RESULTATS DES QUIZZ

1-D Macklin

2- D ou 2-E: sténose trachéale idiopathique ou post intubation

3-E: Pneumonie sur talcoe intra vx

4-C: Tératome pulmonaire

5-A: Affection à Nocardia

6-C: Thymome médiastinal

7-D: TBM & PE & Pleurésie bilatérale

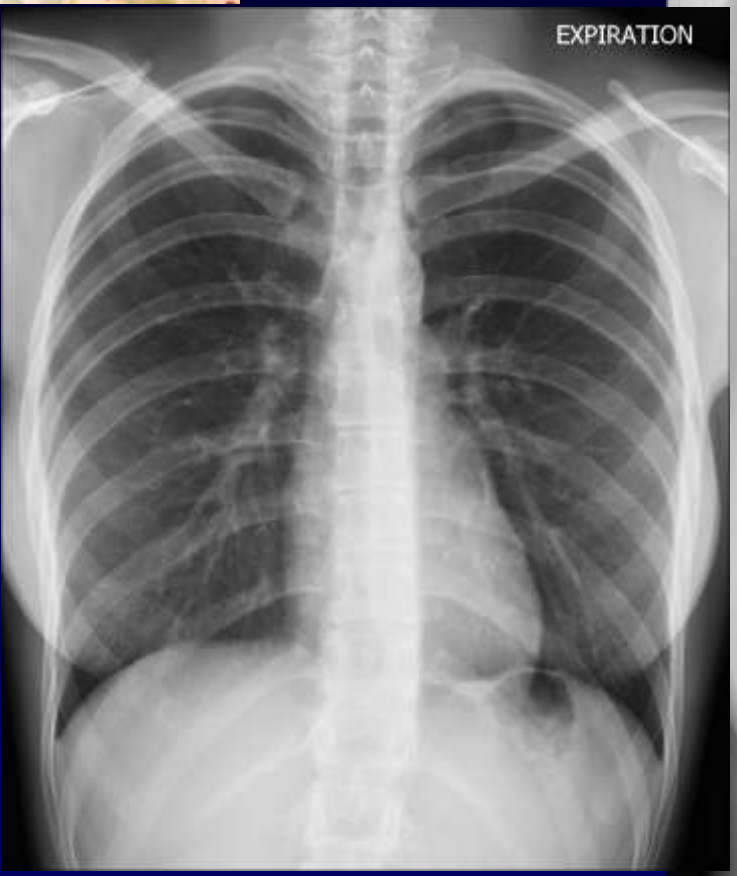
8-B: Goitre médiastinal

PY Marcy
AS Bertrand
A Lacout
P Fajadet

QUIZ n° 1

- Femme 21ans, Douleur thorax brutale sans dyspnée.
- Pas d'antécédent cardiothoracique particulier
- Bon état général
- Apyrétique
- Auscultation: normale
- Saturation à l'air ambiant: 98%
- Pas de syndrome de MARFAN.


CLUB THORAX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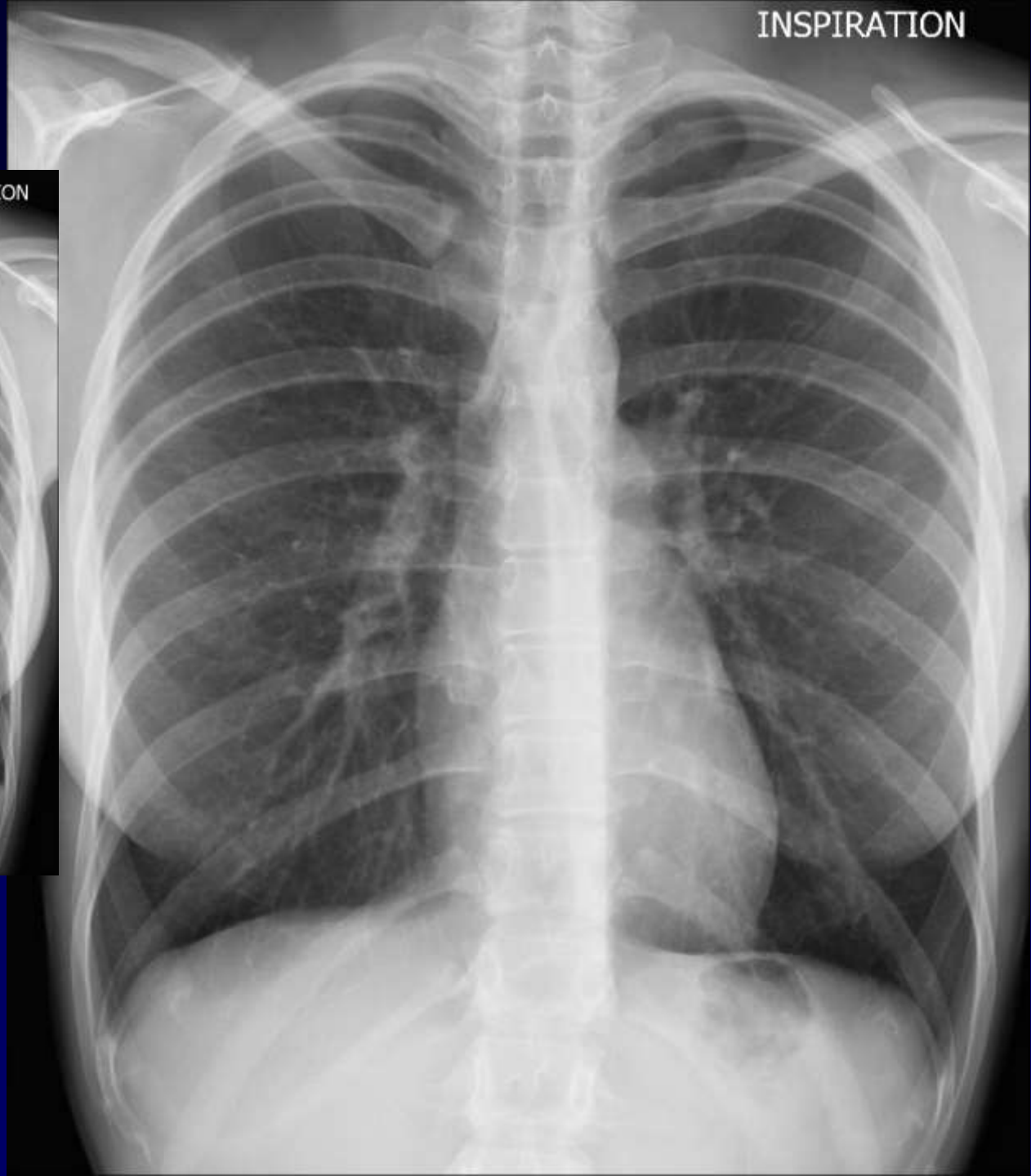
INSPIRATION


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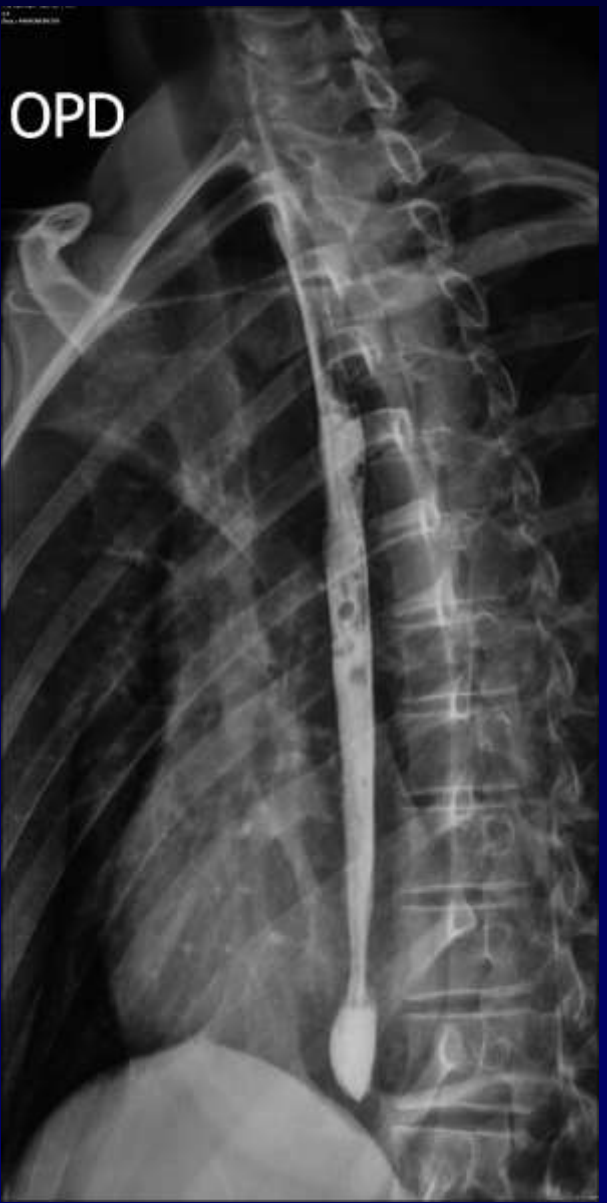
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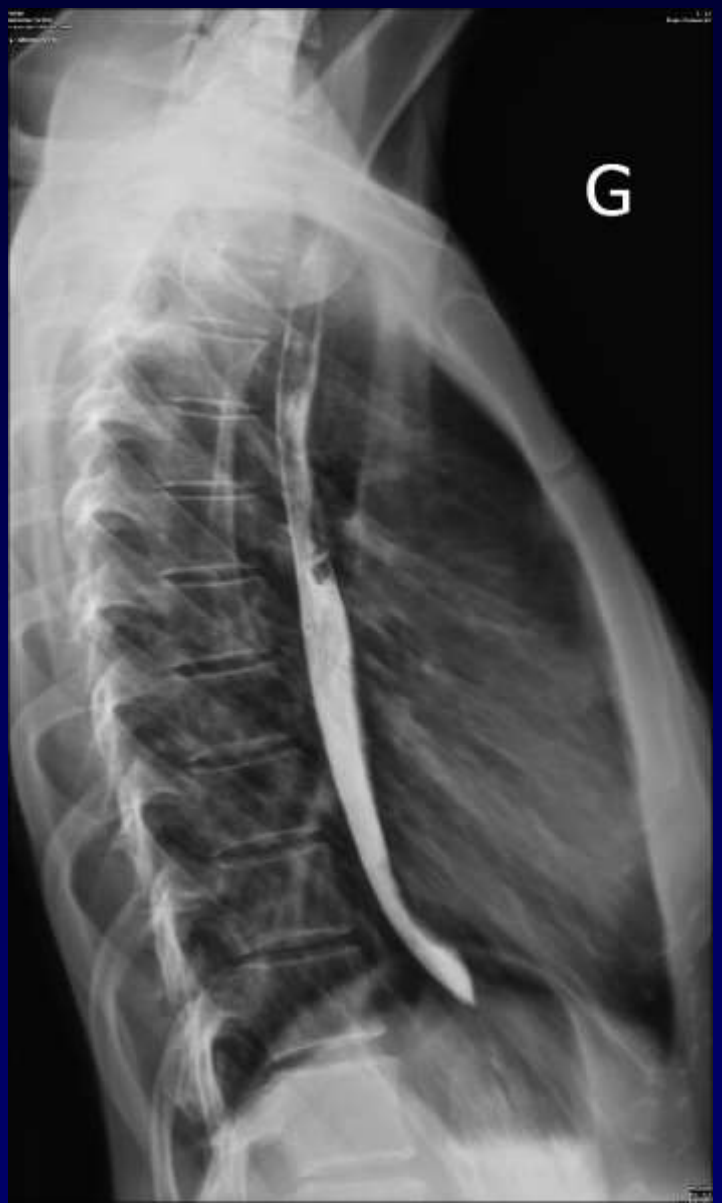
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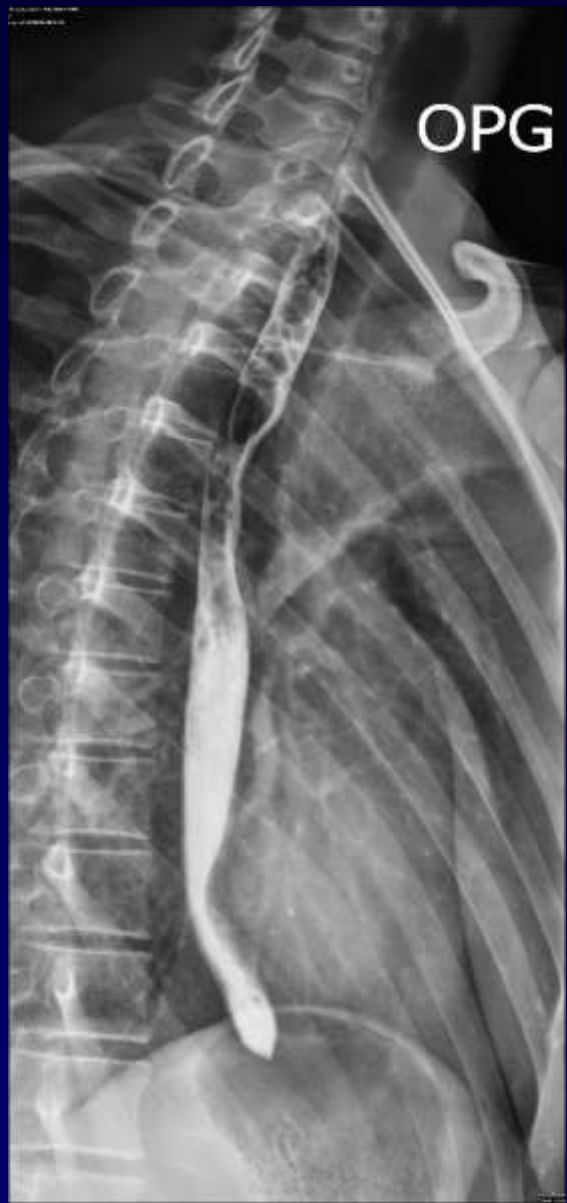
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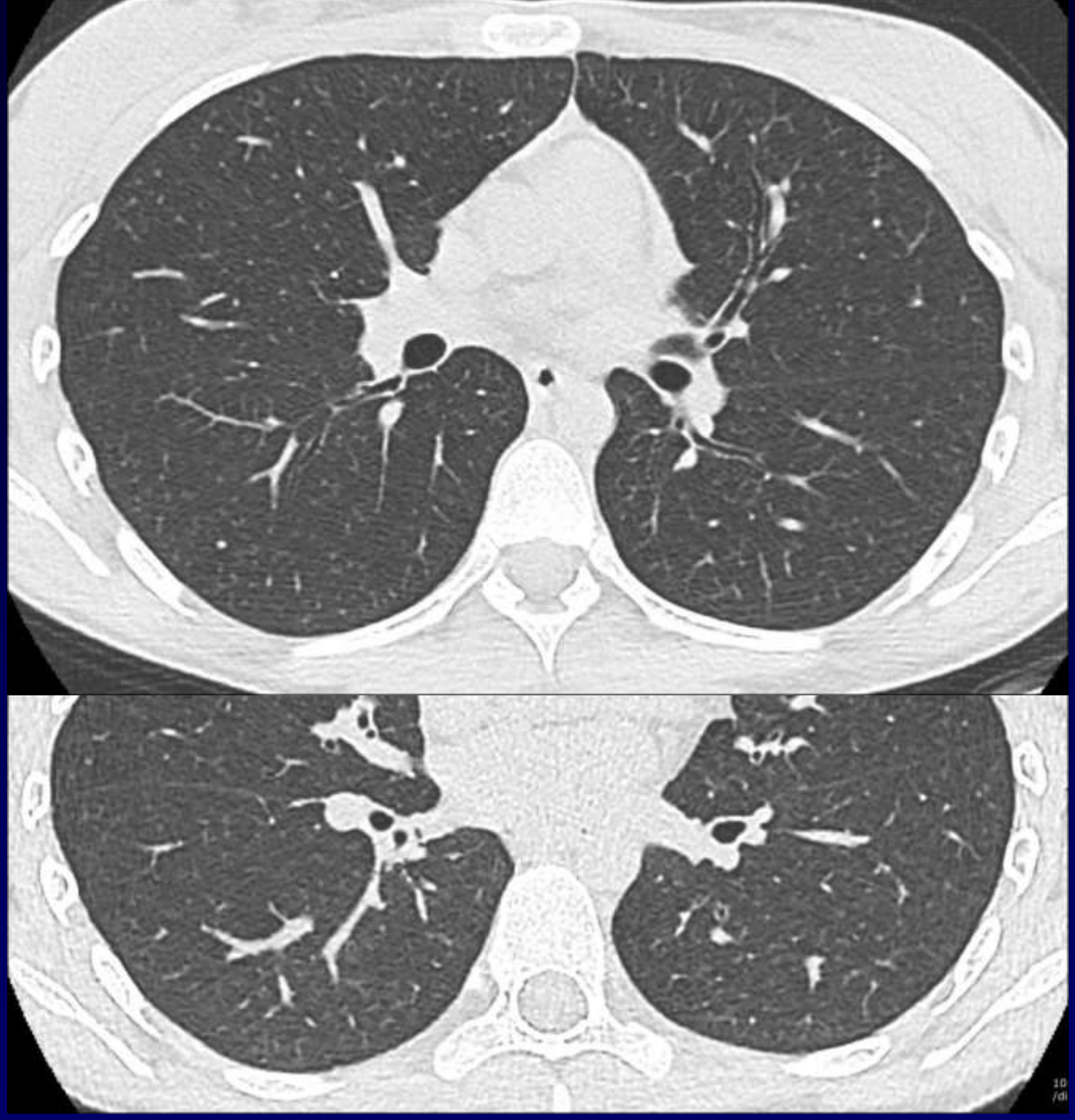
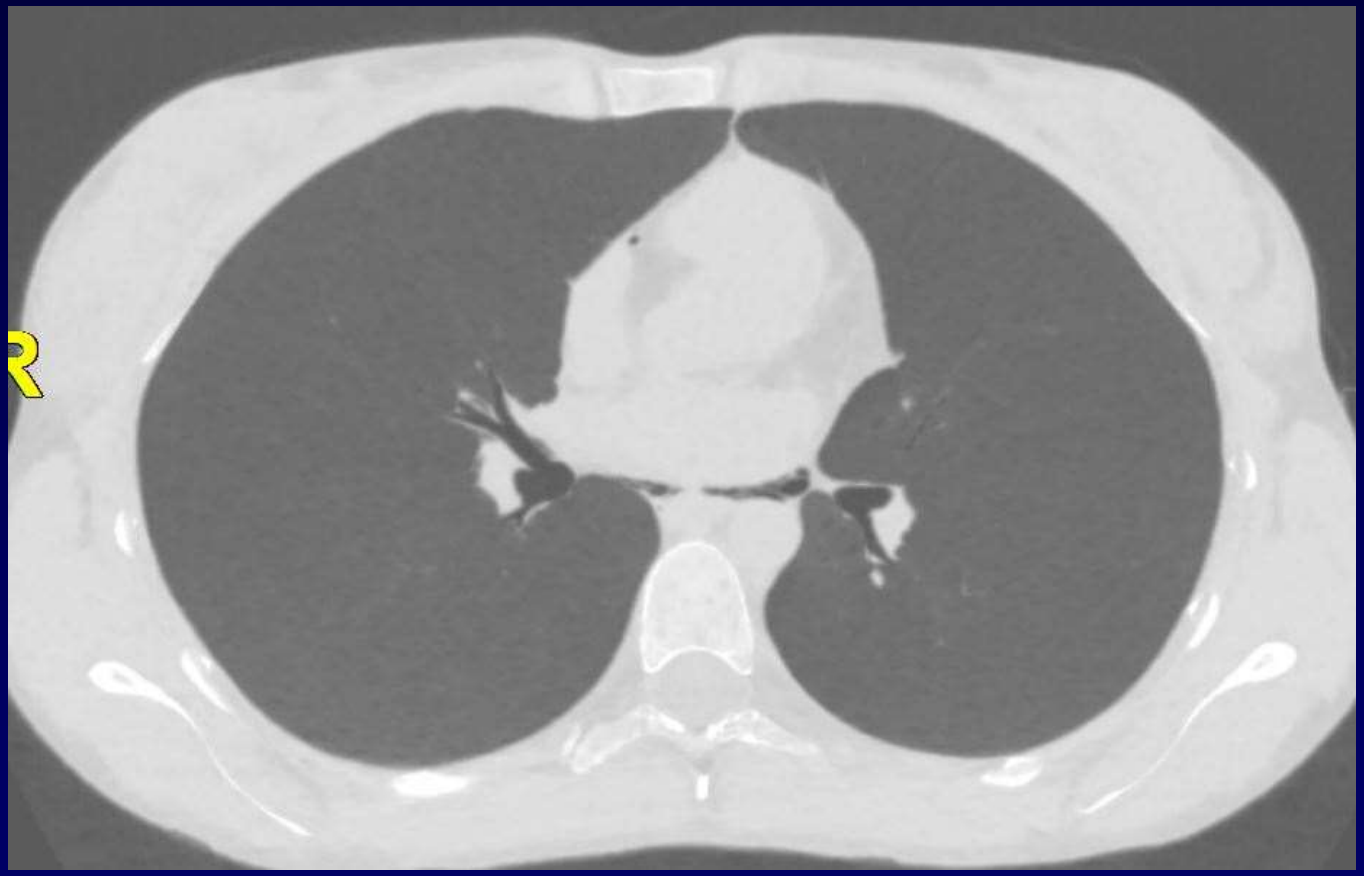
CLUB THORAX



Protocole MINIP



QUIZ 1

Diagnostic ?

A. Pneumopéricarde spontané

B. Pneumothorax

C. Emphysème sous cutané

D. Macklin syndrome*

E. Boerhaave's syndrome

**** Pneumomédiastin spontané***

A.Pneumopéricarde spontané
B.Pneumothorax
C.Emphysème sous cutané
D.Macklin syndrome*
E.Boerhaave's syndrome

Diagnostic ?

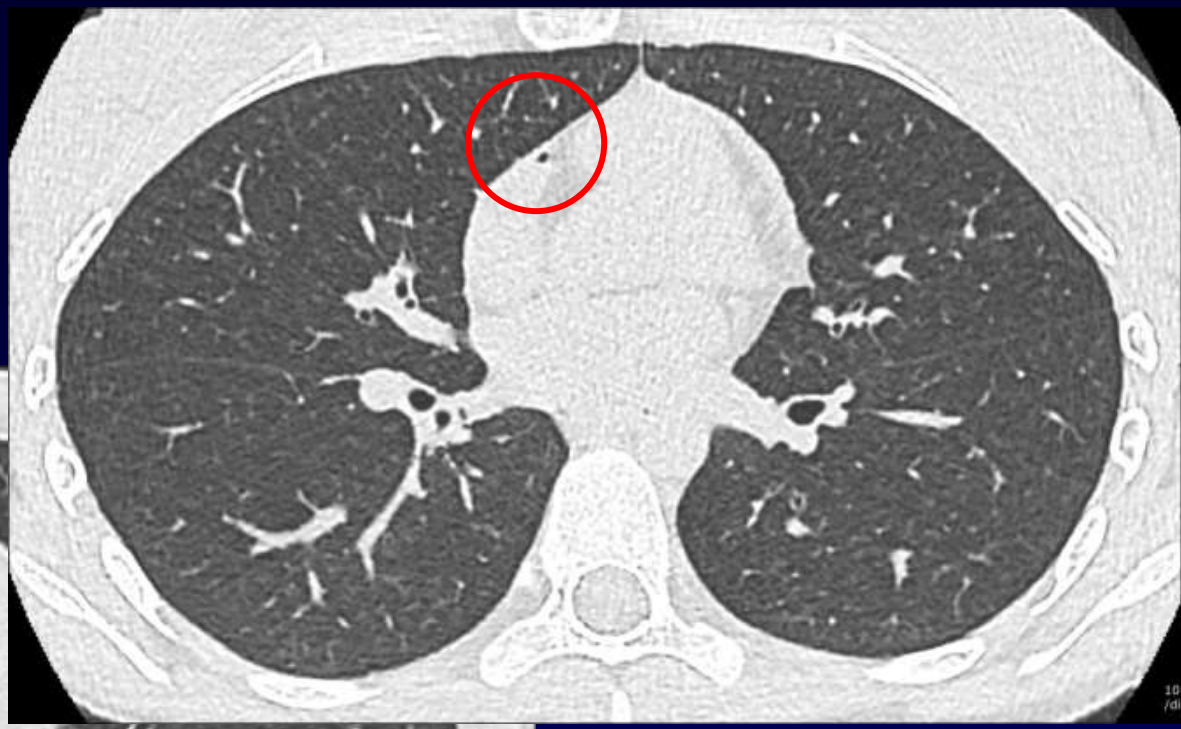
Pneumomédiastin spontané (occulte)

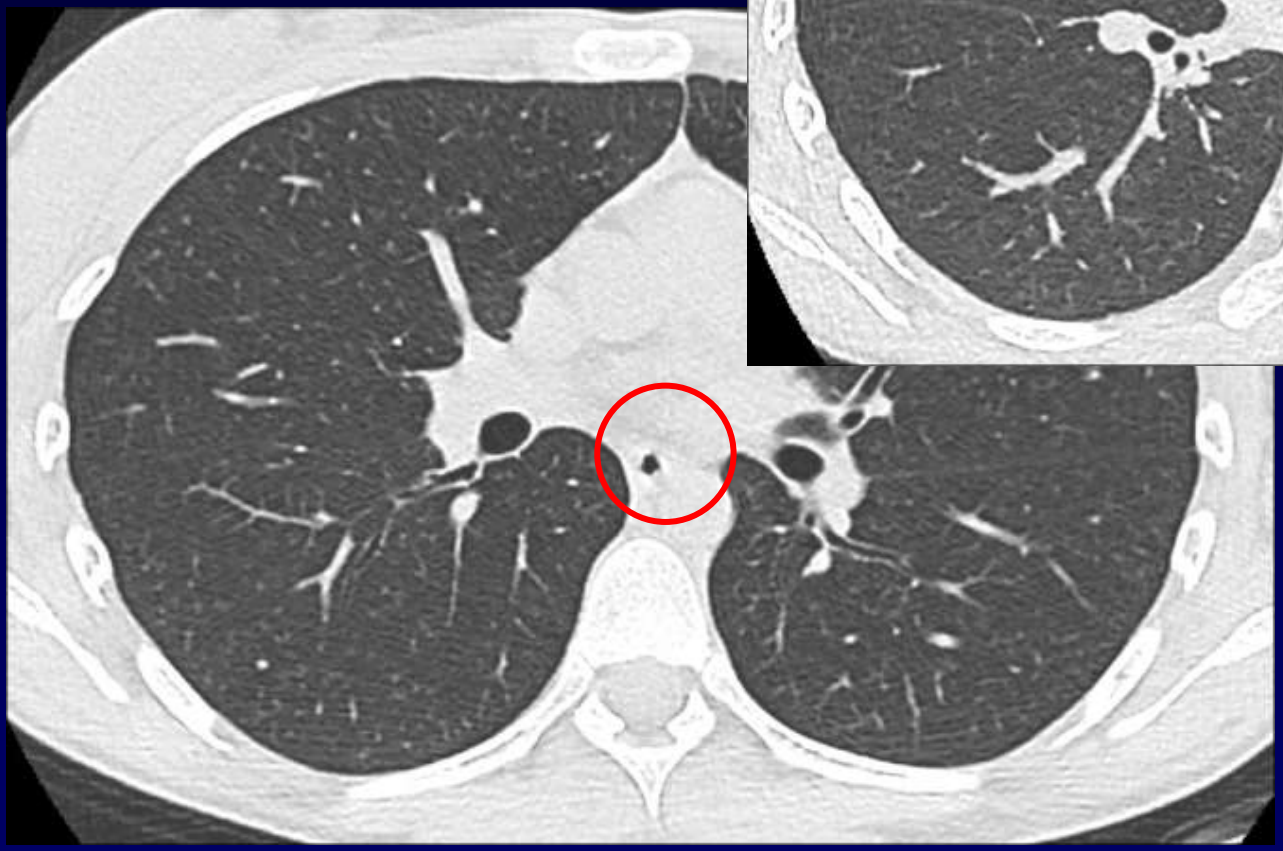
Occulte (CT + / RT -)

Spontané (RT +)

Syndrome de Macklin.


