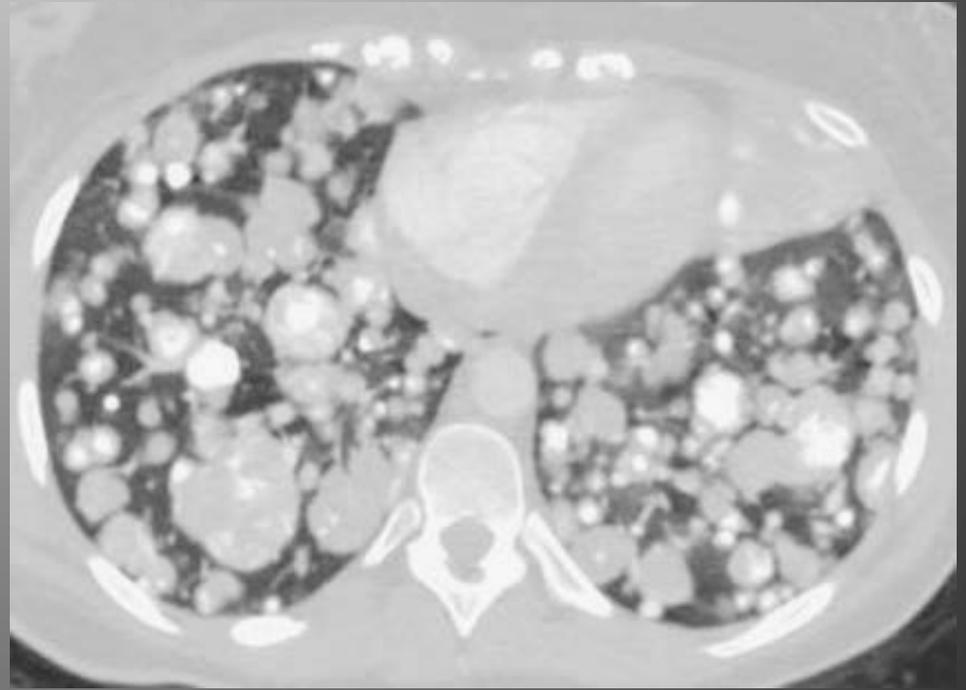
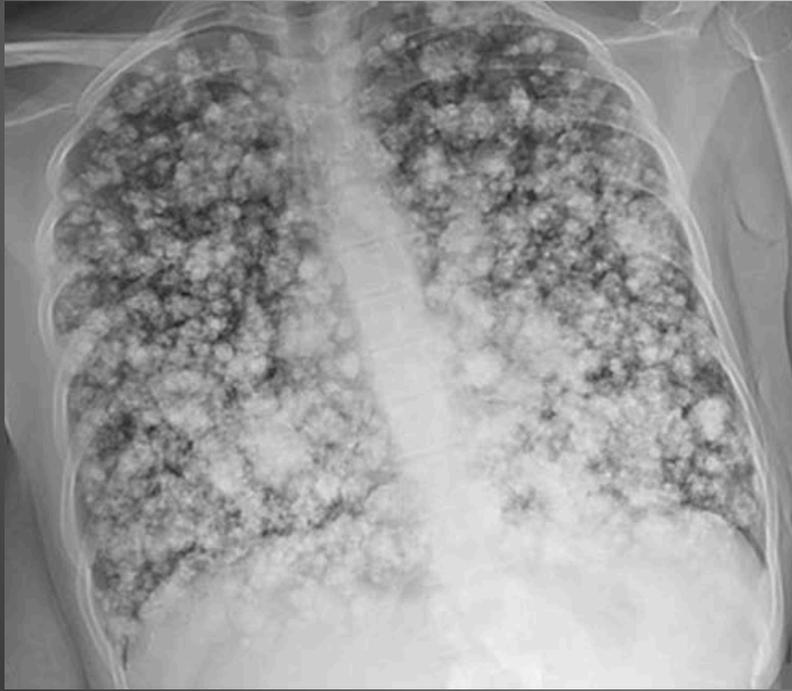
Ca Tiroide





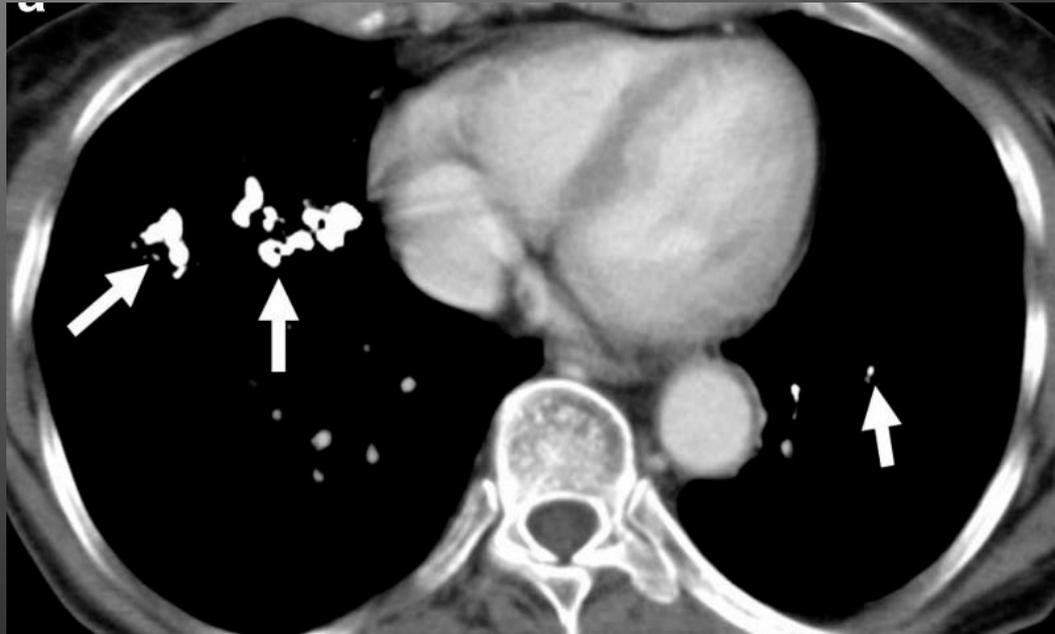
*Secondarismi da  
osteosarcoma*

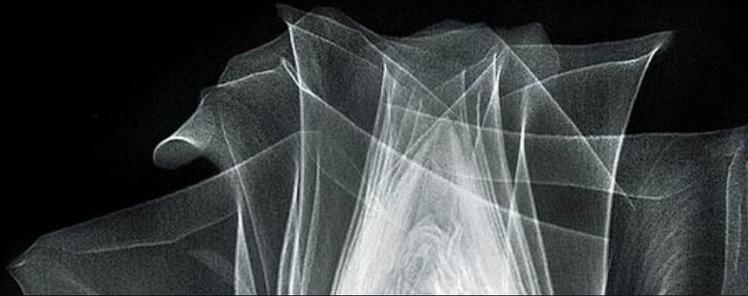




*Secondarismi polmonari da condrosarcoma*

# Depositi di bario





**RADIOLOGO**

**ANATOMO PATOLOGO**

***Grazie***

**PNEUMOLOGO**