CLUB THORAX



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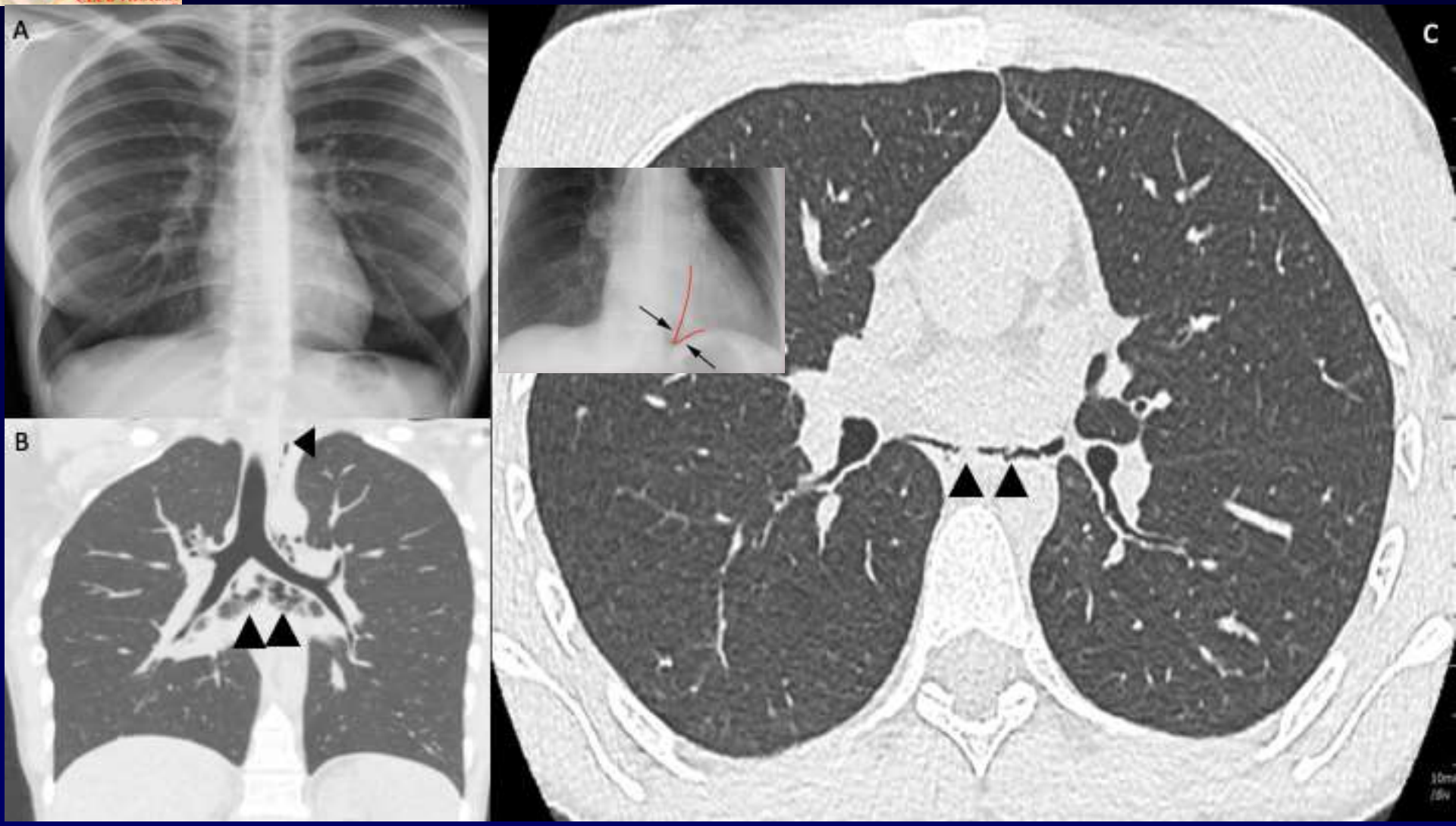
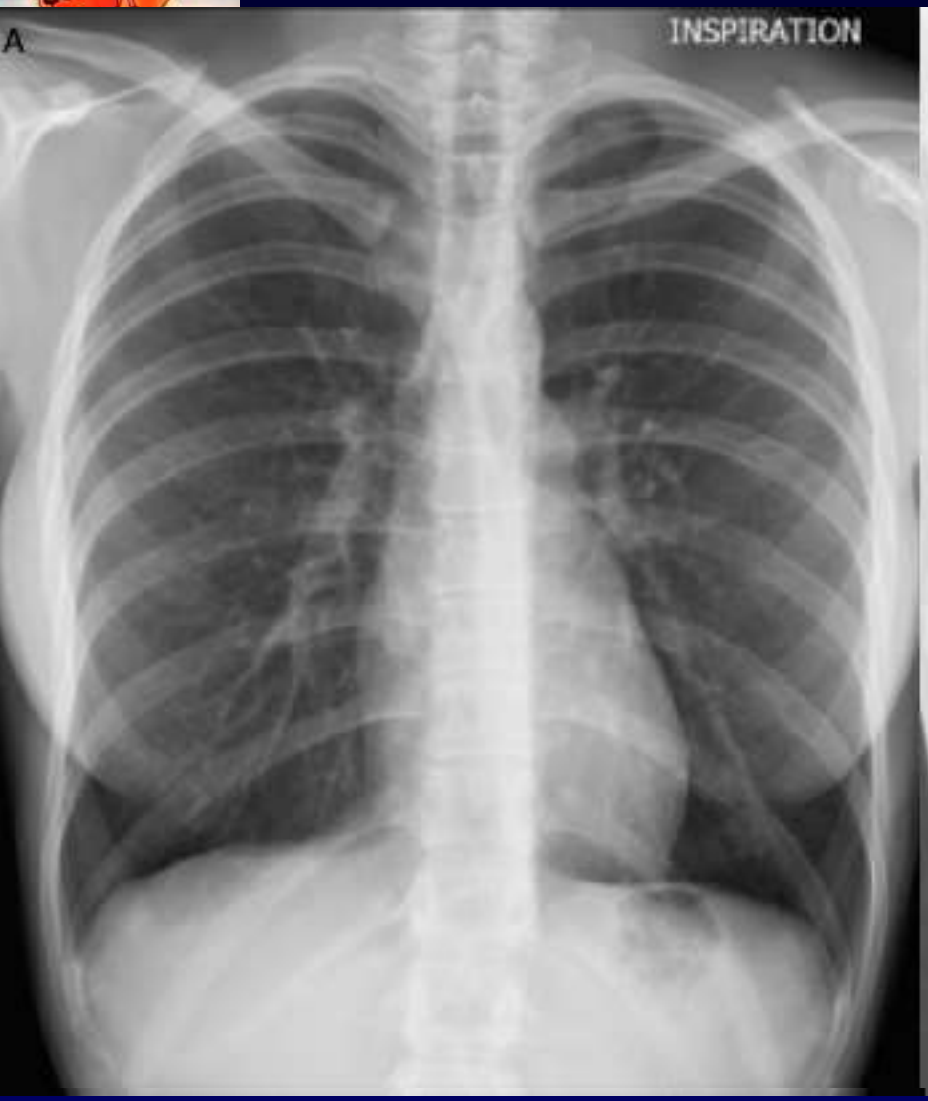
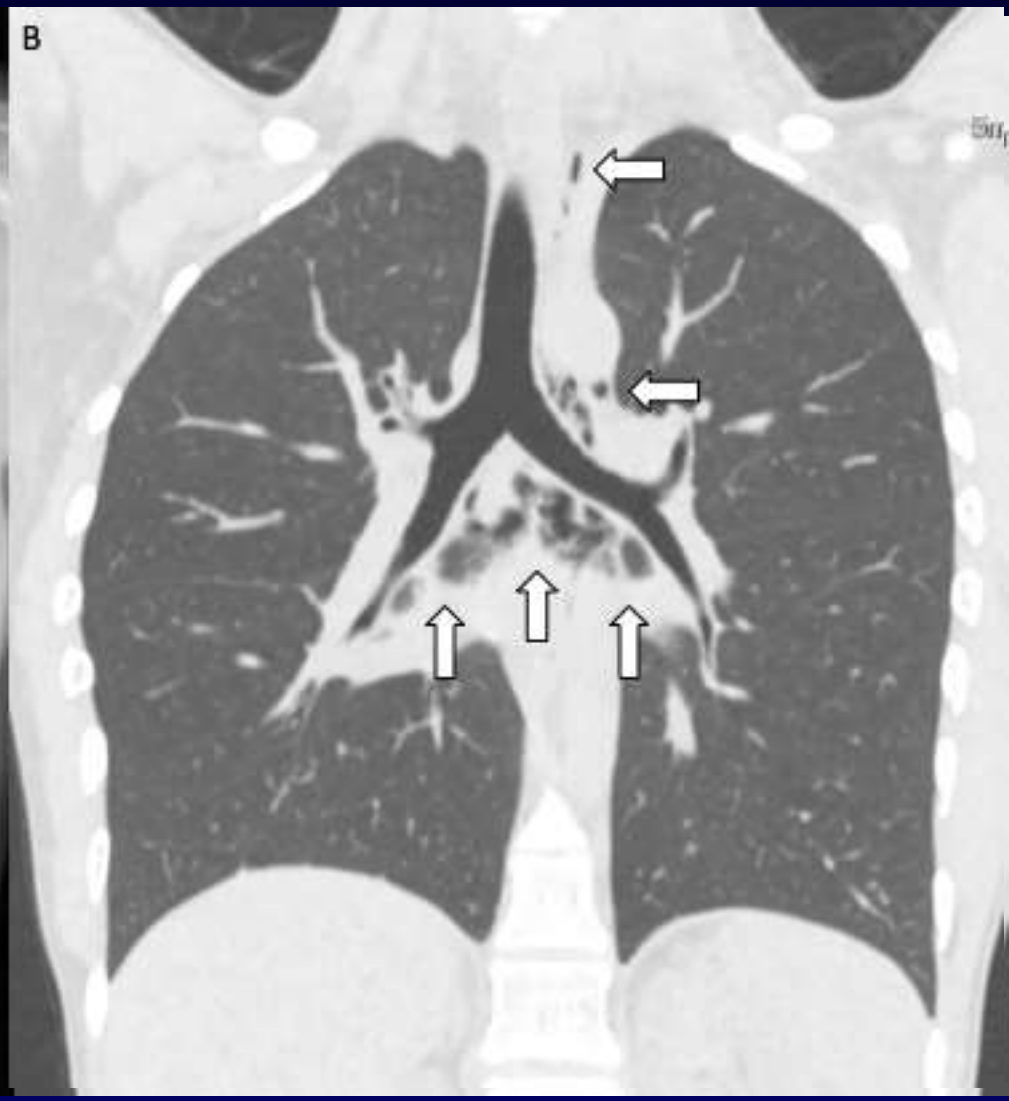

A
B
C


A
INSPIRATION

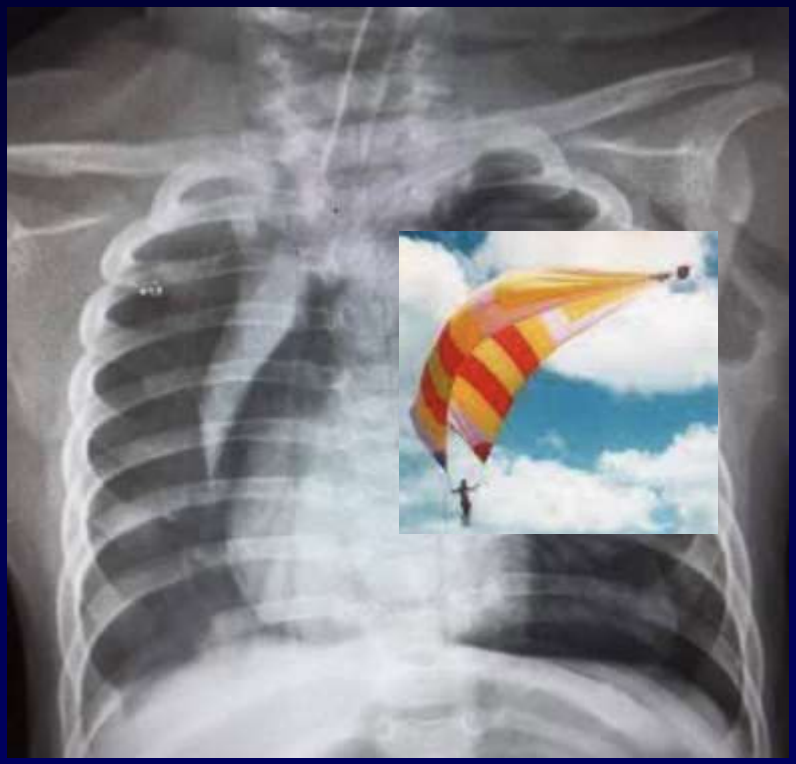

B

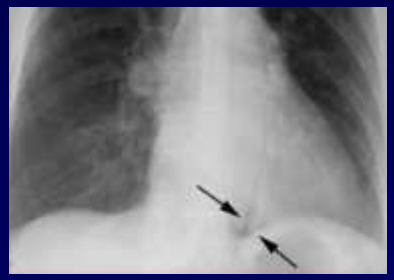
Pneumomédiastin spontané

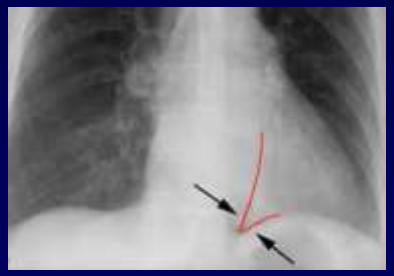
- Asthme
- Efforts de vomissements
- VALSALVA, plongée
- Barotrauma alvéolaire

➡ Emphysème pulmonaire interstitiel

➡ Pneumomédiastin



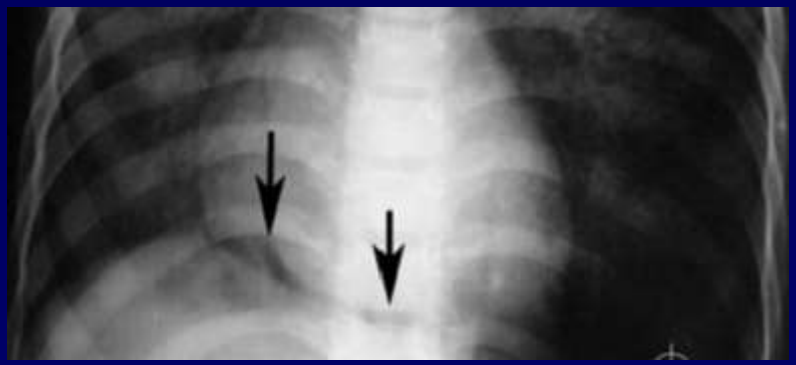




RX PEDIATRIE: Signe du Spinnaker (silhouette du thymus flottant)

Signe de Naclerio (« V »): œsophage +

Signe du « diaphragme continu »



PRONOSTIC (S)

Macklin's syndrome

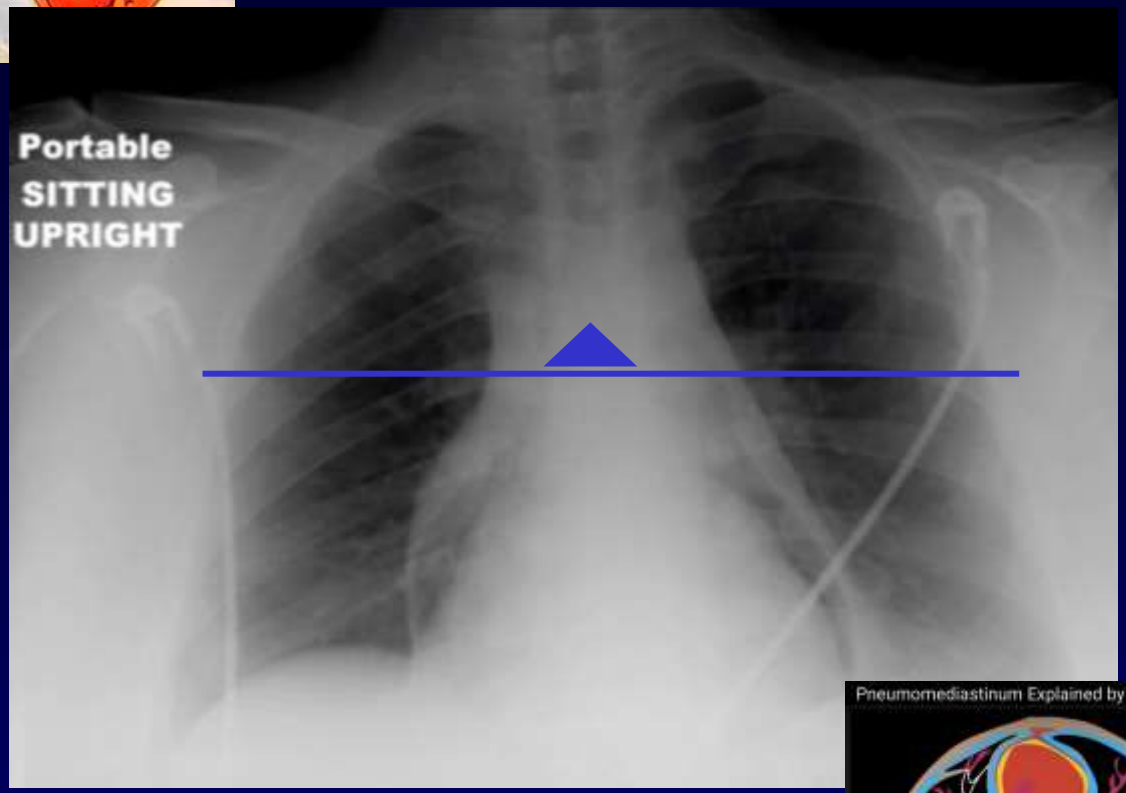
- Baro trauma alvéolaire
- Surpression glottique
- *CT = Air interstitium*
- Repos, Analgésiques, pas d'antibiotiques +/-O2
- Résolution clinique J3

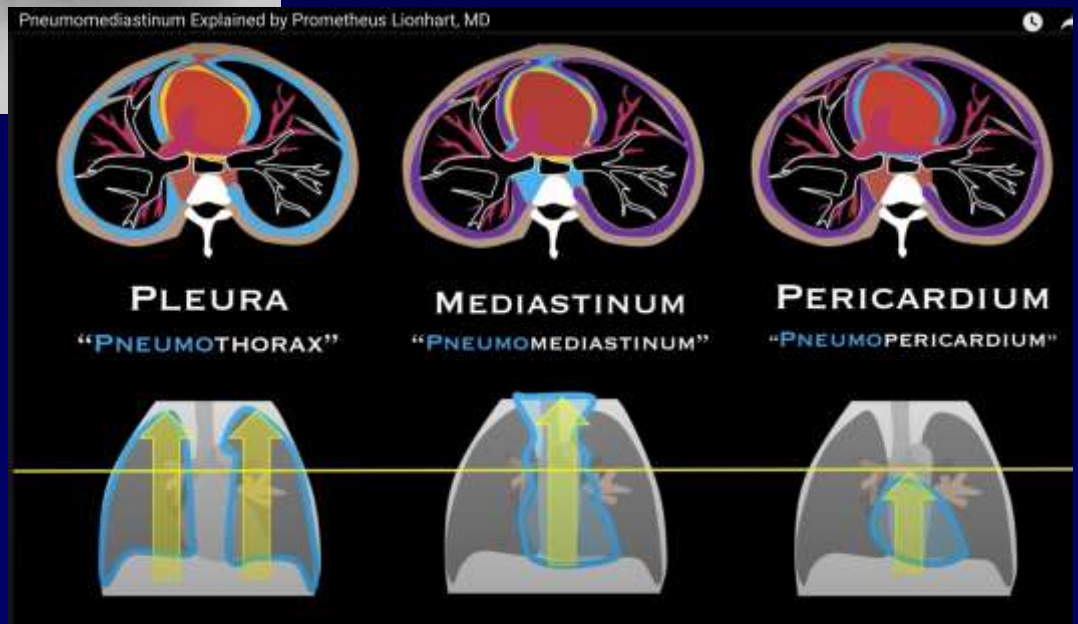
Boerhaave's syndrome

- Rupture œsophage distal
- Suite efforts de vomissements
- *CT = Liquide médiastin*
- *Fissure œsophage post lat.*
- *69% de Faux Dg !*
- Léthal surtout si retard Diag (> 50% à 24h)
- TTT: conservateur, endoscopique, chirurgical.

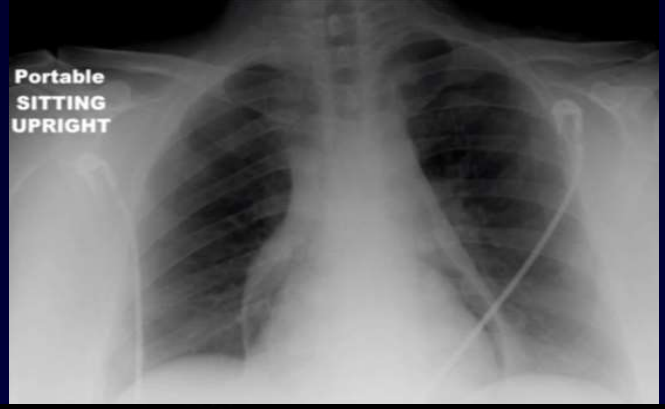
Pneumomédiastin & COVID 19

Diagnostics Différentiels

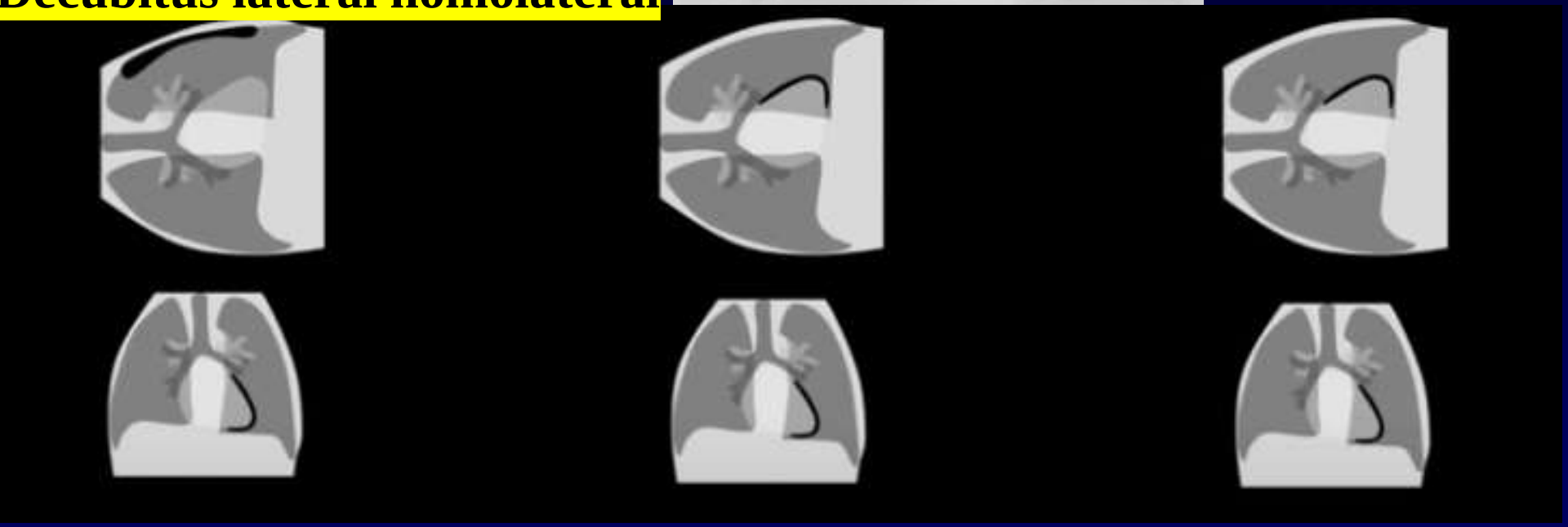




- Pneumomédiastin
- Pneumothorax
- Pneumopéricarde



Decubitus latéral homolatéral

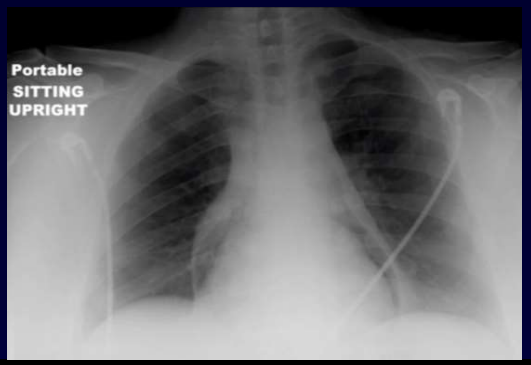


Decubitus latéral Controlatéral

PnT

PnM

PnP



PLEURA

"PNEUMOTHORAX"

MEDIASTINUM

"PNEUMOMEDIASTINUM"

PERICARDIUM

"PNEUMOPERICARDIUM"

Macklin's syndrome

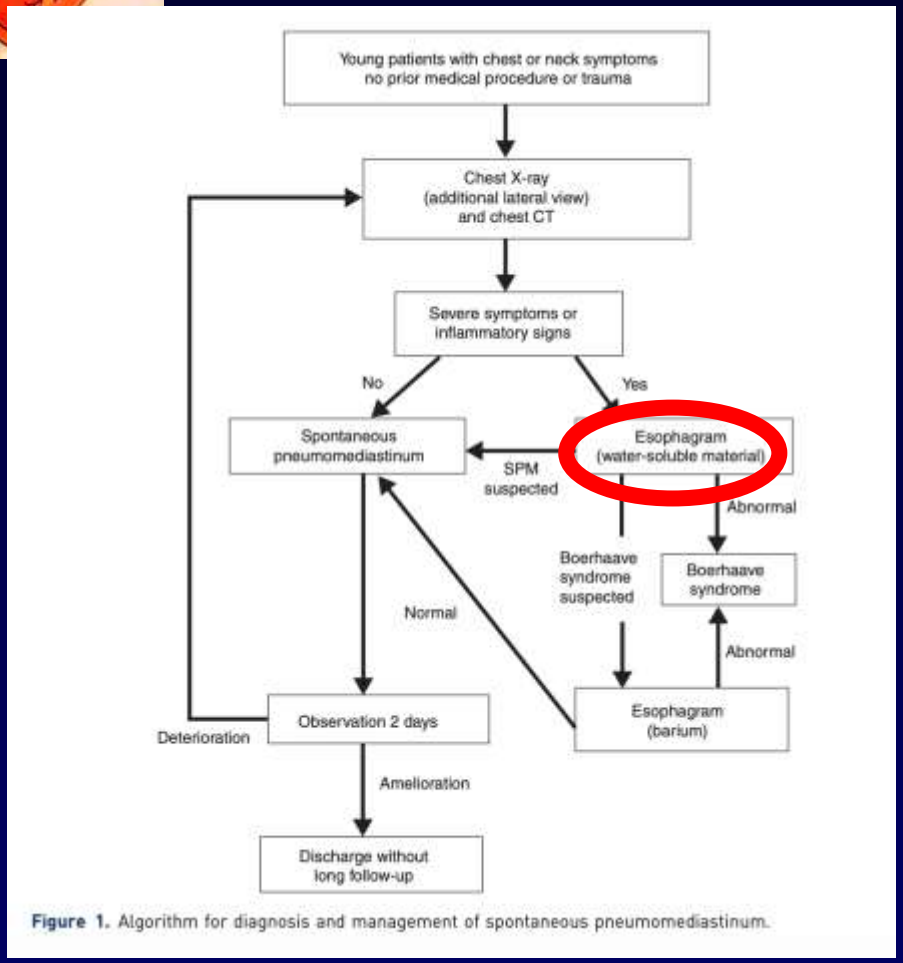


Figure 1. Algorithm for diagnosis and management of spontaneous pneumomediastinum.

J3: patient guéri

Boerhaave's syndrome

characteristics of the 16 patients with complicated Boerhaave syndrome

Men / Women	16/0
Age characteristics	
Mean age (years)	42.2
Range (Years)	22- 81
Hemodynamic parameters	
Pulse rate (Mean)	104 / min
Systolic Blood pressure (Mean)	100 mm hg
History of ethanol use	6 (37.5 %)
Presenting symptoms	
Chest pain	11 (68.7%)
Dyspnoea	10 (62.5%)
Vomiting	4 (25%)
Cough	2 (12.5%)
Delay in diagnosis and referral from ICU (Median)	16 days
Number of patients initially managed for non-esophageal thoracic cause (n=11)	
Initial diagnosis	Number of patients
Pyothorax	6 (54.5 %)
Pleural effusion	3 (27.2 %)
Unstable angina	2 (18.1 %)
Location of Perforation	
Distal	15/16*
Perforation into the pleural cavity	
Right	6 (37.5%)
Left	8 (50%)
Right and Left	2 (12.5%)

J2: 50% léthal

69% de faux Dg: cardio pulmonaire pleural !

Harikrishnan S et al. Challenges faced in the management of complicated Boerhaave syndrome: a tertiary care center experience. Pan Afr Med J. 2020;36:65.

take home points

- Deux formes radicalement opposées:
  - MACKLIN: sort guéri à J3
  - BOERHAVE: léthal 50% J2

- RT: Face & décubitus latéraux, Naclerio (œsophage)
- TDM et TPO
- TRAQUER la bulle mais surtout l'épanchement liquidien
- Gauche > Droit

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Published online 2020 Jun 3. doi: 10.11604/pamj.2020.36.65.23666 PMID: 32754292

Challenges faced in the management of complicated Boerhaave syndrome: a tertiary care center experience

Sakthivel Harikrishnan,[1] Chandramohan Sengoravan Murugesan,[2,&] Raveena Karthikeyan,[3] Kanagavel Manickavasagam,[2] and Balaji Singh[2]

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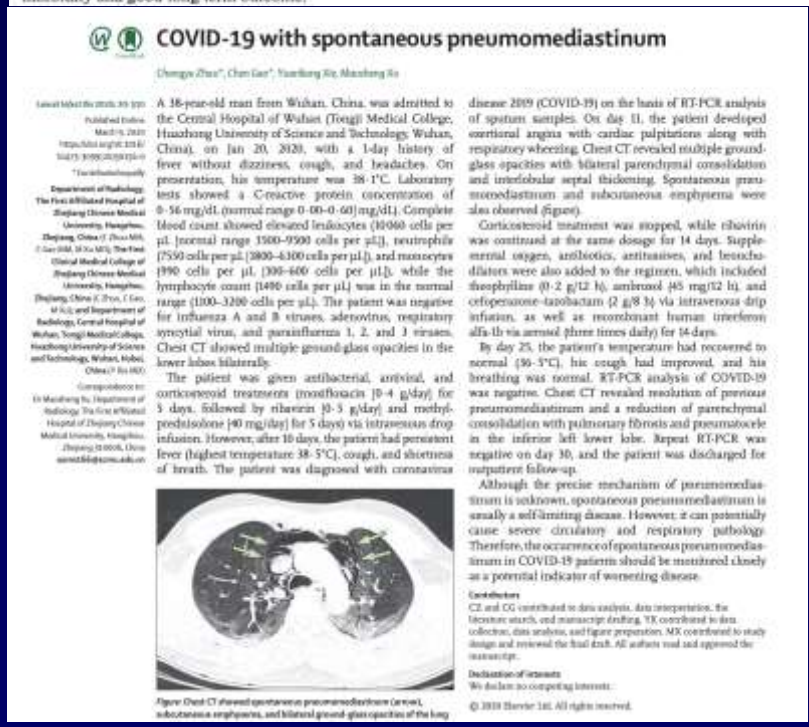
Abstract Go to:

Spontaneous esophageal perforation is rare and is associated with high morbidity and mortality. A spectrum of various surgical modalities ranging from primary surgical repair to esophagectomy is available for its management. The optimal management of patients presenting late in a hemodynamically stable condition is not clearly defined in the literature. A retrospective review of all patients with Boerhaave syndrome managed by a single surgical team in a tertiary care center between 2008 and 2019 was performed (n = 16). Eleven patients were initially managed in the medical intensive care unit (MICU) as non-esophageal cause and 5 patients were referred after failed management (conservative/endoscopic). Demographics, clinical presentation, characteristics of perforation, initial diagnosis, and treatment were analyzed. All patients were males with a mean age of 42.2 years. A history of ethanol use was present in 6 patients. The median delay in diagnosis and referral was 16 days (range: 11-40 days). The common presenting symptoms were chest pain (n=11), dyspnoea (n=10), vomiting (n=4) and cough (n=2). The perforation was directed into right, left, and bilateral pleural cavities in 6, 8, and 2 patients respectively. The location of perforation was distal esophagus except for one patient. One patient was successfully treated with conservative management. The remaining patients underwent esophagectomy as a definitive surgical procedure. There was no significant postoperative morbidity and mortality. Esophagectomy can be done as a one-stage definitive procedure for patients with Boerhaave syndrome who present late in a hemodynamically stable condition with acceptable morbidity and good long term outcome.



COVID-19 with spontaneous pneumomediastinum

Chengyu Zhou*, Chen Gao*, Yuanlong Xie, Maosheng Xu

A 38-year-old man from Wuhan, China, was admitted to the Central Hospital of Wuhan (Tongji Medical College, Huazhong University of Science and Technology, Wuhan, China), on Jan 20, 2020, with a 1-day history of fever without dizziness, cough, and headaches. On presentation, his temperature was 38·1°C. Laboratory tests showed a C-reactive protein concentration of 0·56 mg/dL (normal range 0·00–0·60 mg/dL). Complete blood count showed elevated leukocytes (10·60 cells per μL [normal range 3·500–9·500 cells per μL]), neutrophils (7·550 cells per μL [2·800–6·300 cells per μL]), and monocytes (990 cells per μL [100–600 cells per μL]), while the lymphocyte count (1·490 cells per μL) was in the normal range (1·100–3·200 cells per μL). The patient was negative for influenza A and B viruses, adenovirus, respiratory syncytial virus, and parainfluenza 1, 2, and 3 viruses. Chest CT showed multiple ground-glass opacities in the lower lobes bilaterally.

The patient was given antibacterial, antiviral, and corticosteroid treatments (moxifloxacin [0·4 g/day] for 5 days, followed by ribavirin [0·5 g/day] and methylprednisolone [40 mg/day] for 5 days) via intravenous drip infusion. However, after 10 days, the patient had persistent fever (highest temperature 38·5°C), cough, and shortness of breath. The patient was diagnosed with coronavirus disease 2019 (COVID-19) on the basis of RT-PCR analysis of sputum samples. On day 11, the patient developed exertional angina with cardiac palpitations along with respiratory wheezing. Chest CT revealed multiple ground-glass opacities with bilateral parenchymal consolidation and interlobular septal thickening. Spontaneous pneumomediastinum and subcutaneous emphysema were also observed (figure).

Corticosteroid treatment was stopped, while ribavirin was continued at the same dosage for 14 days. Supplemental oxygen, antibiotics, antitussives, and bronchodilators were also added to the regimen, which included theophylline (0·2 g/12 h), ambroxol (45 mg/12 h), and cefoperazone-tazobactam (2 g/8 h) via intravenous drip infusion, as well as recombinant human interferon alfa-1b via aerosol (three times daily) for 14 days.

By day 25, the patient's temperature had recovered to normal (36·5°C), his cough had improved, and his breathing was normal. RT-PCR analysis of COVID-19 was negative. Chest CT revealed resolution of previous pneumomediastinum and a reduction of parenchymal consolidation with pulmonary fibrosis and pneumatocele in the inferior left lower lobe. Repeat RT-PCR was negative on day 30, and the patient was discharged for outpatient follow-up.

Although the precise mechanism of pneumomediastinum is unknown, spontaneous pneumomediastinum is usually a self-limiting disease. However, it can potentially cause severe circulatory and respiratory pathology. Therefore, the occurrence of spontaneous pneumomediastinum in COVID-19 patients should be monitored closely as a potential indicator of worsening disease.

Figure: Chest CT showed spontaneous pneumomediastinum (arrow), subcutaneous emphysema, and bilateral ground-glass opacities of the lung

Contributors
CZ and CG contributed to data analysis, data interpretation, the literature search, and manuscript drafting. YX contributed to data collection, data analysis, and figure preparation. MX contributed to study design and reviewed the final draft. All authors read and approved the manuscript.

Declaration of interests
We declare no competing interests.

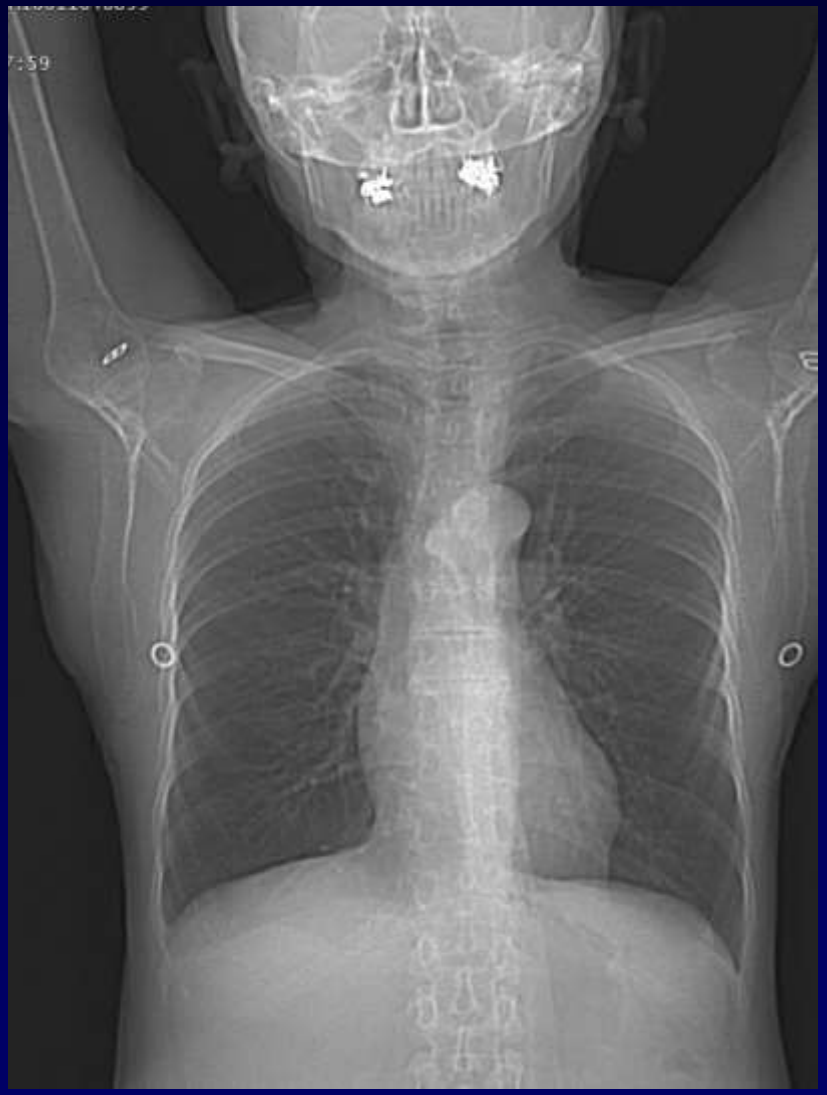
QUIZ n° 2

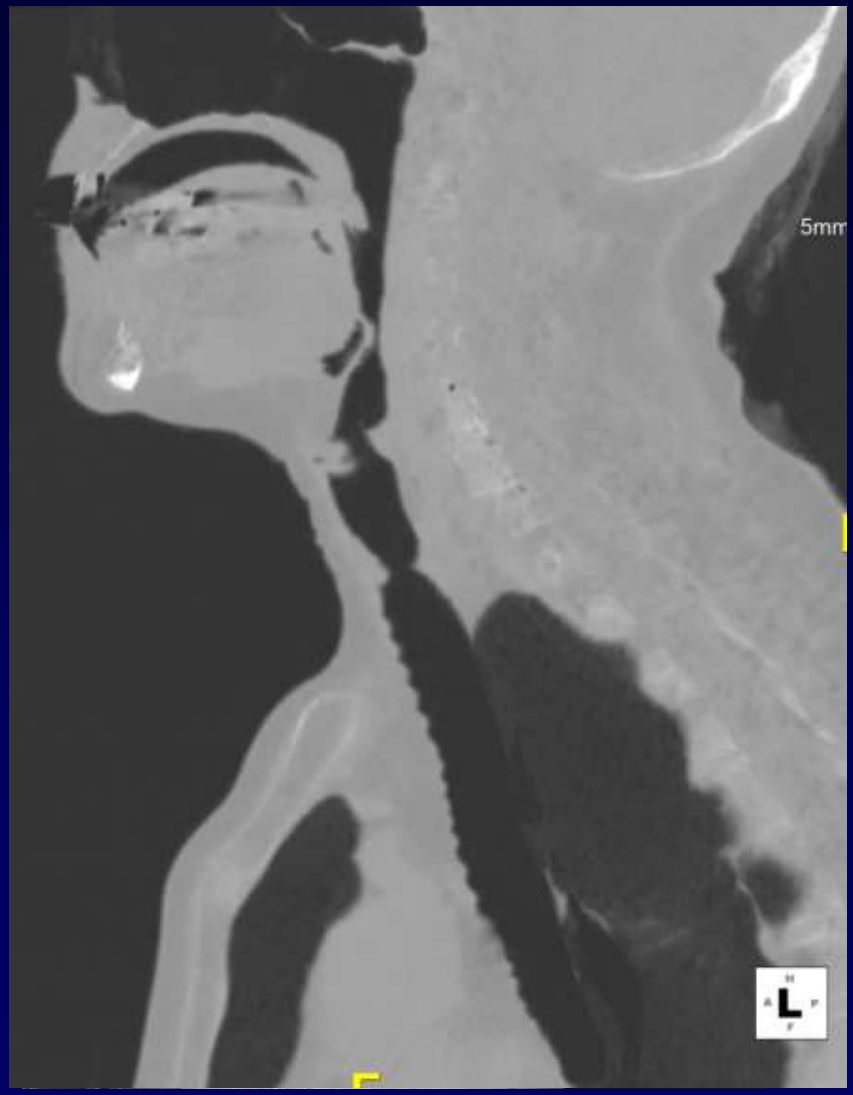
PY Marcy
A Bizeau
A Lacout
M El Hajjam

- Femme 68ans
- Asthme sévère traité depuis 20ans
- Pas d'ATCD particulier Med ou CHIR
- Dyspnée progressive qui s'aggrave, notamment à l'effort.
- Wheezing réagissant peu aux bronchodilatateurs & corticoïdes.

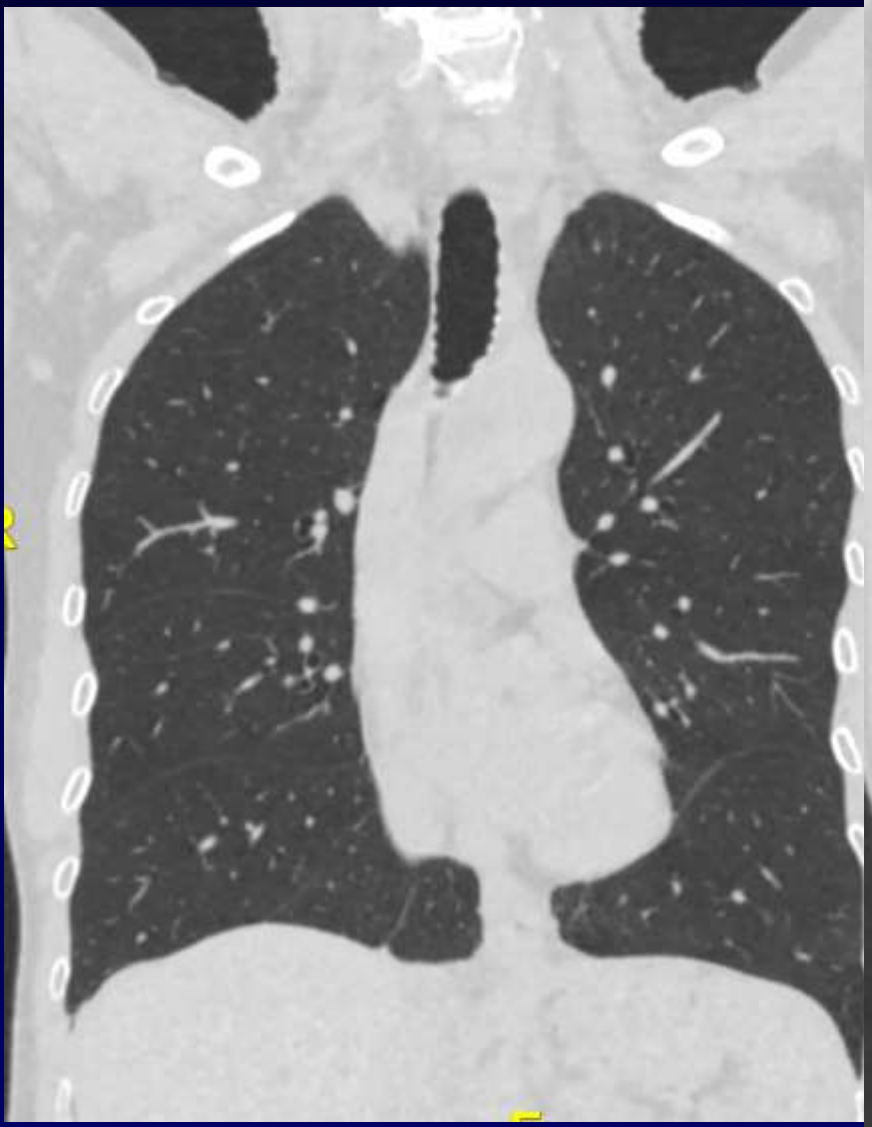
- CT est demandé par le médecin traitant

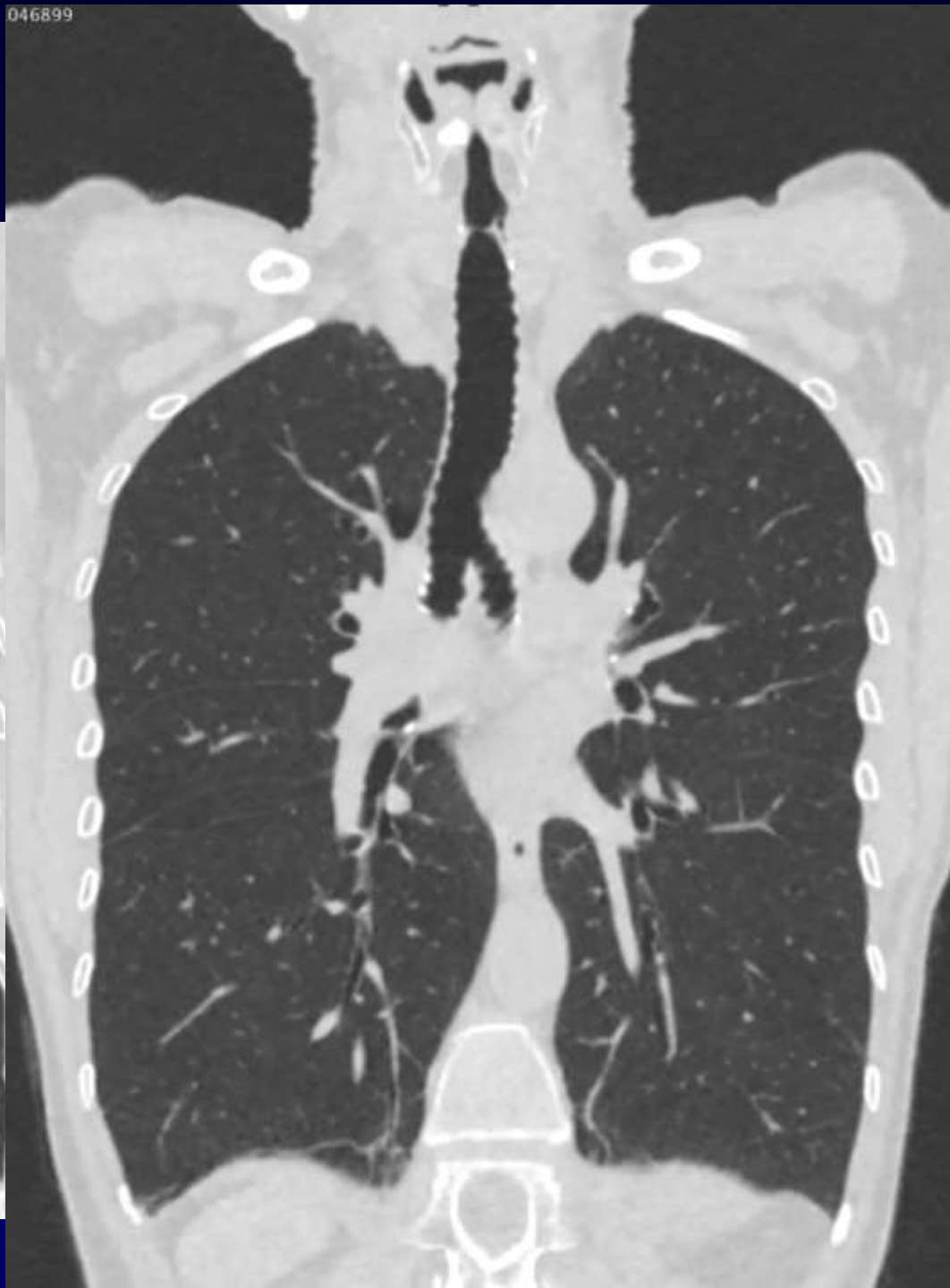

CLUB THORAX




5mm
L


CLUB THORAX

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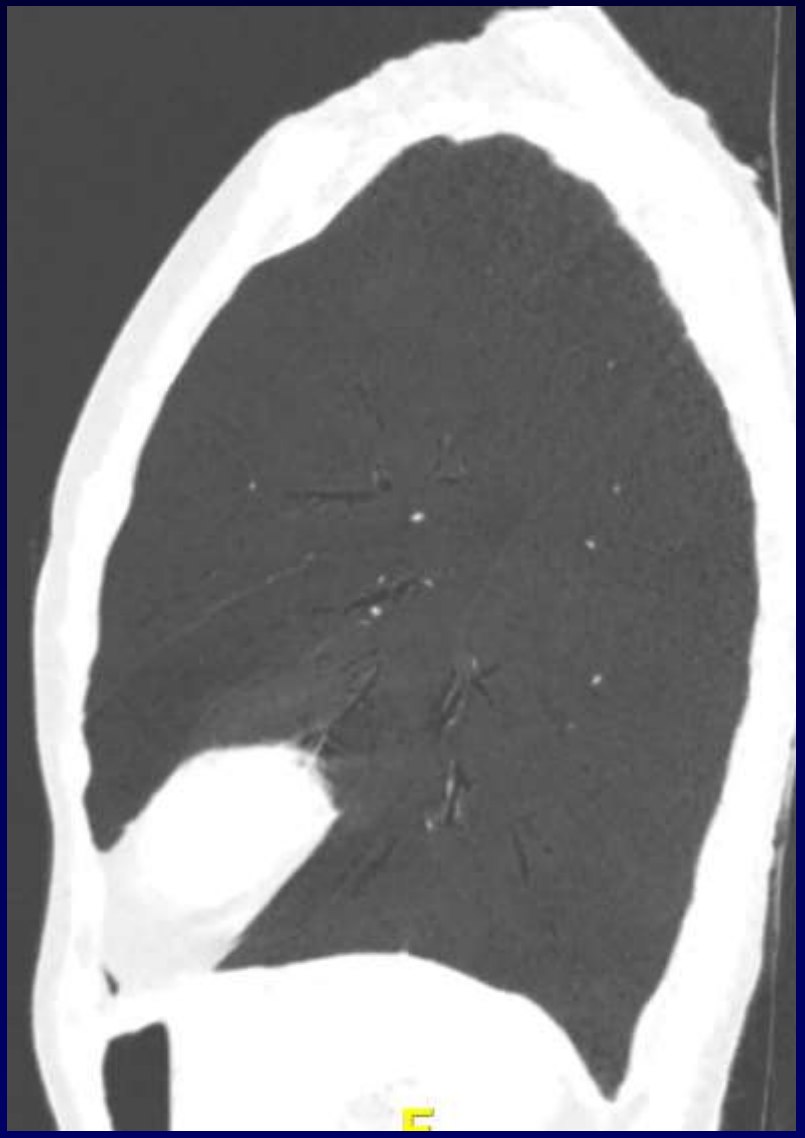
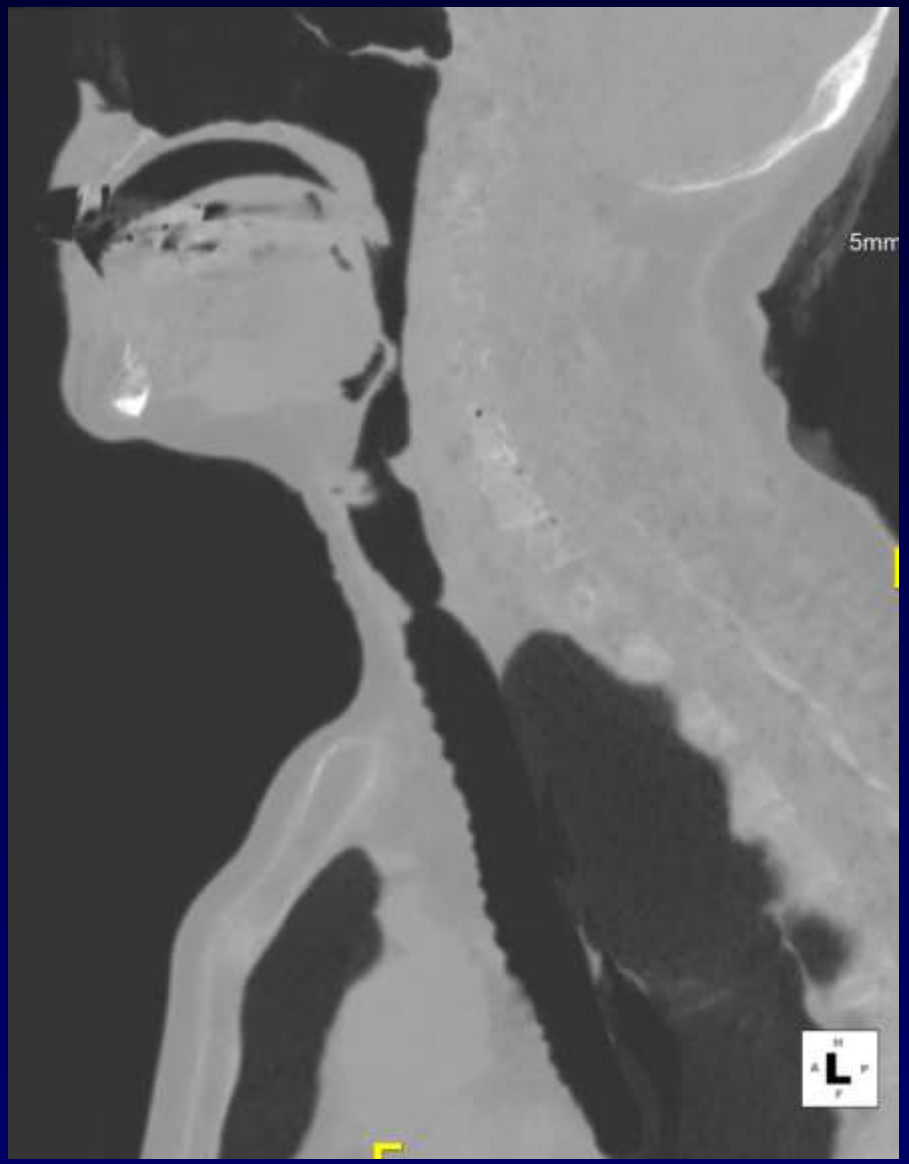



5mm

QUIZ 2

Diagnostic ?

A.Granulomatose pulmonaire

B.BPCO

C.Sténose laryngée basse

D.Sténose trachéale idiopathique

E.Sténose post- intubation

A.Granulomatose pulmonaire

B.BPCO

C.Sténose laryngée basse

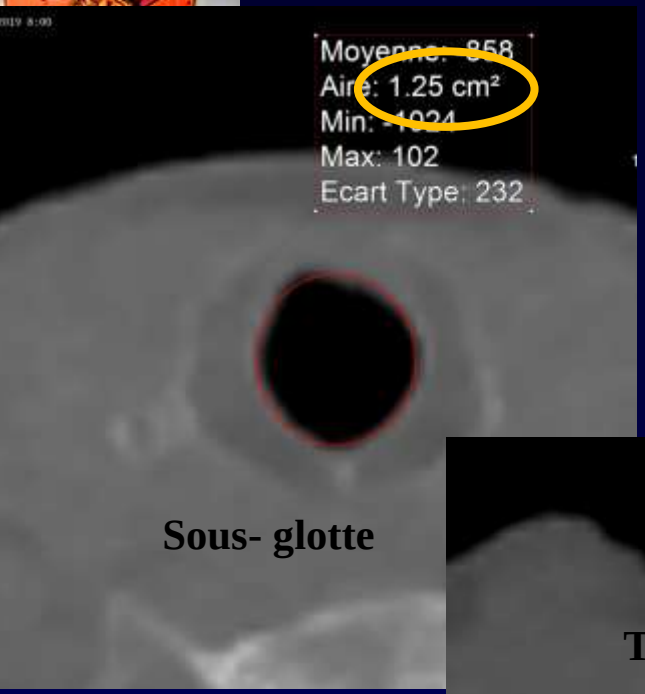
D.Sténose trachéale idiopathique

E.Sténose post- intubation

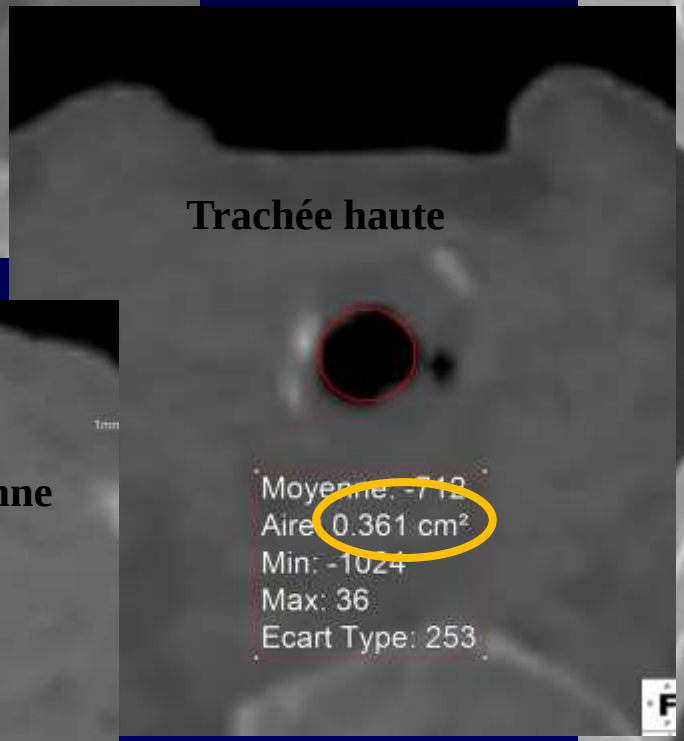
Diagnostic ?

Sténose trachéale idiopathique

Sténose trachéale sous glottique > 75%

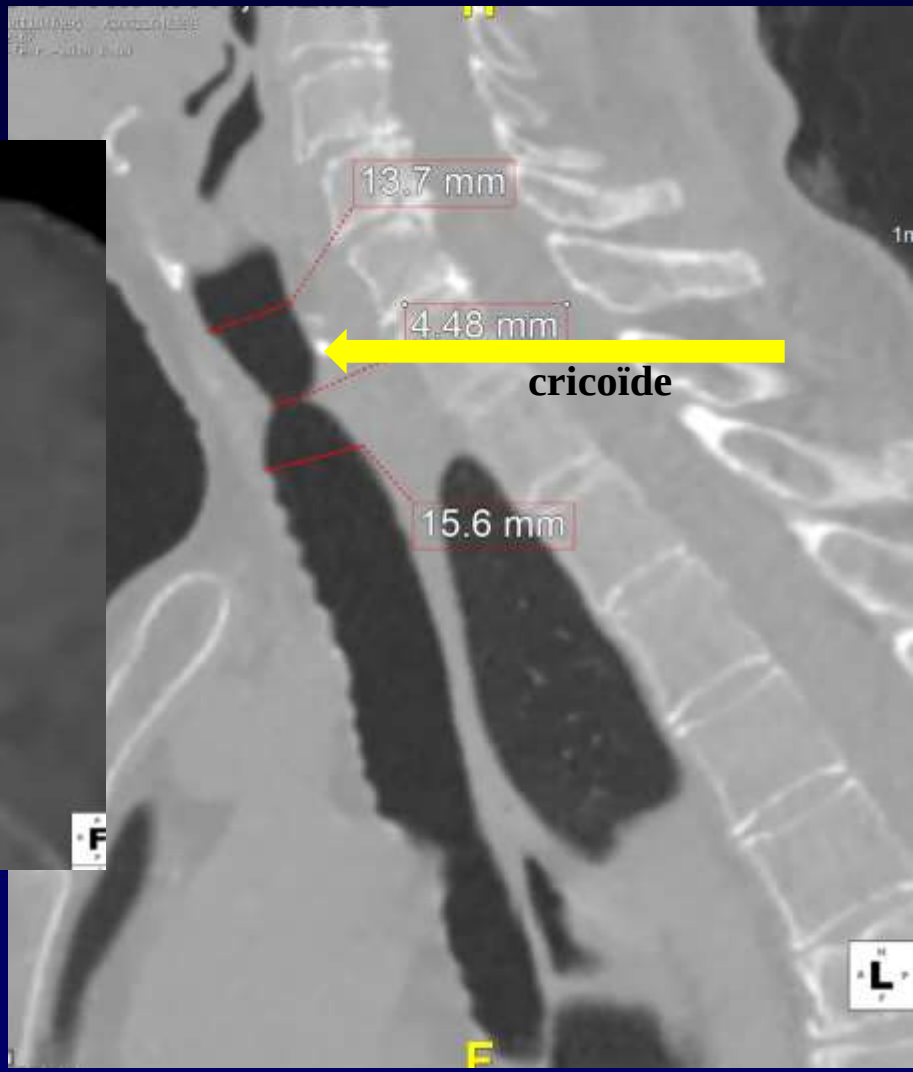


Sous- glotte



Trachée haute

Trachée moyenne



cricoïde

Sténoses iatrogènes

Imagerie ? : TDM (accessibilité), IRM (résolution en contraste)

Objectifs :

- Siège
- Degré
- Extension en hauteur
- Lésions associées
- Existence éventuelle d'une autre sténose en aval
- Inflammation trachéale et péritrachéale.

→

- Choix de la modalité thérapeutique la plus adaptée
- Suivi post-thérapeutique

Imagerie de la pathologie trachéale et des grosses bronches.
Hantous- Zannad S. www.clubthorax.com

CLINIQUE DIFFICILE VARIABLE

- Symptômes si sténose sévère : >70%
- Si 50% < Sténose < 70%:
  - Pneumopathie récidivante
  - Dyspnée d'effort progressive
  - STRIDOR si Lumière < 5mm.

Dg évoqués :
-ASTHME
-BRONCHITE CHRONIQUE
-TRACHEOMALACIE
-PARALYSIE CORDE VOCALE

- 6% à 22%, 1–2% symptomatique
- Multifactorielle:
  - INTUBATION
    - Pression Ballonnet > 20-30mmHg
    - Durée intubation : 2% si < 6j, 5% si >6j, 12% si > 11j
    - Traumatique
    - HypoTENSION
  - TRACHEOTOMIE haute
  - Corticoïdes, Age avancé
  - RGO sévère; Maladie autoImmune
  - SAS; ATCD d'IRX
  - F > H ?

PHYSIOPATHOLOGIE: intubation

Signaler un ballonnet surdimensionné !

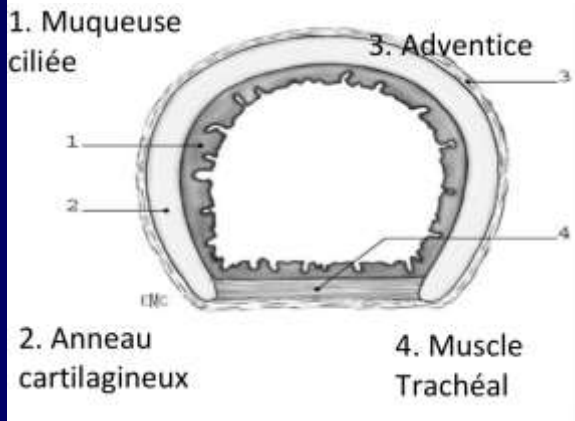
Pression du ballonnet > pression de perfusion capillaire

Lésions ischémiques avec érosions muqueuses

Ulcérations profondes avec destructions cartilagineuses

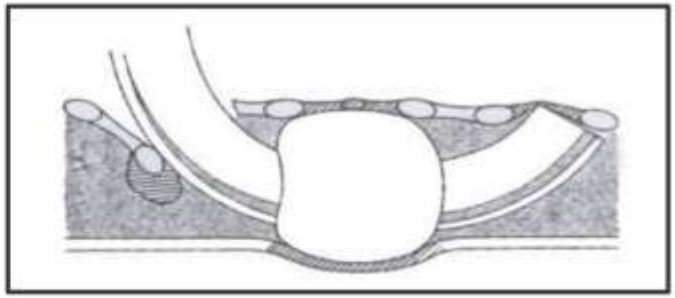
STENOSES CICATRICIELLES

TRACHEOMALACIES



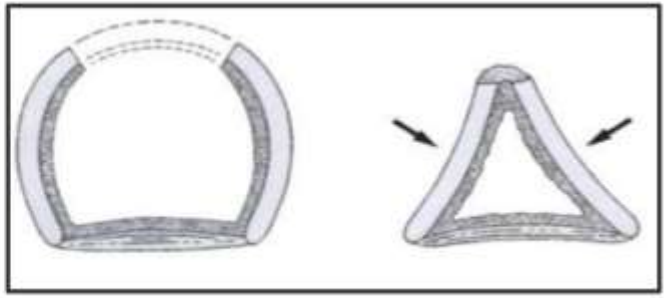
PHYSIOPATHOLOGIE: trachéotomie

- Les points d'appui de la canule de trachéotomie sur la muqueuse trachéale.



- Rupture de la voute cartilagineuse antérieure

→ collapsus latéral des parois.



Imagerie de la pathologie trachéale et des grosses bronches.
Hantous- Zannad S. www.clubthorax.com

DIAGNOSTIC

- SPIROMETRIE
- BRONCHOSCOPIE
- CT
  - ENDOSCOPIE VIRTUELLE
  - MINIP dans le plan trachéal
  - INSPI & EXPI

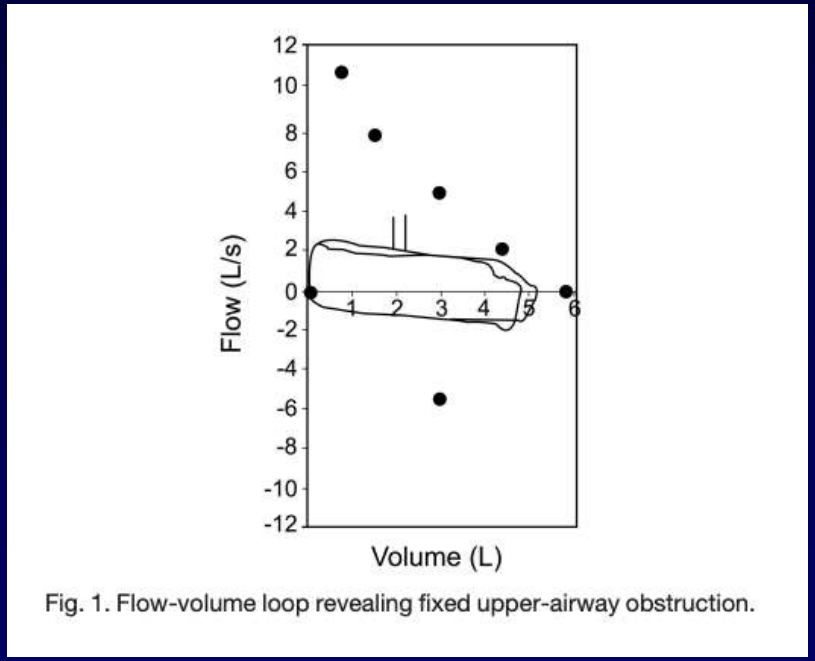


Fig. 1. Flow-volume loop revealing fixed upper-airway obstruction.

Diagnostics Différentiels

(biopsie)

Table. Differential Diagnosis of Tracheal Diseases

- Focal Disease
  - Post-intubation stenosis
  - Post-infectious stenosis
  - Post-transplant stenosis
  - Systemic disease
    - Crohn disease
    - Sarcoidosis
    - Behçet disease
- Diffuse disease
  - Wegener granulomatosis
  - Relapsing polychondritis
  - Tracheobronchopathia osteochondroplastica
  - Amyloidosis
  - Papillomatosis
  - Rhinoscleroma

Aspergillose ?

« L'essentiel

N'EST PAS DE VIVRE,

Mais de

BIEN VIVRE. »

-PLATON-

Bibliographie

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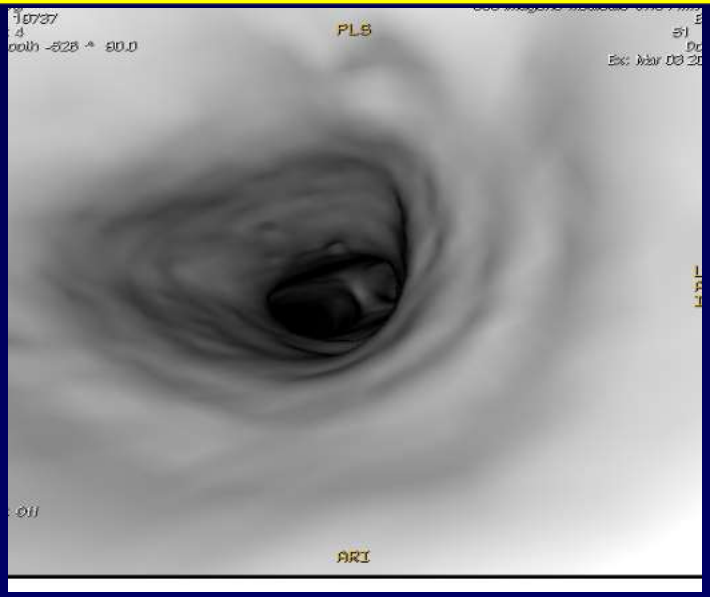
- Imagerie de la pathologie trachéale et des grosses bronches. Hantous- Zannad S. www.clubthorax.com

take home points

- Regarder l'arbre trachéo bronchique
- INTERROGATOIRE
- Y PENSER +++:

COUPES CERVICALES



- Protocoles MIP MinIp
  - SAGITTALES
  - CORONALES OBLIQUES
- VRD: « endoscopie virtuelle »
- MESURE la sténose EN AXIAL NATIF

Imagerie de la pathologie trachéale et des grosses bronches.
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QUIZ n° 3

N Cherif Idrissi El Ganouni
M Ranib
M Ouali Idrissi
Hôp Arrazi

Patiente de 65 ans

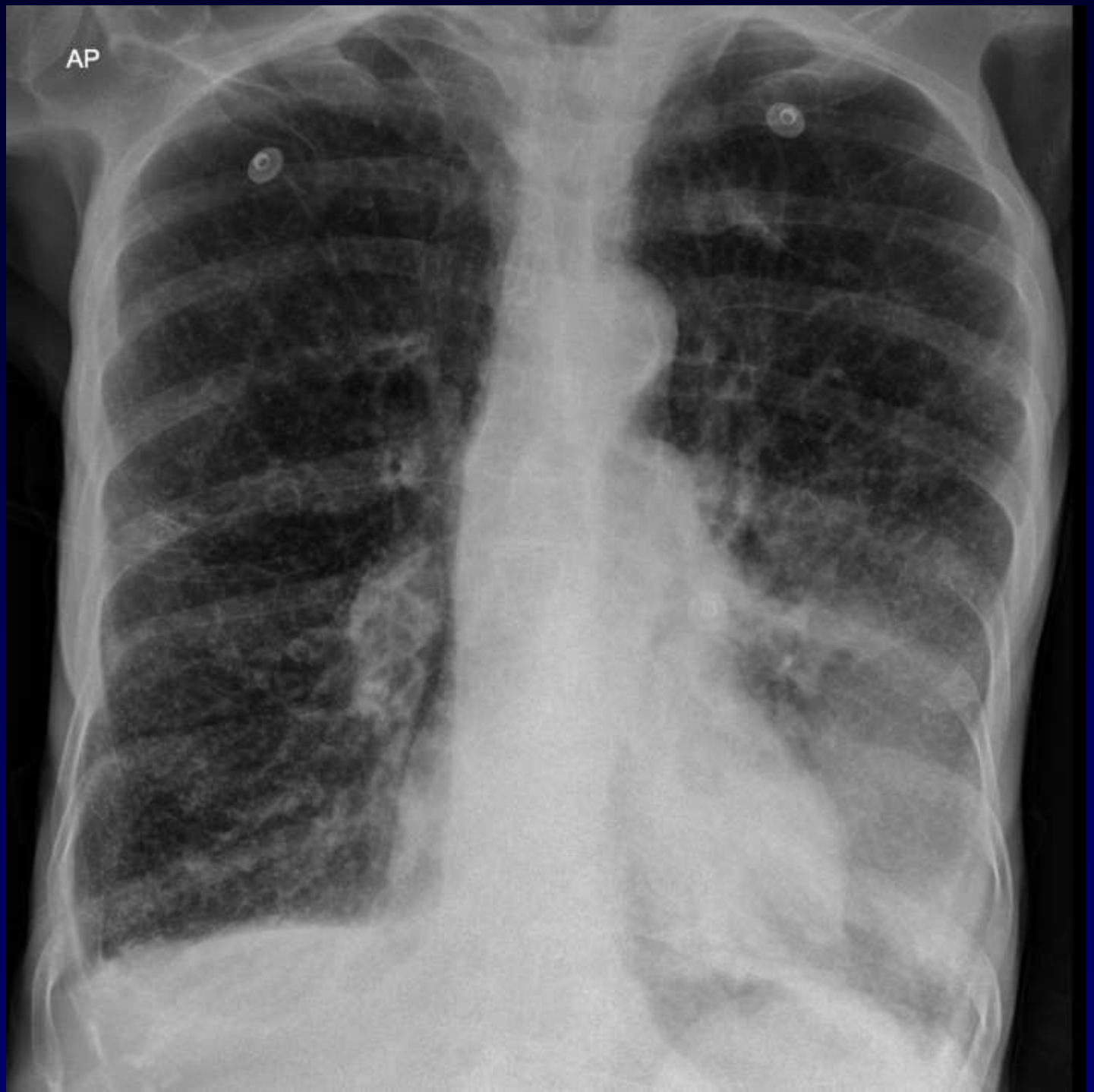
Originaire et résidant en Angleterre

ATCD :

- Tabagique chronique 30 PAT
- Toxicomane
- Se présente aux urgences pour dyspnée stade III
- Contexte fébrile.

Service de radiologie
CHU Mohamed VI de Marrakech


LUB THORAX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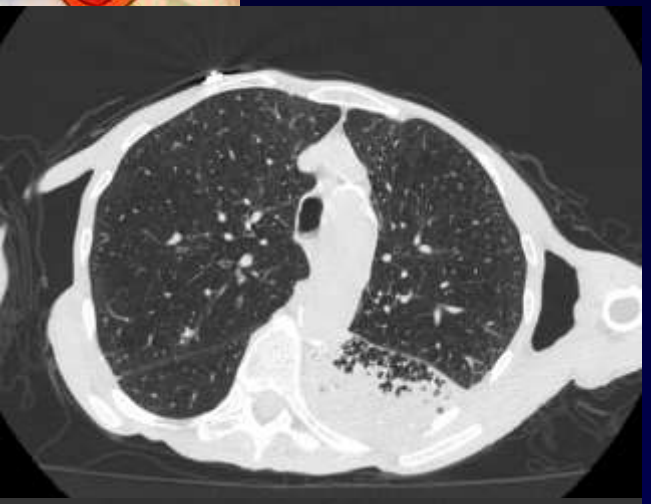
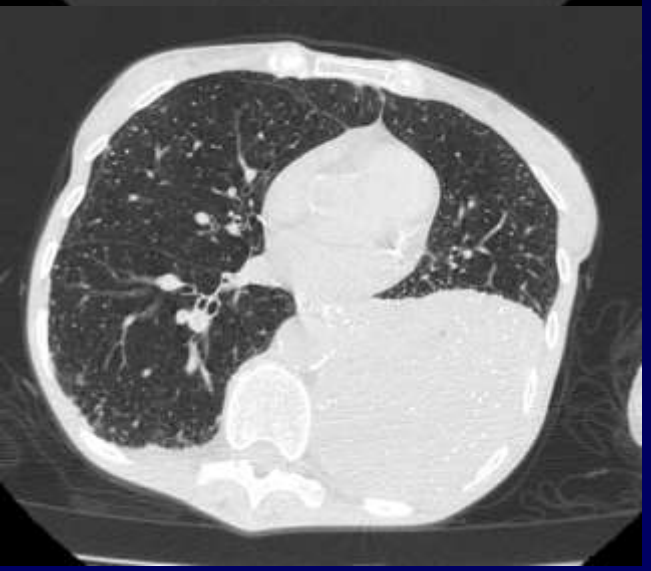
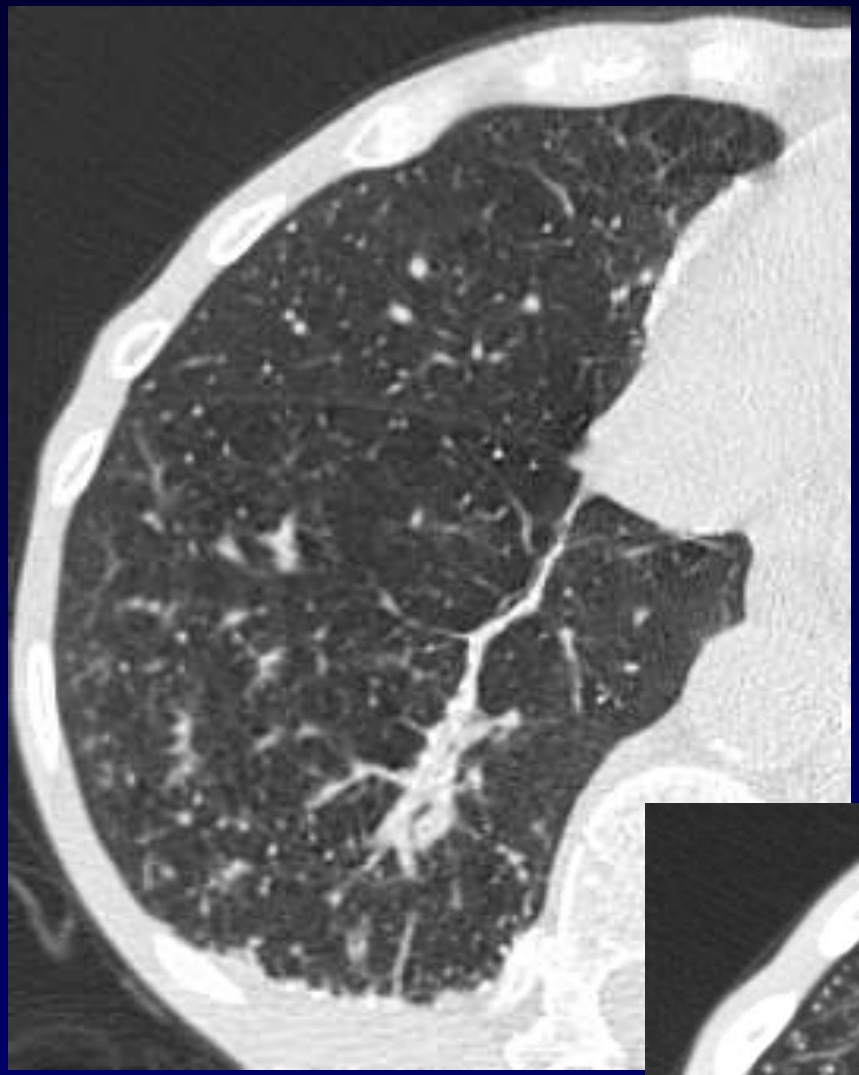
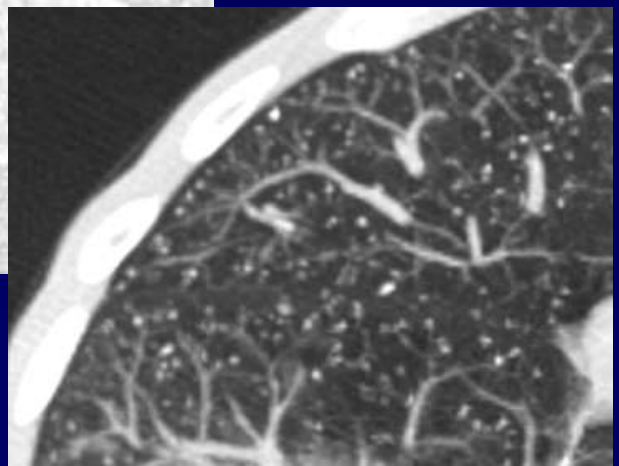
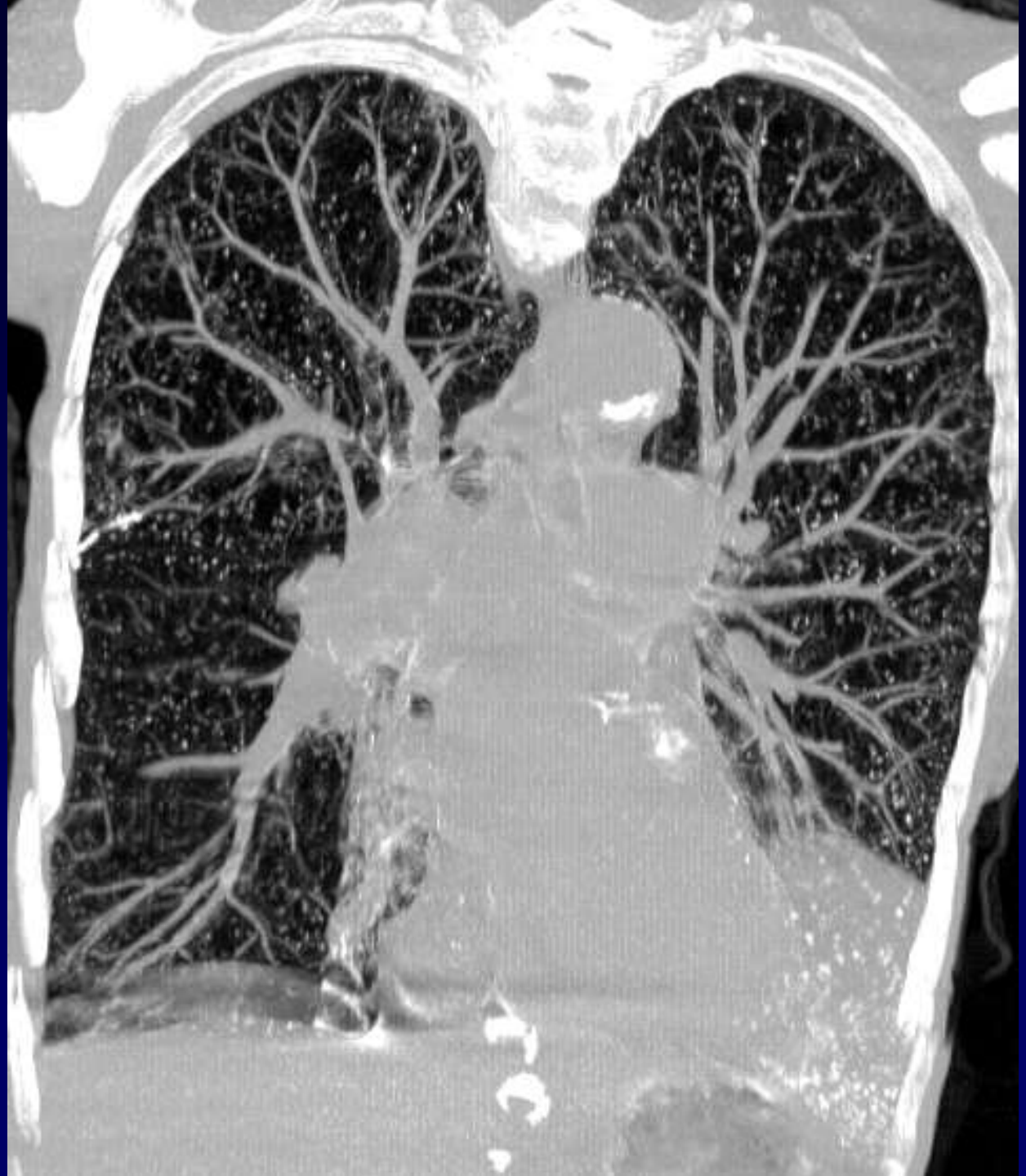




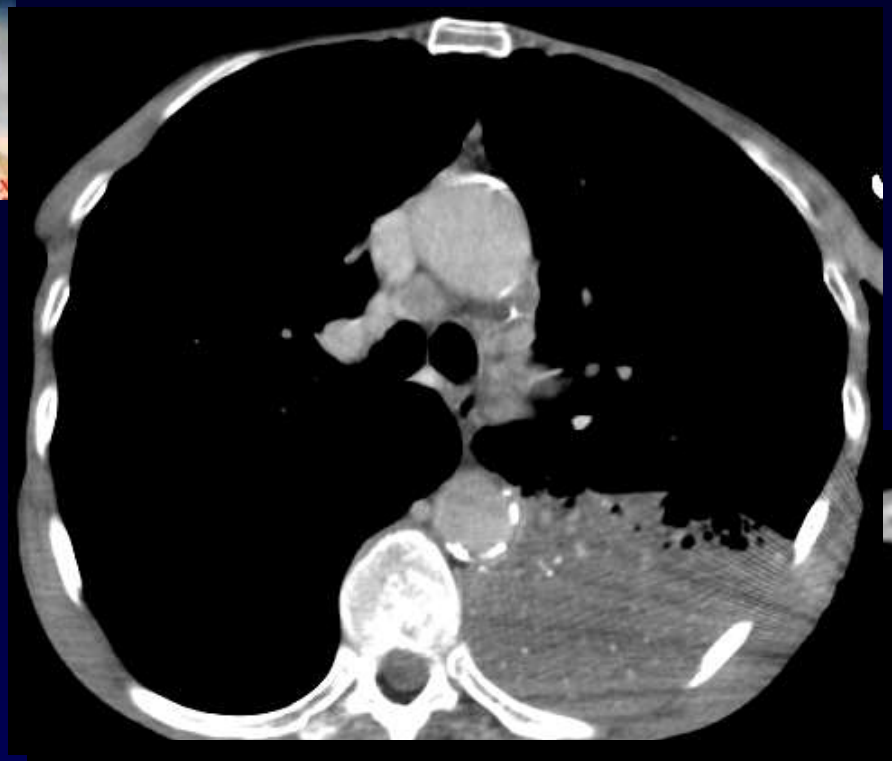


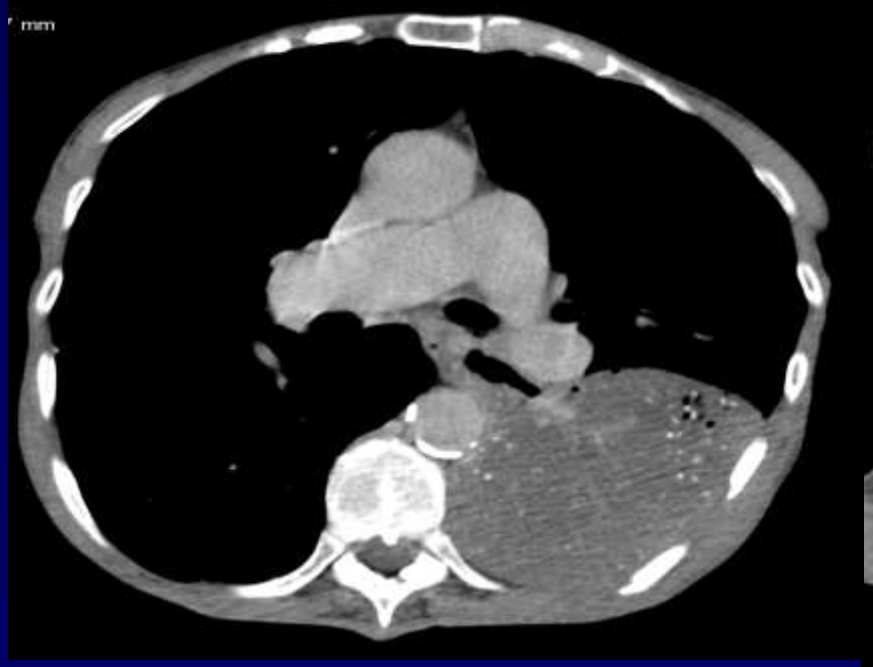


MIP




CLUB THORAX

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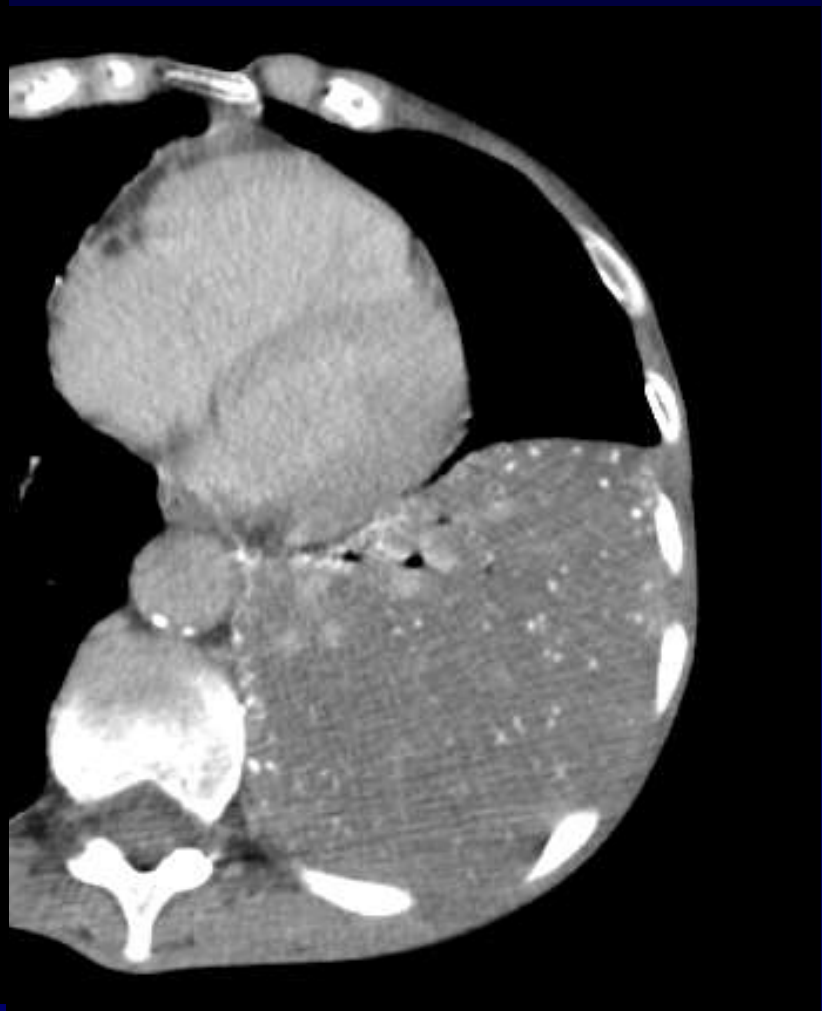

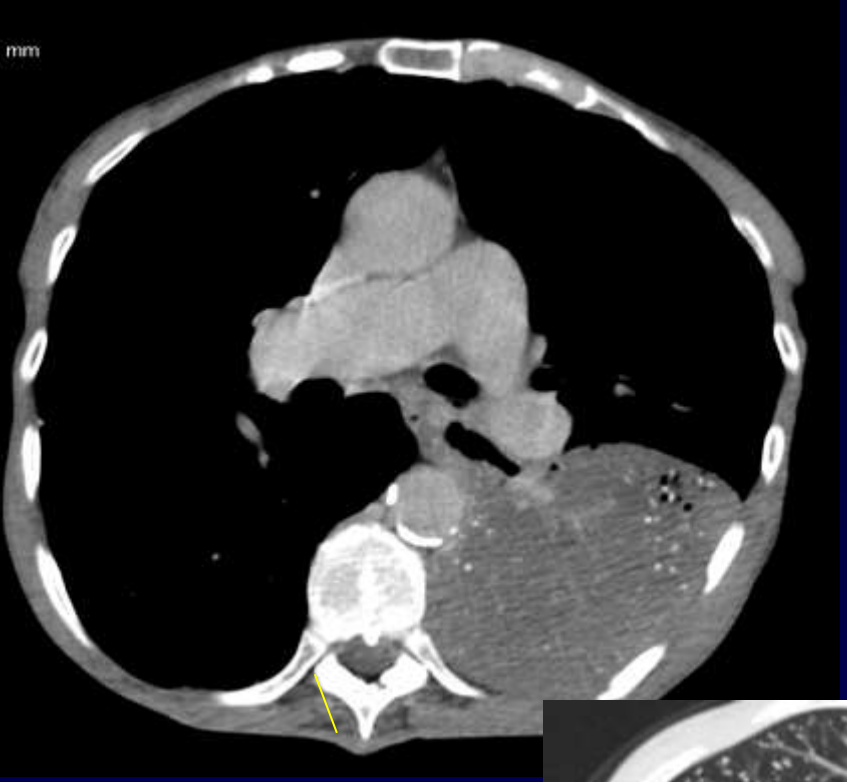
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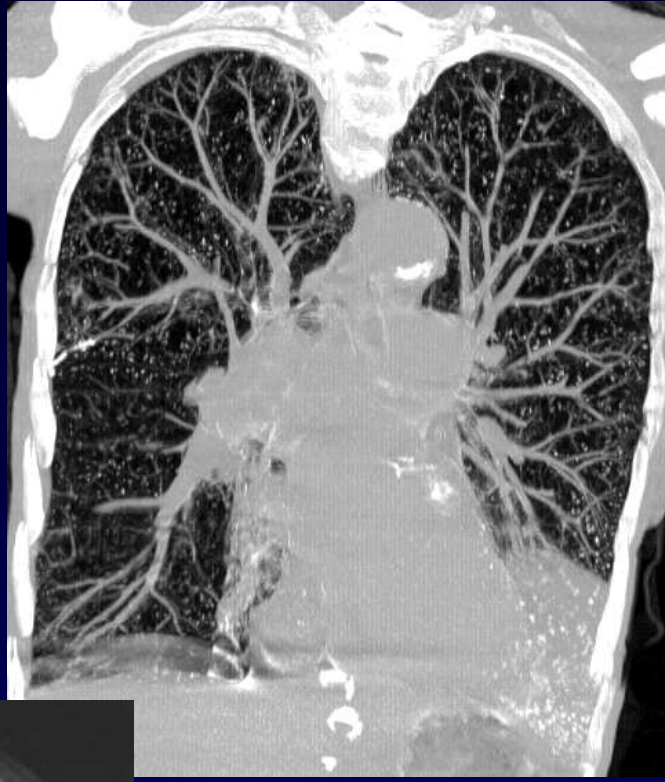
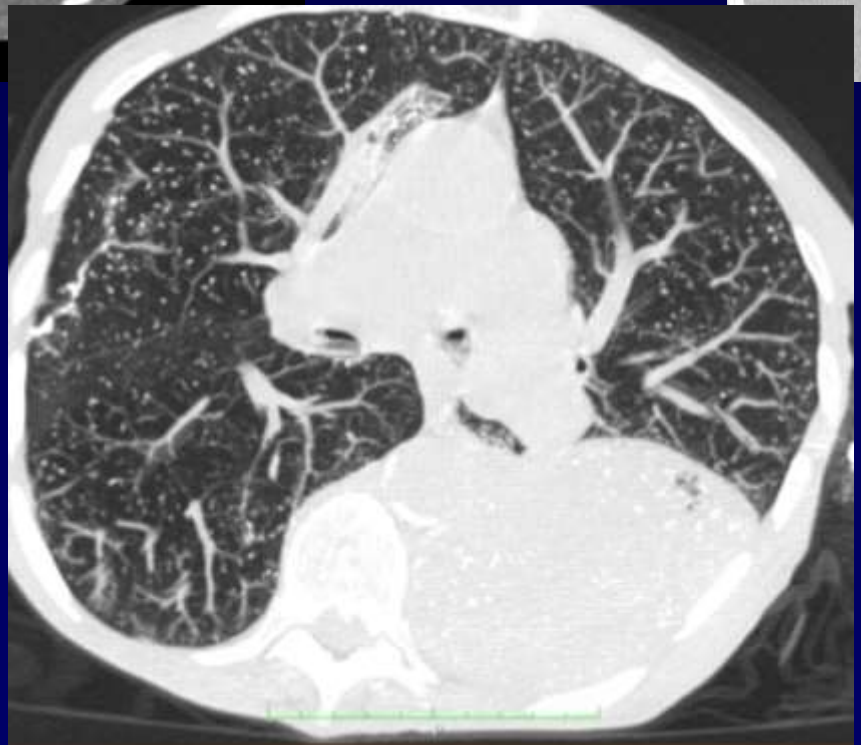




QUIZ 3

Diagnostic ?

A. Miliaire tuberculeuse

B. Tumeur pulmonaire avec lymphangite K

C. Microlithiase alvéolaire surinfectée

D. Métastases calcifiées

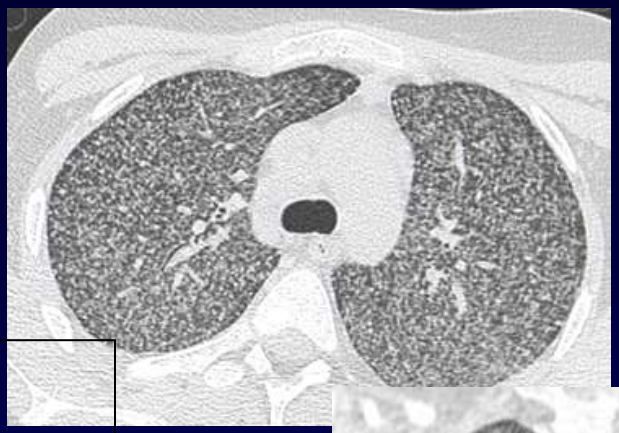
E. Pneumonie sur talcose vasculaire

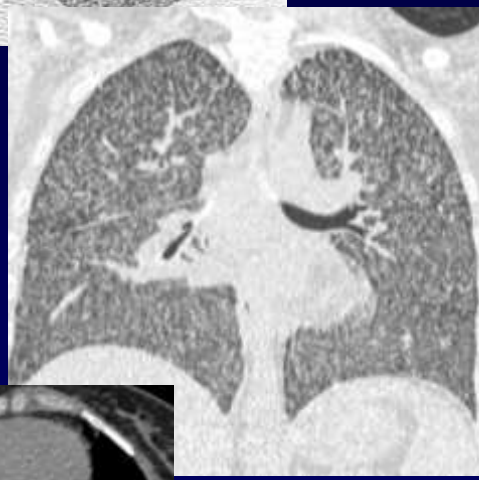
A. Miliaire tuberculeuse
B. Tumeur pulmonaire avec lymphangite K
C. Microlithiase alvéolaire surinfectée
D. Métastases calcifiées
E. Pneumonie sur talcose vasculaire

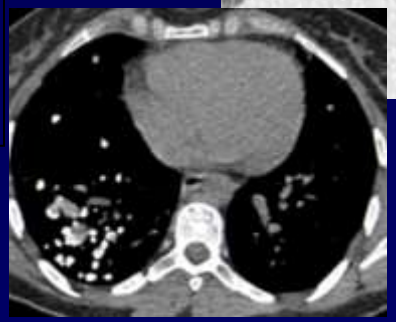
Diagnostic ?

Pneumonie sur talcose vasculaire

Miliaire tuberculeuse



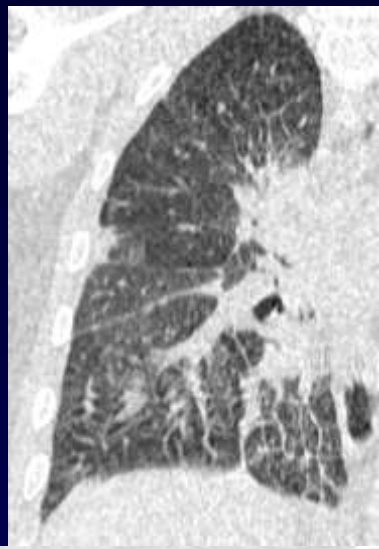




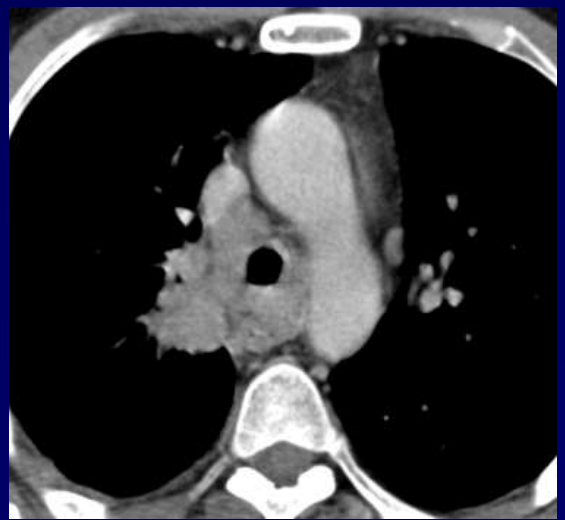
- 1 à 7% des cas
- Forme grave de la maladie
- Dissémination hématogène
- Vieillard,Enfant,Immunodéprimé
- Multiples micronodules diffus, à contours réguliers de 1 à 3 mm, de distribution aléatoire.

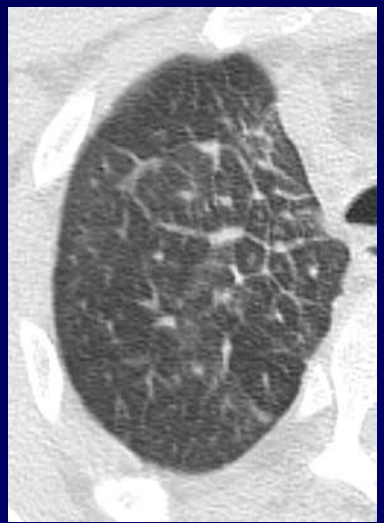
Altraja A, Jürgenson K, Roosipuu R, Laisaar T. Pulmonary intravascular talcosis mimicking miliary tuberculosis in an intravenous drug addict. BMJ Case Rep. 2014;2014:bcr2014203908.

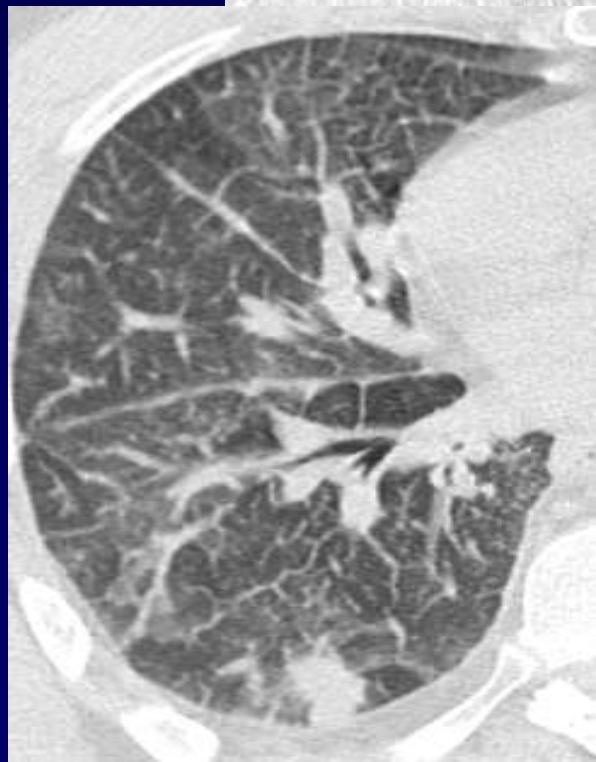
Tumeur pulmonaire avec lymphangite K



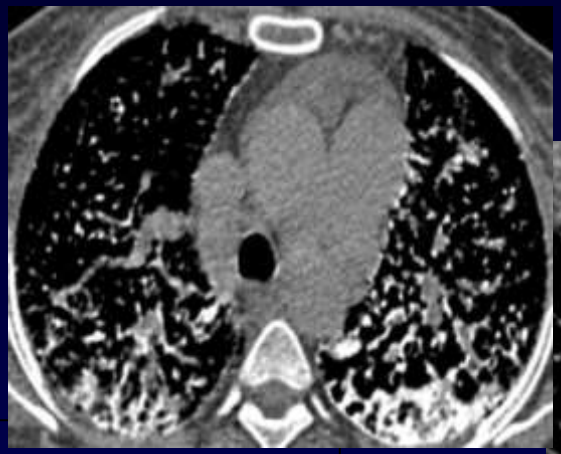
- Épaississement des septa interlobulaires
- Épaississement péribronchique
- Épaississement de l'interstitium sous pleural
- Aspect irrégulier et nodulaire

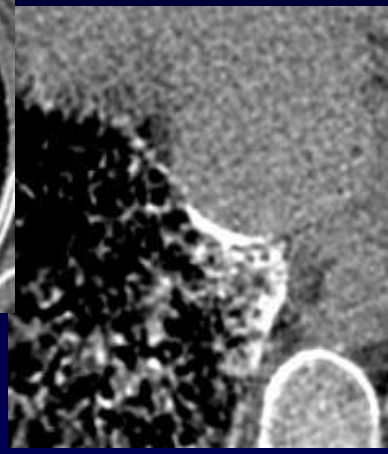




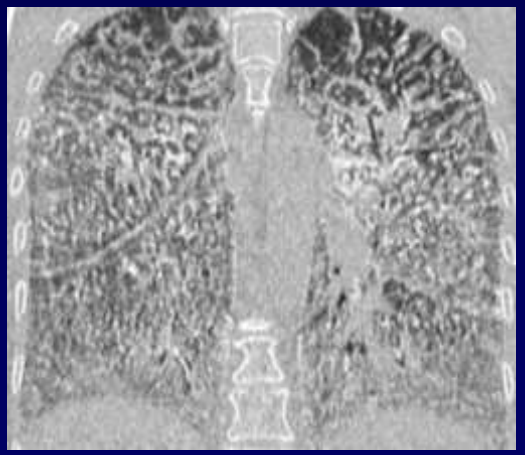


Microlithiase alvéolaire



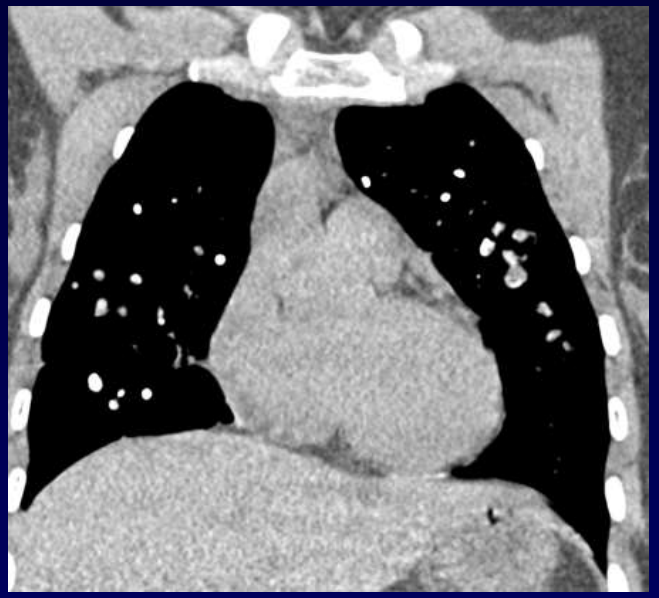


- 20 à 50 ans.
- Caractère familial dans 50 % des cas.
- Anomalie autosomique récessive
- Miliaire de micronodules calcifiés
- Calcifications des lignes para pleurales et para médiastinales.
- Nette prédominance basale et péri-hilaire



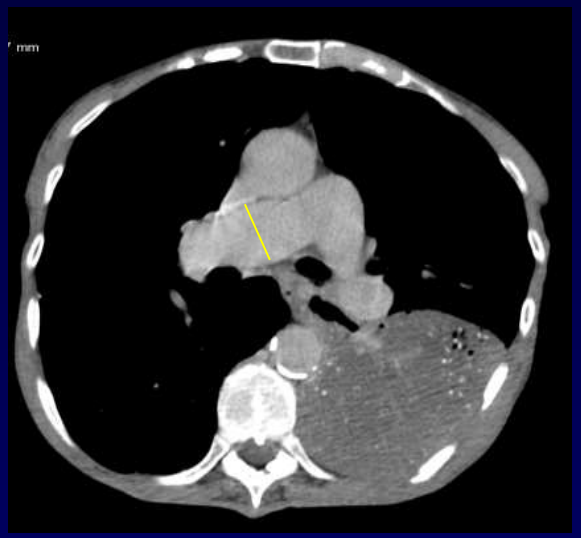
Métastases calcifiées

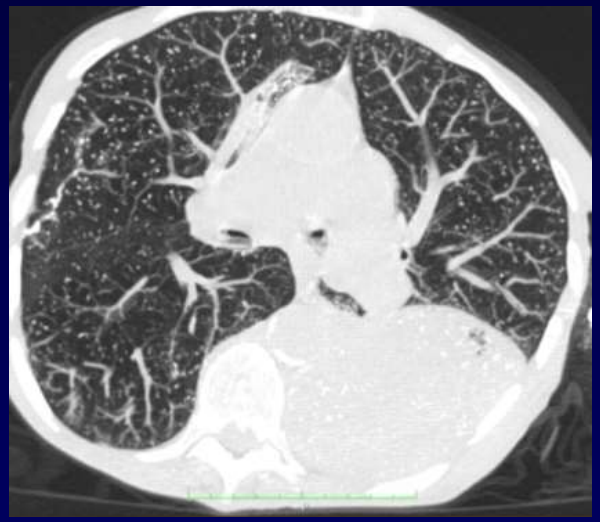
- METAS de Primitifs : T osseuses primitives, mélanomes, colorectales, sein (mucipares)
- Micronodules et nodules bilatéraux diffus calcifiés

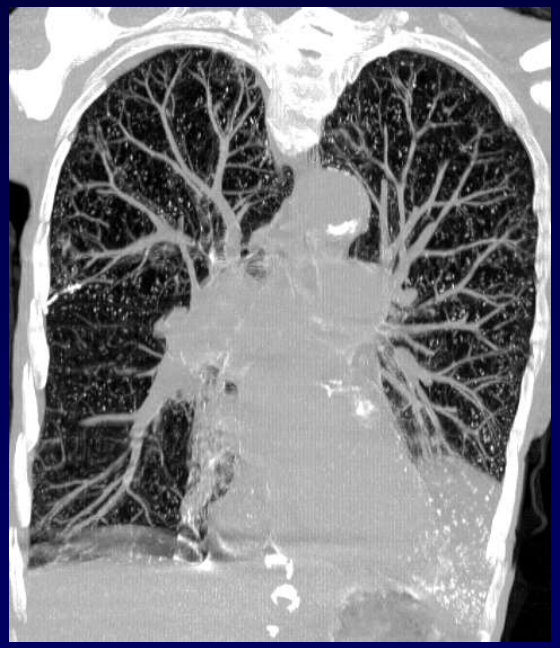


- **Autres causes de calcifications : Varicelle, Hémosidérose, Amylose, Silicose, Sarcoïdose, Contexte d'IRC sous dialyse**

Pneumonie sur talcose intravasculaire







Talcose intravasculaire

- Granulomatose liée au talc
- Affection rare
- Divisée en quatre types:
  - Talco-silicose et Talco-asbestose : mineurs ou industriels exposés à inhalation de grande quantité de poussière de talc impure contenant de silice ou des fibres d'amiante.
  - Talcose pure : Forme associée à l'inhalation de talc pur, suite à une inhalation quotidienne abondante (+/- silice, amiante…) : fibrose.
  - Talcose intravasculaire : chez toxicomanes par injection intraveineuse de comprimés destinés à l'usage oral.

Talcose intravasculaire

- Les médicaments destinés à l’usage oral sont écrasés, mélangés à de l'eau, chauffés, puis injectés voie IV.

- Les excipients utilisés dans les comprimés oraux comprennent le talc + d'autres particules insolubles: cellulose microcristalline, crospovidone et amidon: peuvent induire une réaction à corps étranger dans les artérioles pulmonaires.

- L'héroïne, la cocaïne et la méthadone sont les drogues injectables les plus courantes.

Talcose intravasculaire

Physio et Histo-pathologie

- Maladie vasculaire occlusive sévère
- Particules injectées se logent dans artérioles et capillaires pulmonaires
- Formation de granulomes vasculaires ou périvasculaires
- Réaction angiogranulomateuse (qui peut être fatale)
- Parfois passage au delà des capillaires vers veines pulmonaires puis circulation systémique

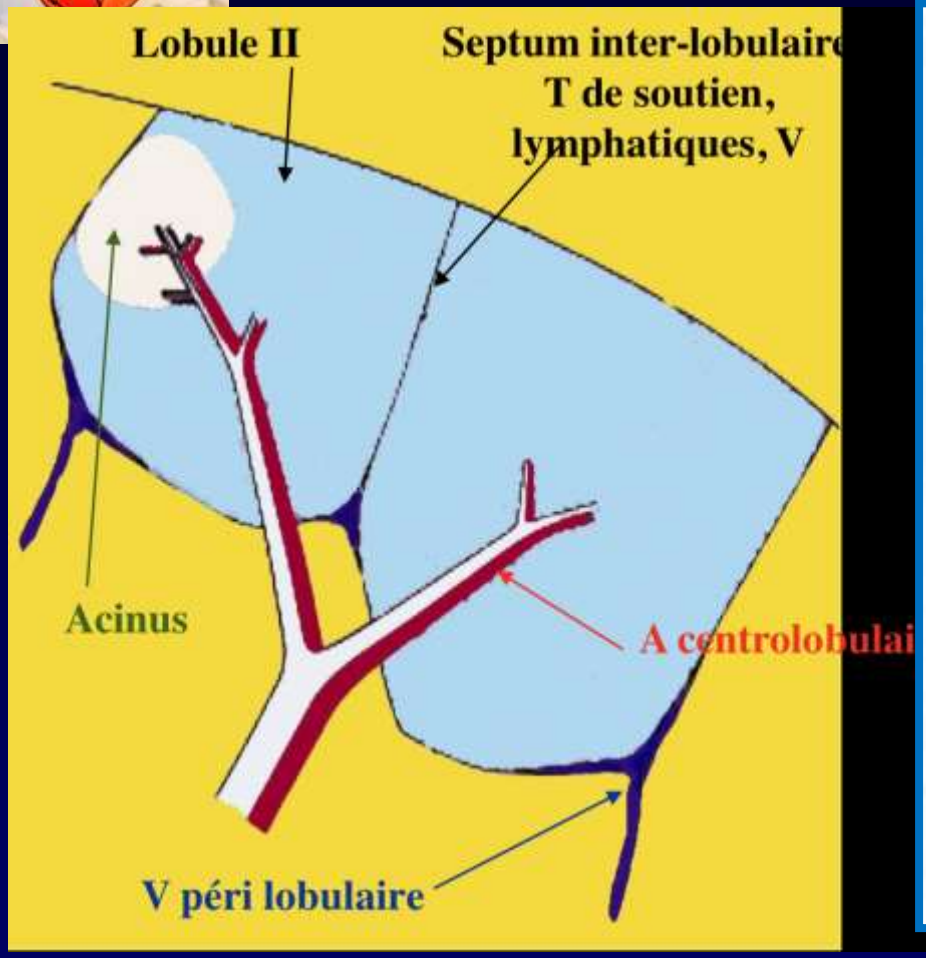
- Évolution :
  - HTAP par occlusion des artérioles pulmonaires
  - FIBROSE par granulomes dans l'interstitium

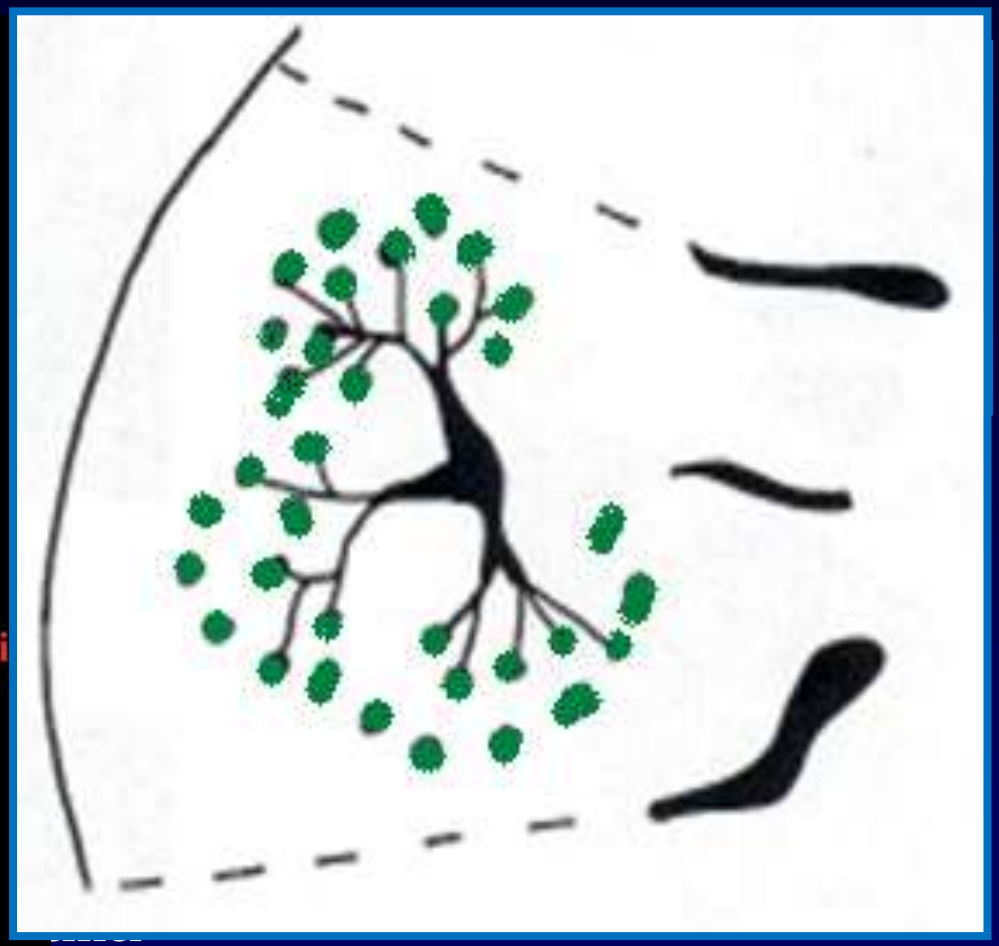
Talcose intravasculaire

Clinique

- Pauvre
- Peu spécifique
- Dyspnée
- Parfois fièvre
- Insuffisance respiratoire
- Mort subite

Talcose intravasculaire





- Emphysème (Ritalin)
- Adénopathies médiastinales et hilaires

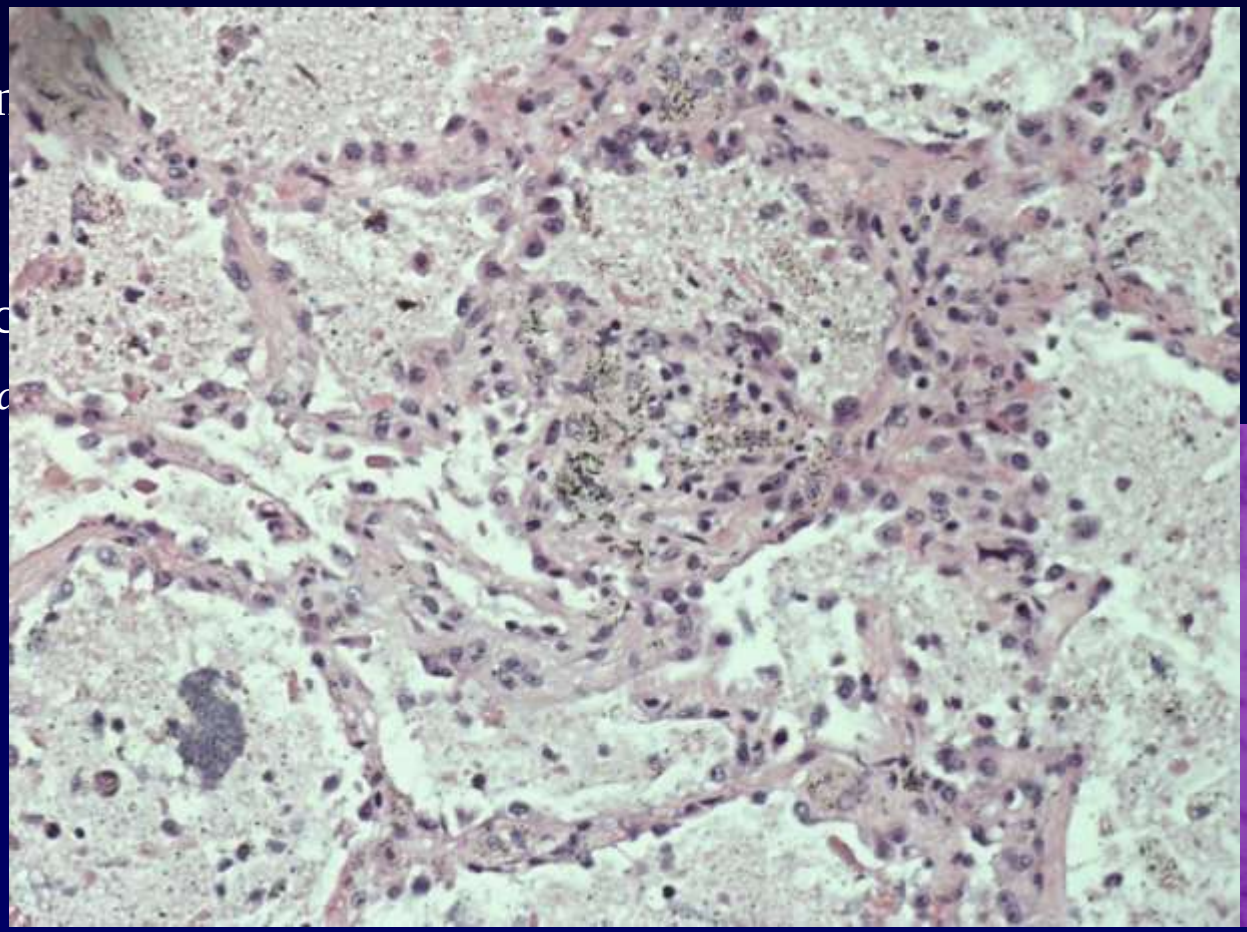
AJR 2014, 203

Talcose intravasculaire

- Diagnostic : biopsie pulmon
  transbronchique ou chir.

- Histologie : Cristaux de talc

granulomes centrés par des corps étro
biréfringents en lumière polarisée



- Diag Diff: tuberculose ++

- Traitement :
  - Arrêt exposition
  - Transplantation pulmonaire

Revue de médecine interne, 2017

Talcose intravasculaire

CONCLUSION

- La présence de micronodules centro-lobulaires chez un patient toxicomane, devrait faire évoquer une **talcose intravasculaire.**

- HTAP + terrain toxicomane.

- Ne pas oublier la tuberculose !

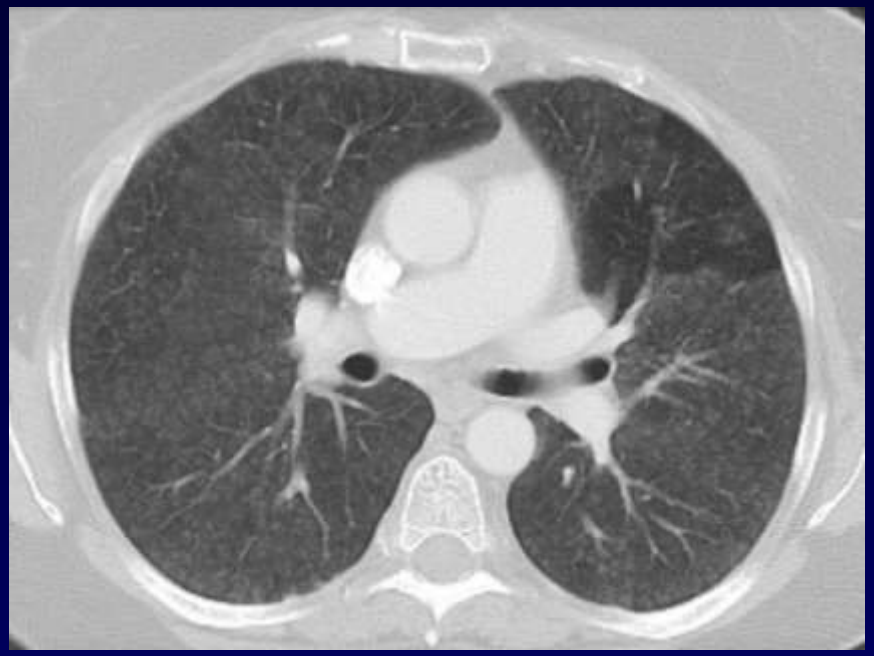
Pulmonary talcosis in the setting of cosmetic talcum powder use

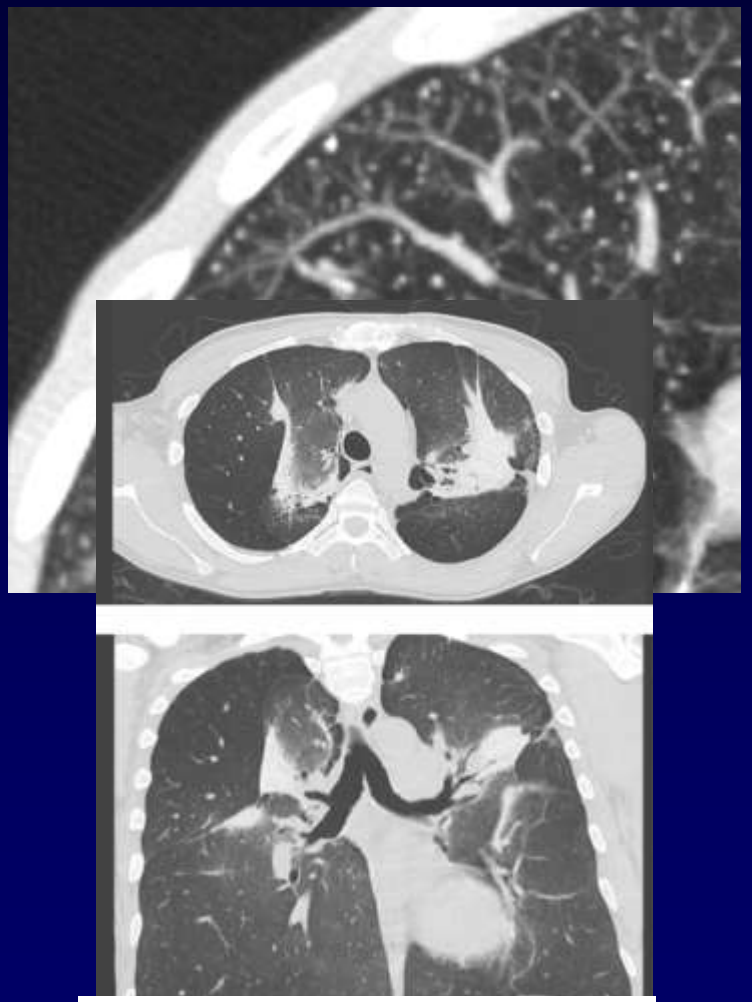
Alvin Cho [a,*], Roxana Amirahmadi [b], Aamir Ajmeri [b], Janaki Deepak [c]

Intravascular Talcosis due to Intravenous Drug Use Is an Underrecognized Cause of Pulmonary Hypertension

Christopher C Griffith [1], Jay S Raval, Larry Nichols

take home points





Verre Dépoli centrolobulaire
Prédominance SUP.
+/- ADP médiastin

INHALATION

INJECTION

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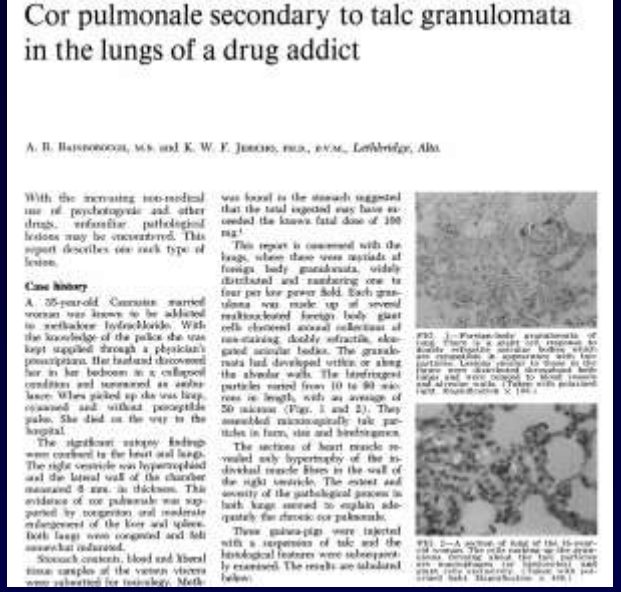


Cor pulmonale secondary to talc granulomata in the lungs of a drug addict

Korean J Radiol 2021;22(8):1416-1435

Non-Infectious Granulomatous Lung Disease: Imaging Findings with Pathologic Correlation

Tomás Franquet[1], Teri J. Franks[2], Jeffrey R. Galvin[3], Edson Marchiori[4], Ana Giménez[1], Sandra Mazzini[1], Takeshi Johkoh[5], Kyung Soo Lee[6]

Learning points

- This case warns against the use of anti-tuberculosis treatment without confirmation of the microbiological diagnosis of tuberculosis.
- Pulmonary intravascular talcosis can mimic many other pulmonary diseases that are more common. Therefore, a more precise diagnosis of the pulmonary lesion is necessary.
- As several foreign materials can cause a similar micronodular pattern of lung granulomatosis, the exact causative agent can be determined only by lung biopsy.
- Scanning electron microscopy-based analysis with confirmation of the nature of the foreign material by elemental analysis is provided.

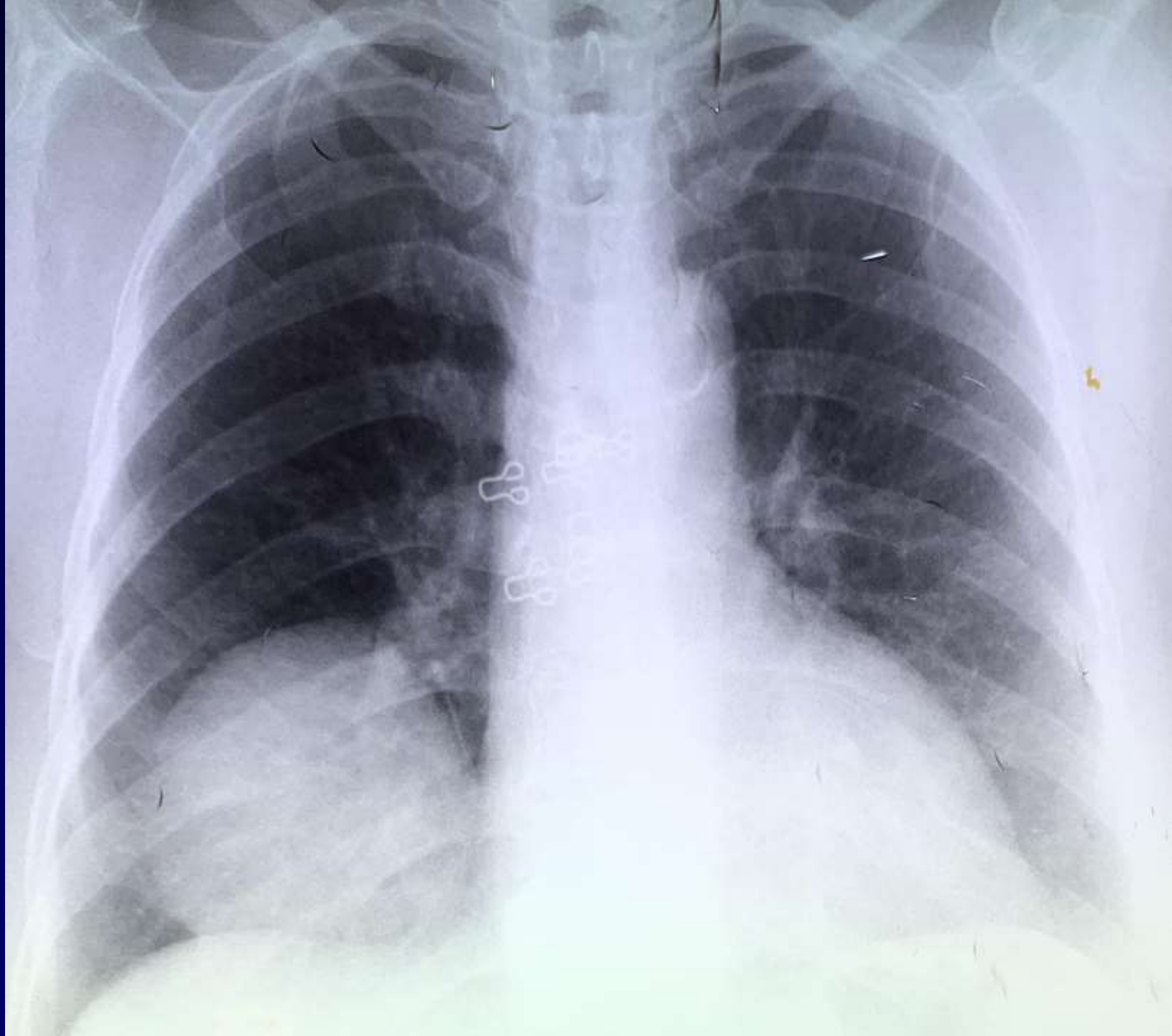
QUIZ n° 4

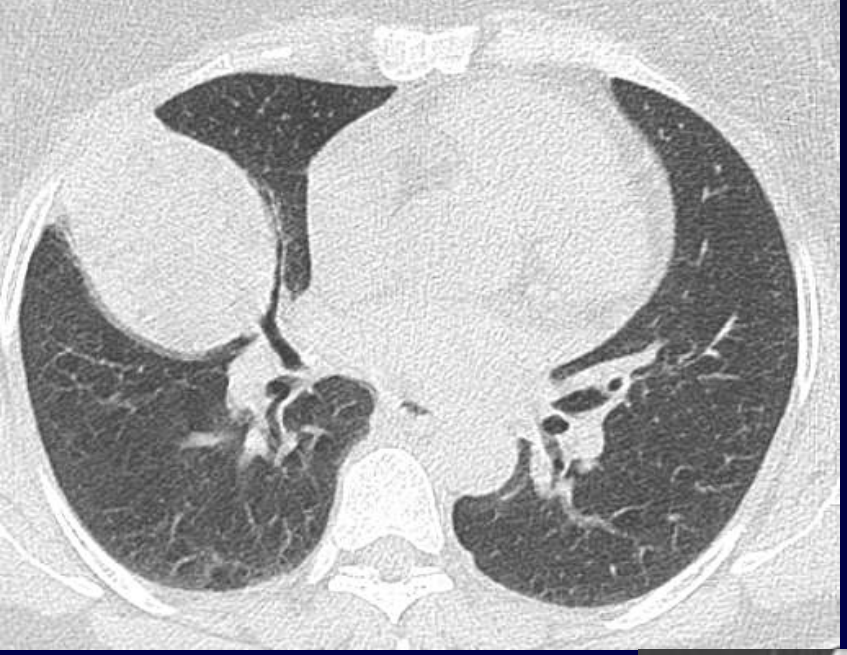
N Cherif Idrissi El Ganouni
M Ranib
M Ouali Idrissi
Hôp Arrazi

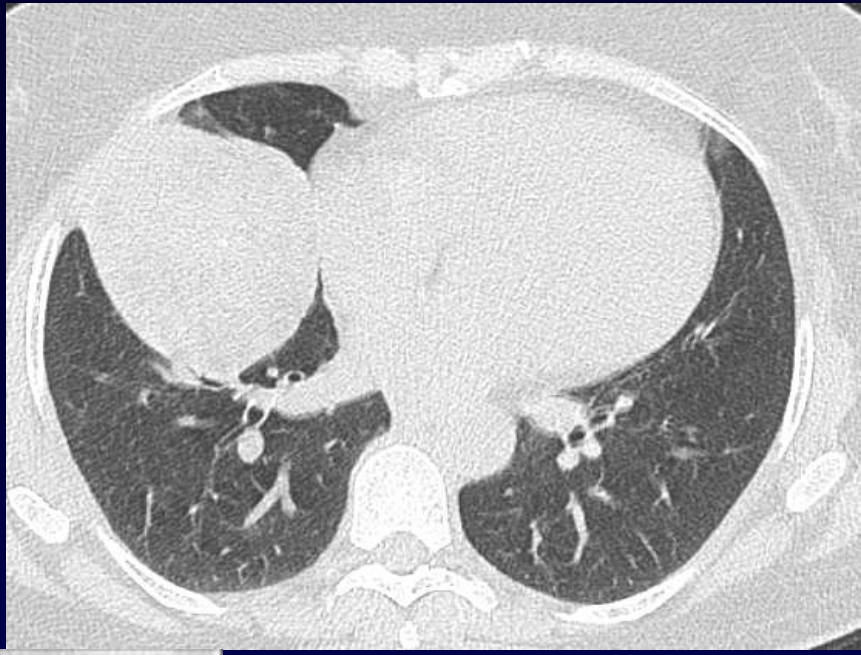
- Patiente de 58 ans
- Habite en milieu rural
- Diabétique
- Douleurs thoraciques droites chroniques

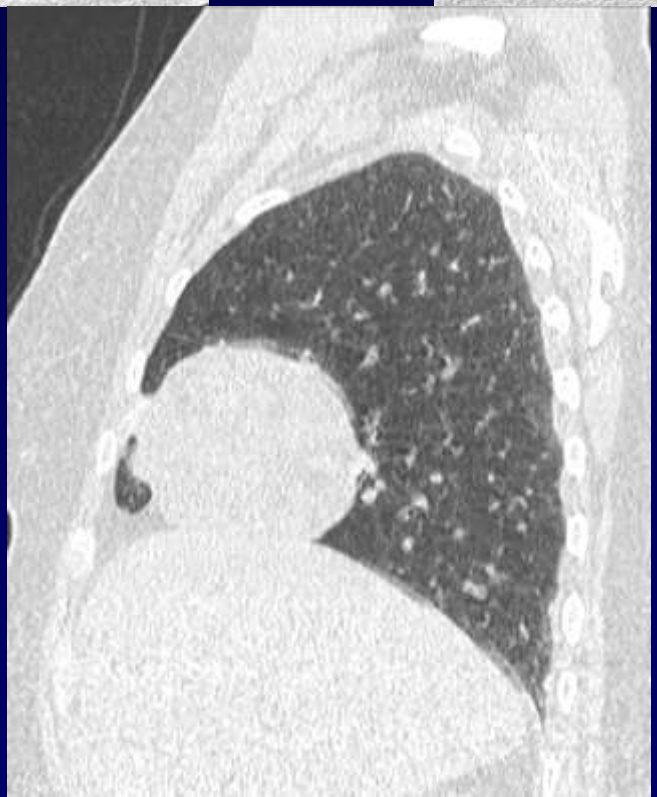
Service de radiologie
CHU Mohamed VI de Marrakech

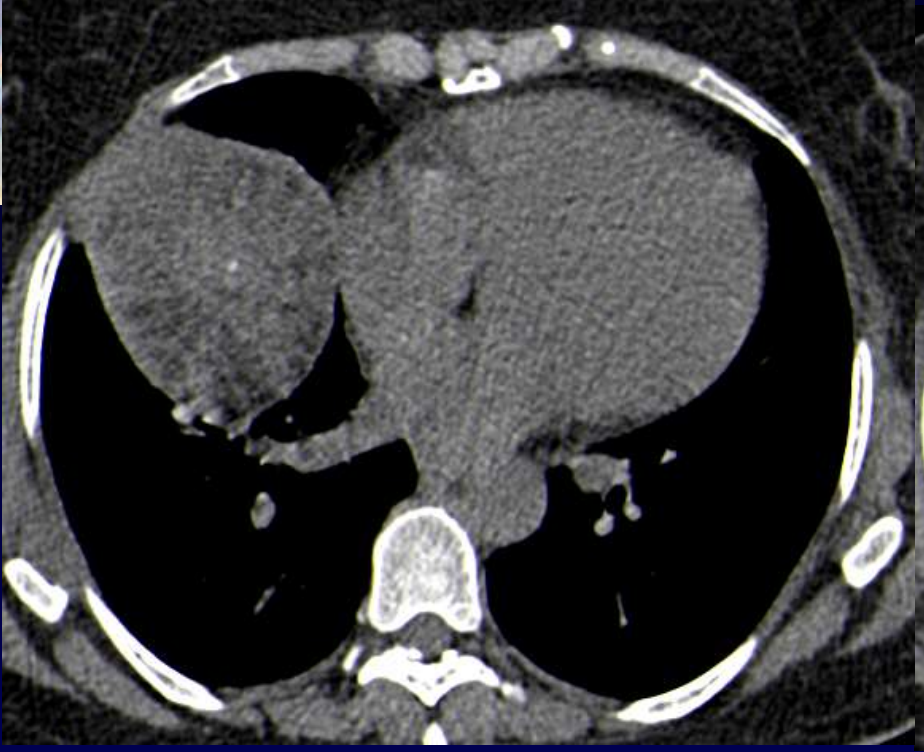
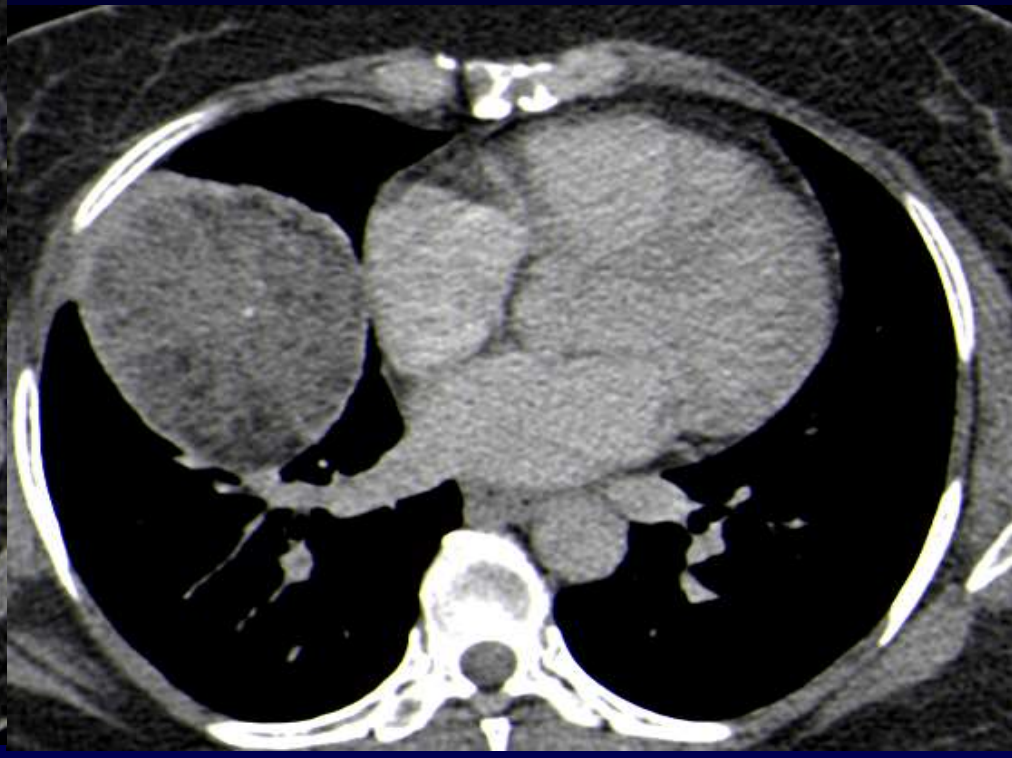
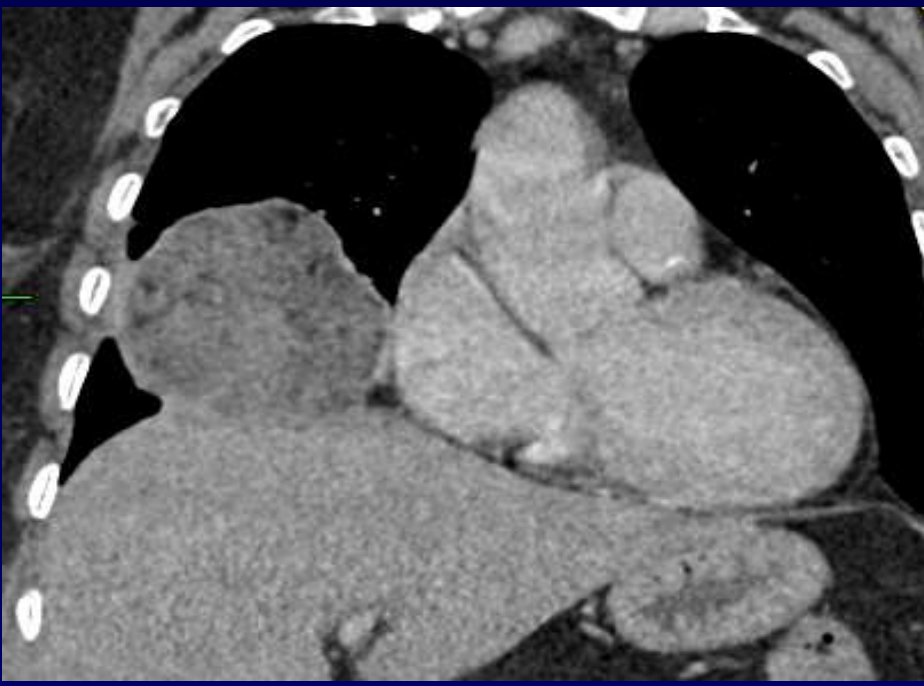
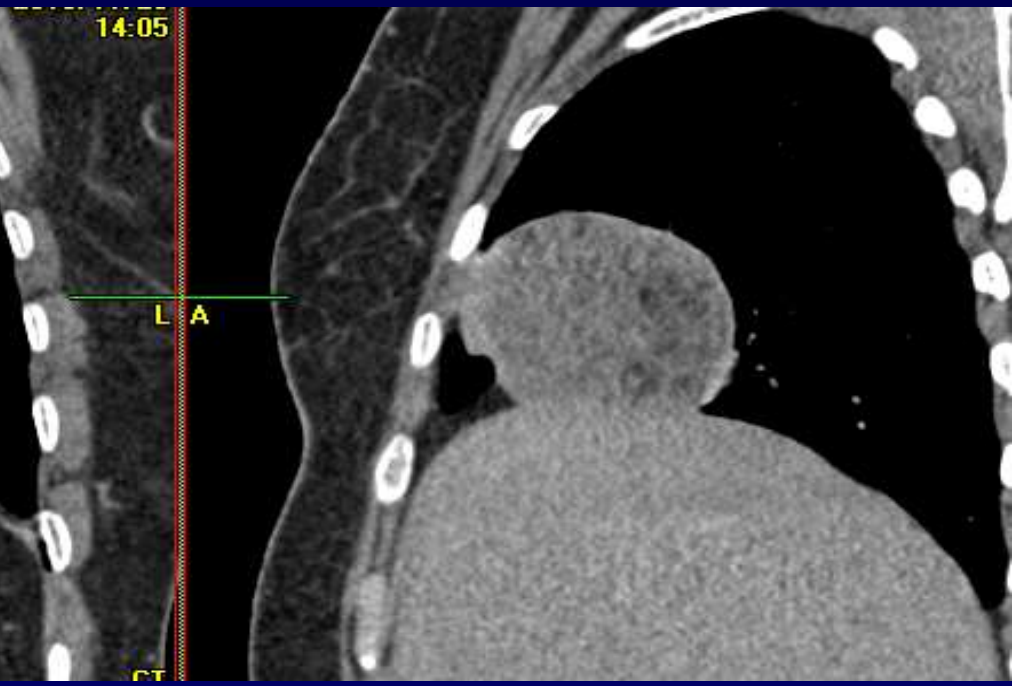

CLUB THORAX







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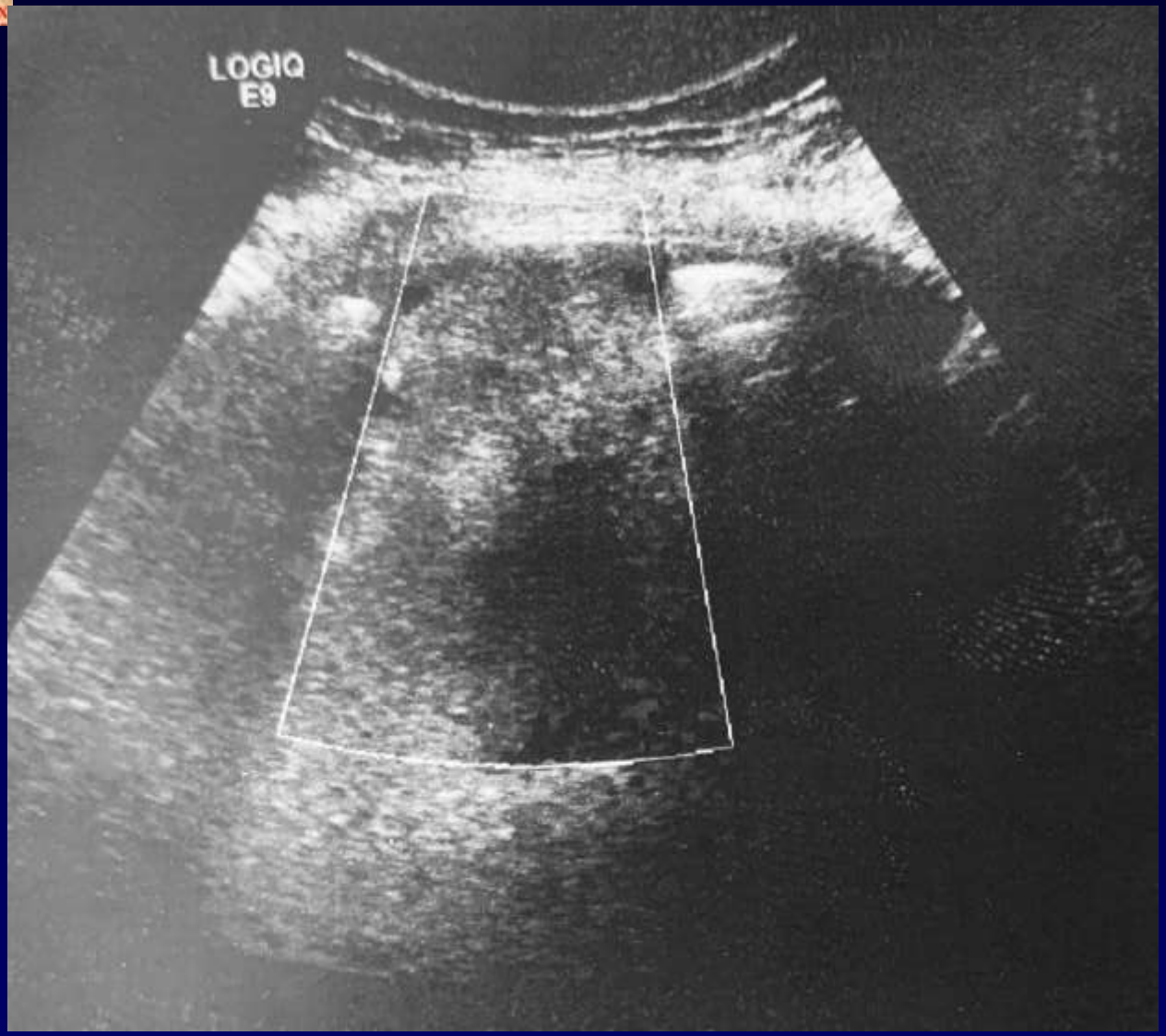
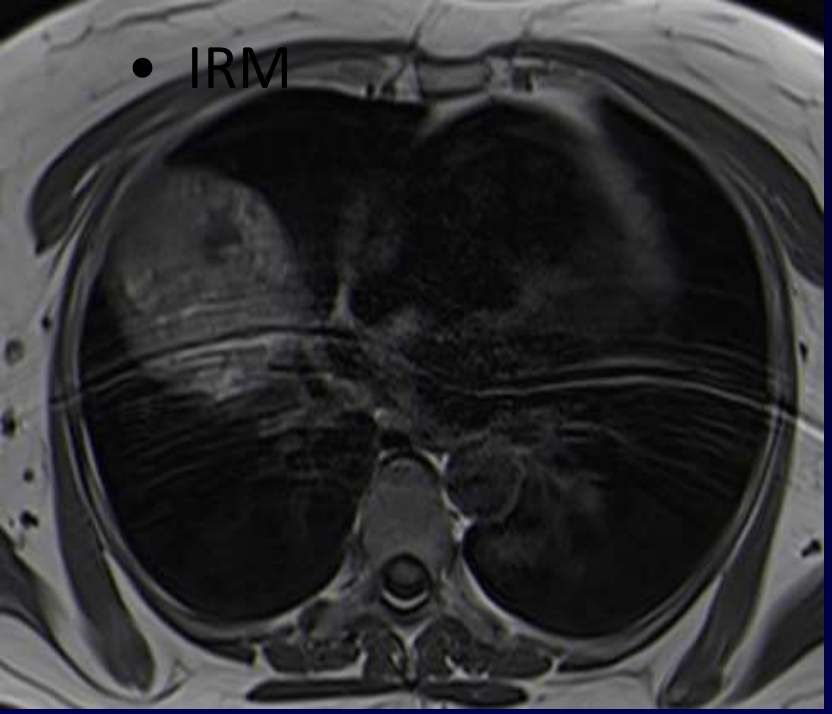
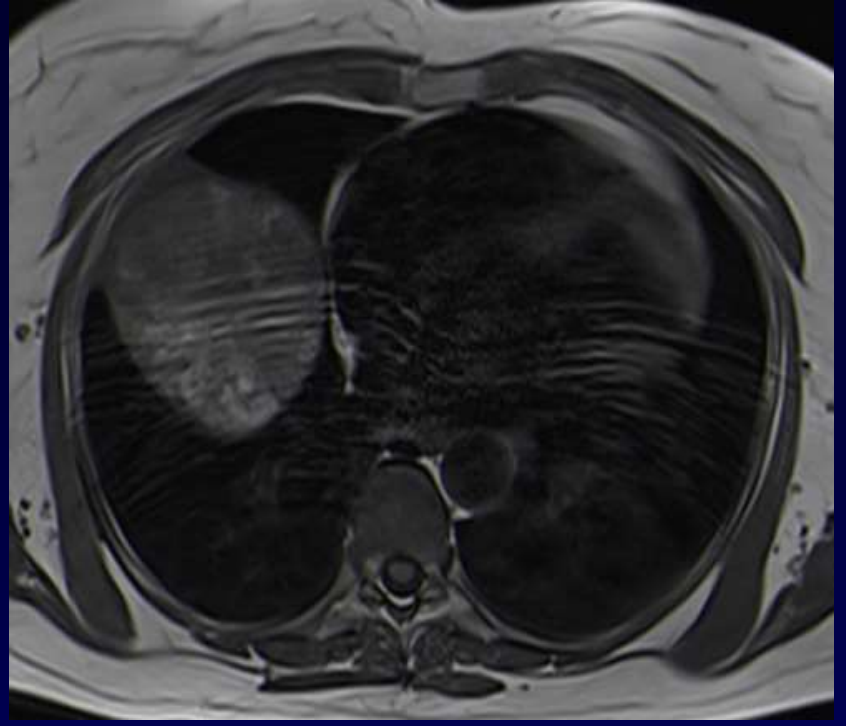


- *Sérologie hydatique négative*

- IRM





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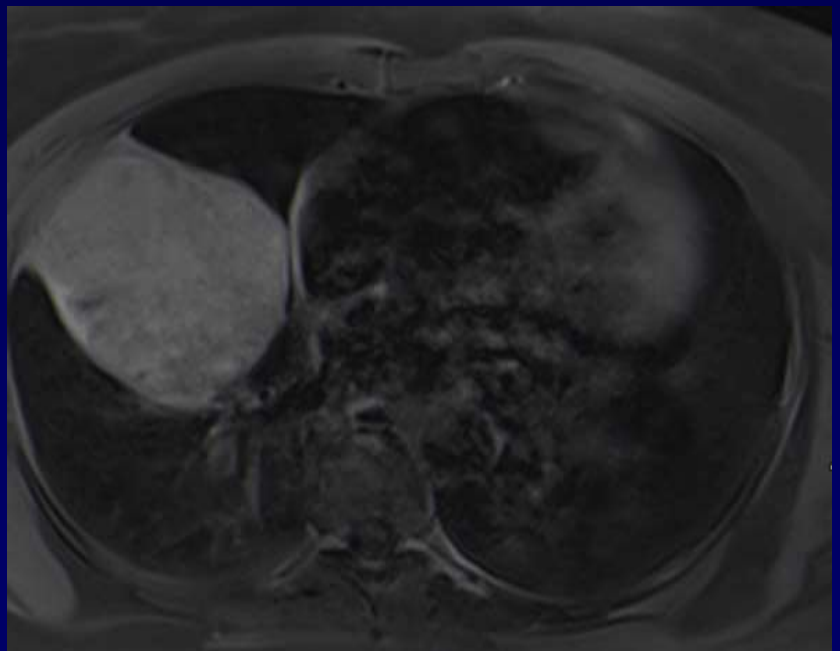

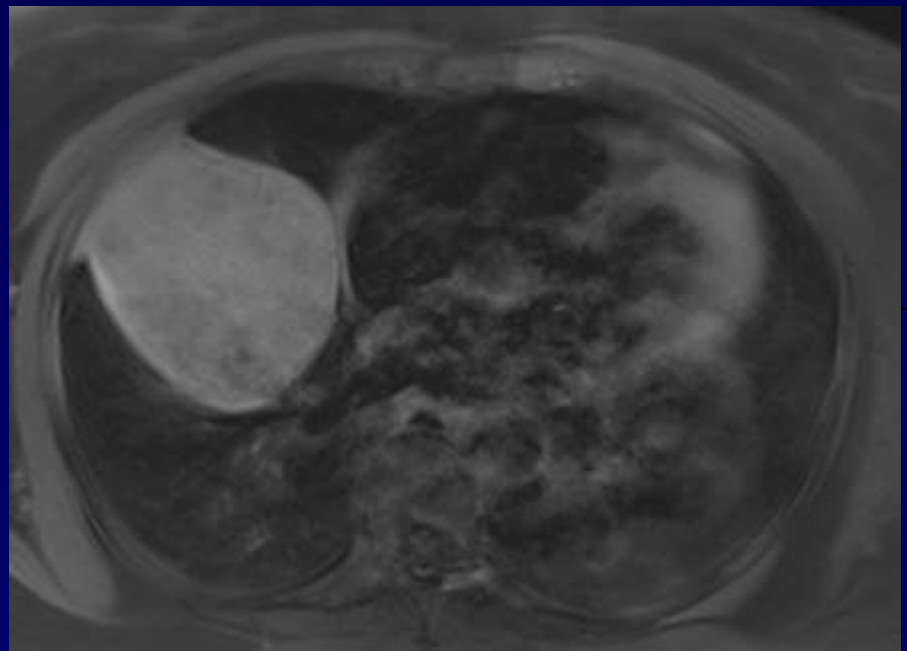

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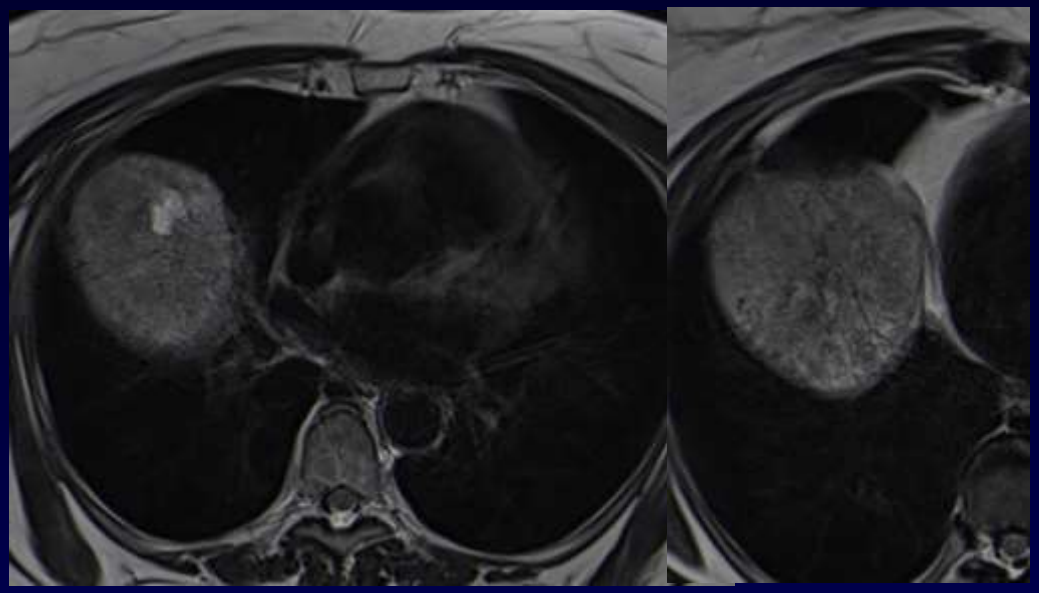

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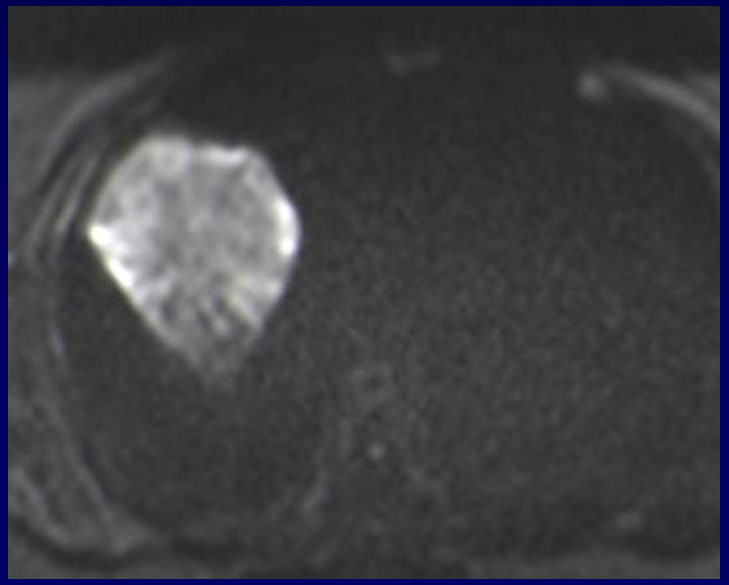

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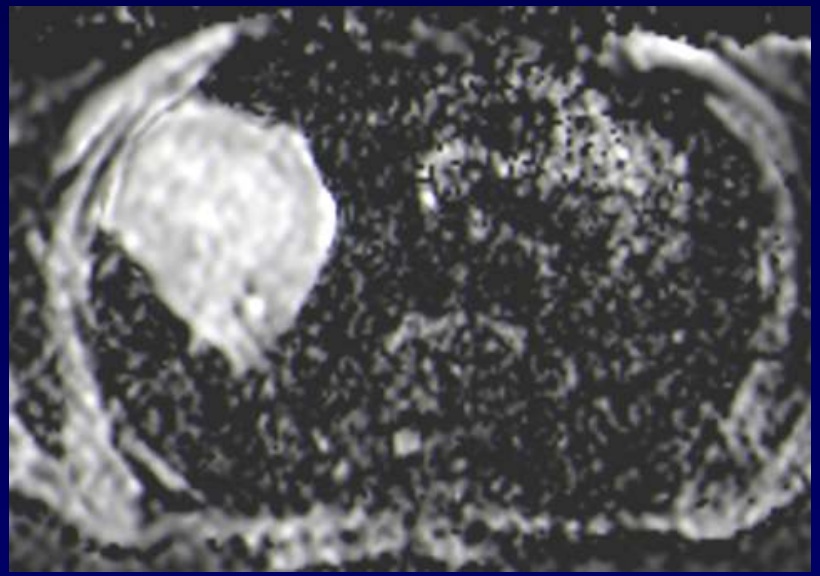
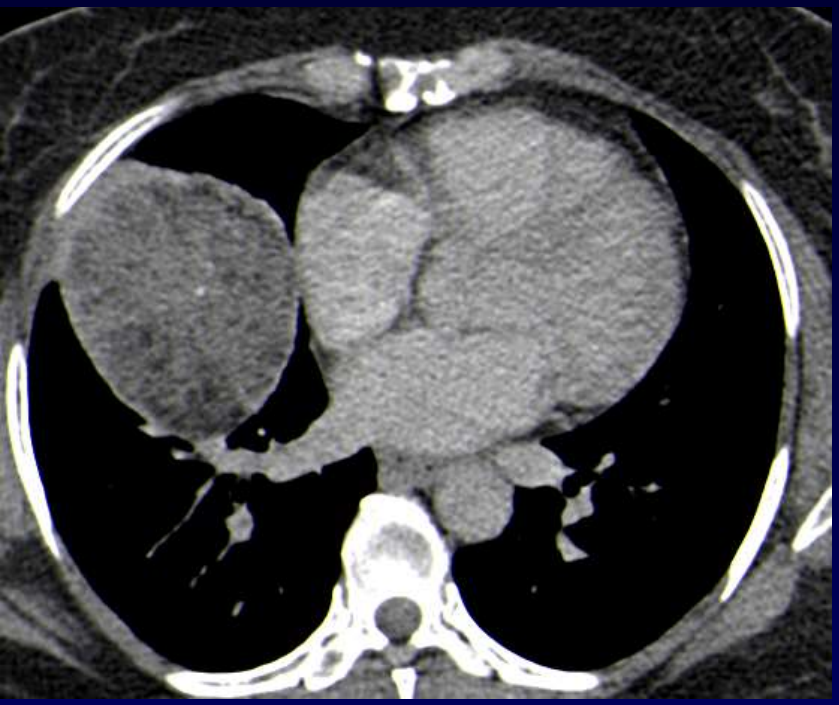
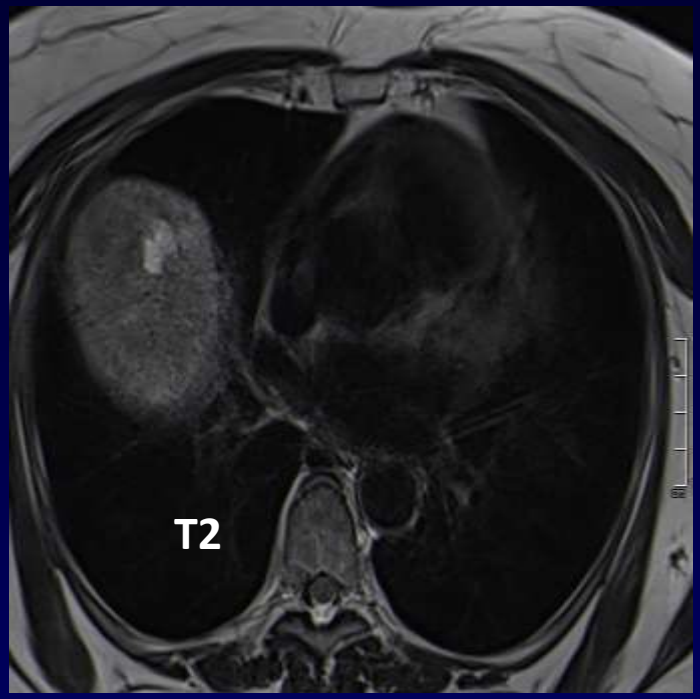


ADC


LUB THORAX

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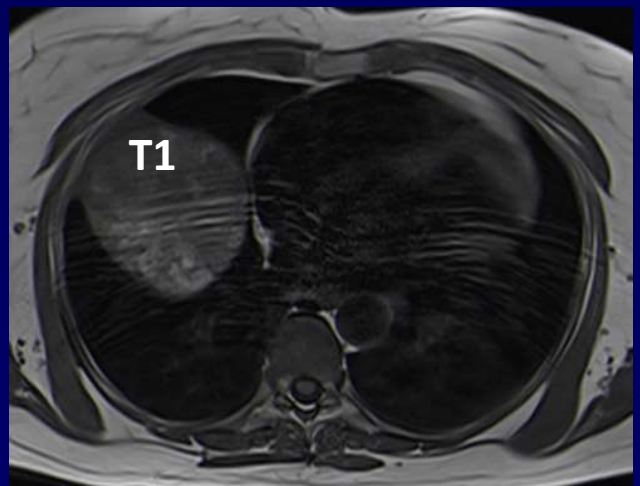
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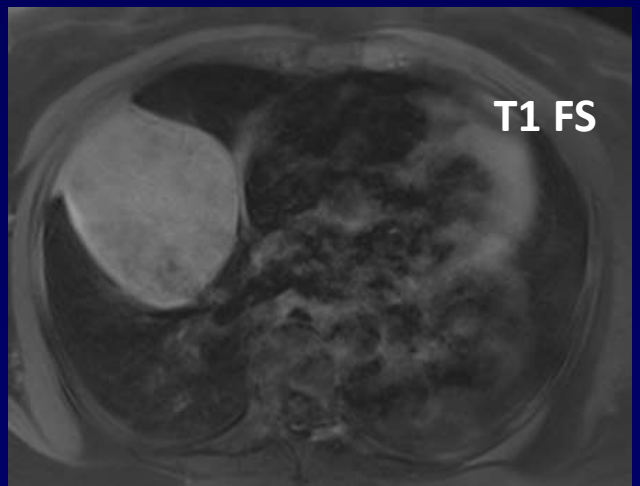
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Diagnostic ?

- :

A. Hamartochondrome

B. Anévrysme pulmonaire

C. Tératome pulmonaire

D.Tumeur maligne pulmonaire

E. Kyste hydatique pulmonaire

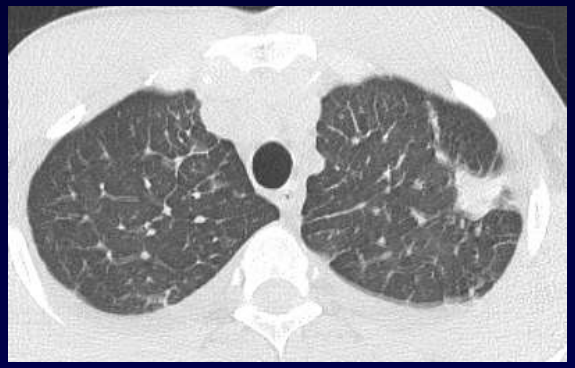
- :

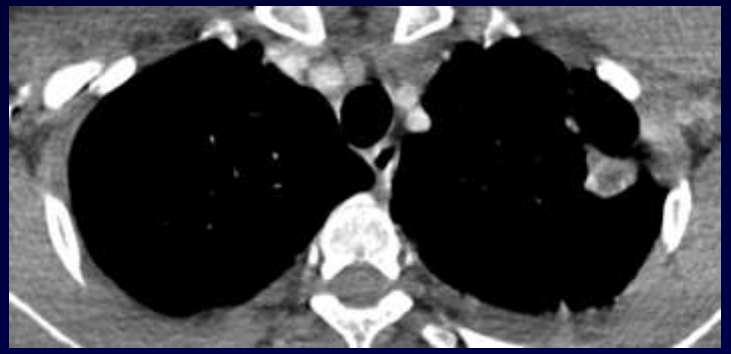
A. Hamartochondrome
B. Anévrysme pulmonaire
C. Tératome pulmonaire
D.Tumeur maligne pulmonaire
E. Kyste hydatique pulmonaire

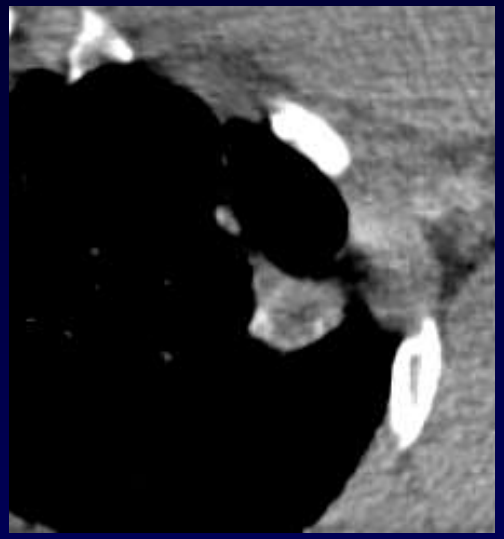
Diagnostic ?

Tératome pulmonaire

Hamartochondrome







Tumeur bénigne la plus fréquente Adulte

Poumon périphérique ++

Endobronchique ou endotrachéale

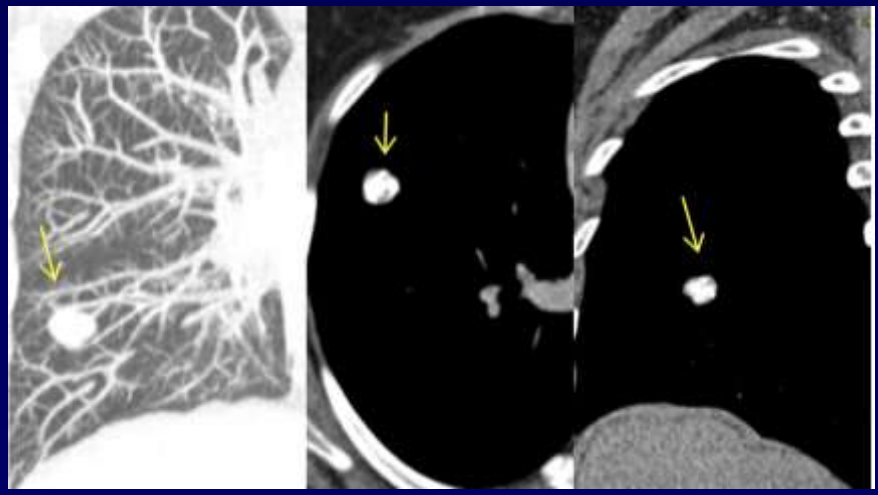
< 4cm, contours réguliers

Composante graisseuse

Calcifications centrales en « pop corn »

Rehaussement variable

Dégénérescence maligne exceptionnelle



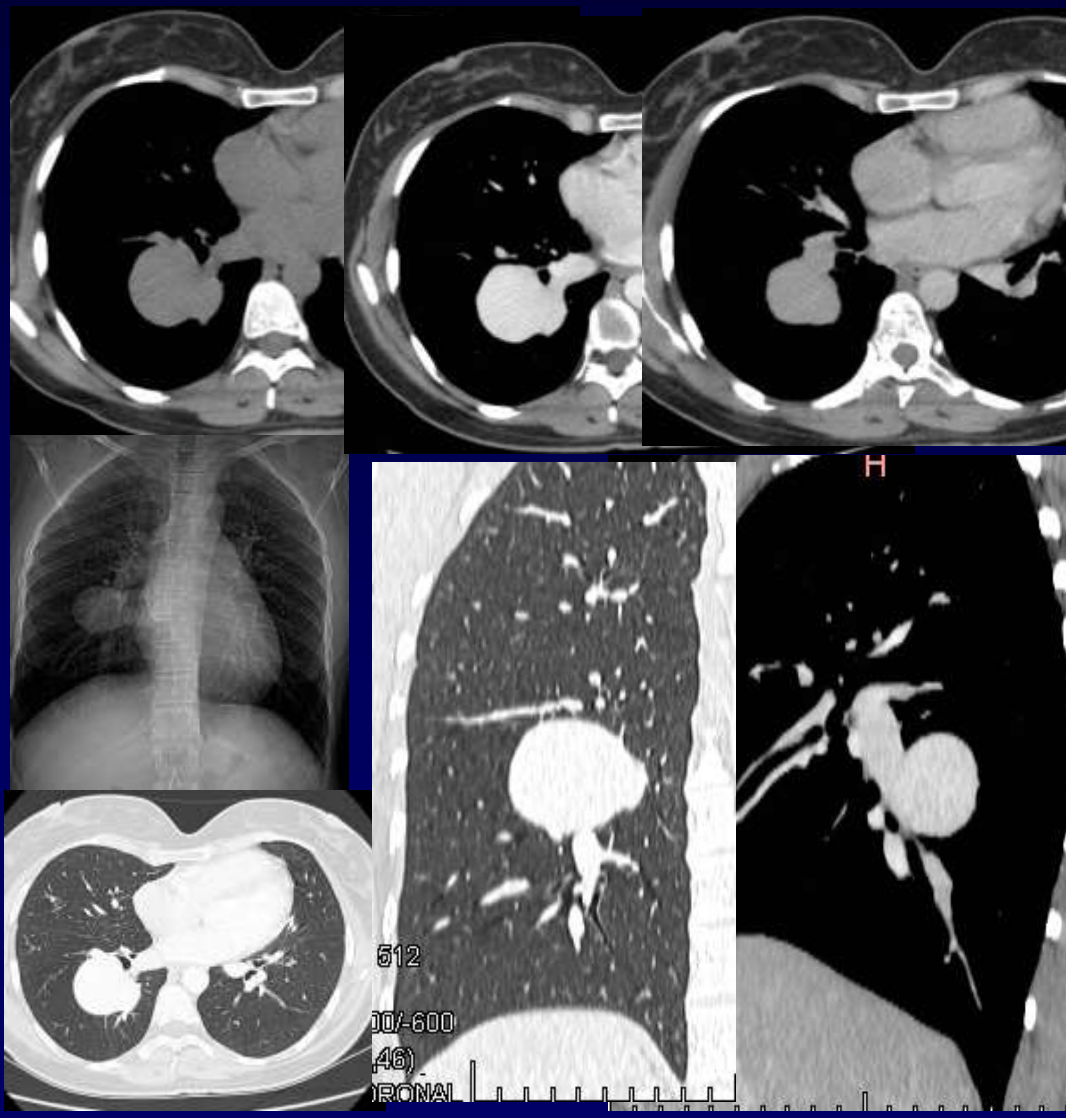
Anévrysme pulmonaire

-Continuité avec l'axe vasculaire

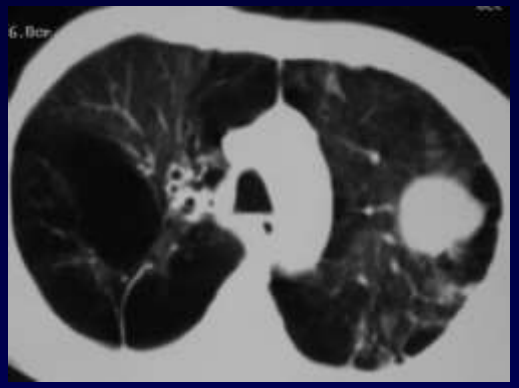
-Rehaussement identique aux vaisseaux pulmonaires

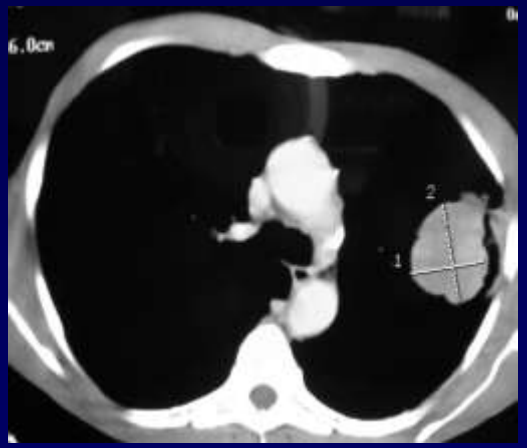
-Causes multiples :

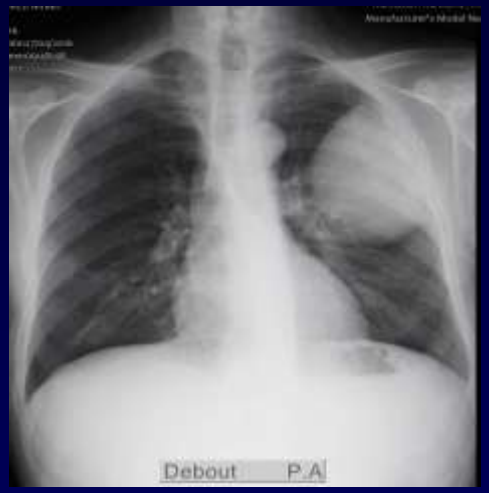
- .Behcet
- .Anévrysmes mycotiques
- .Tuberculose
- .Idiopathique

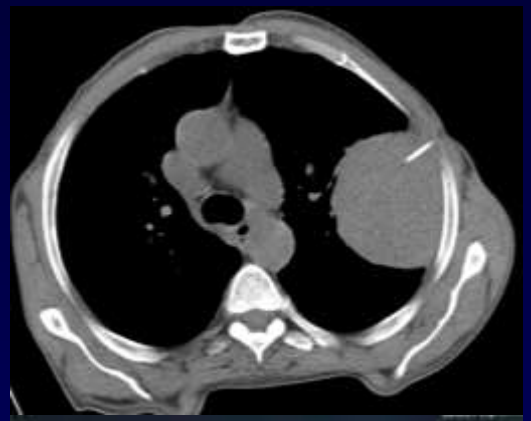


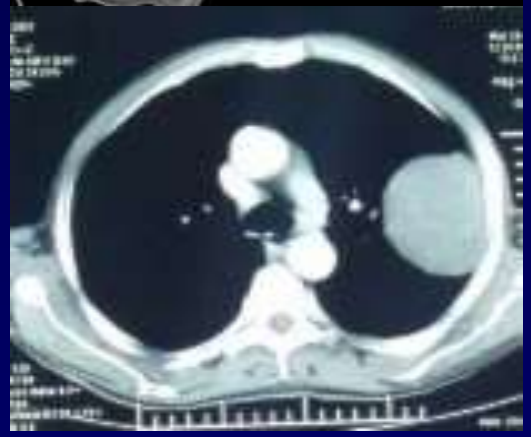
Tumeur bronchique









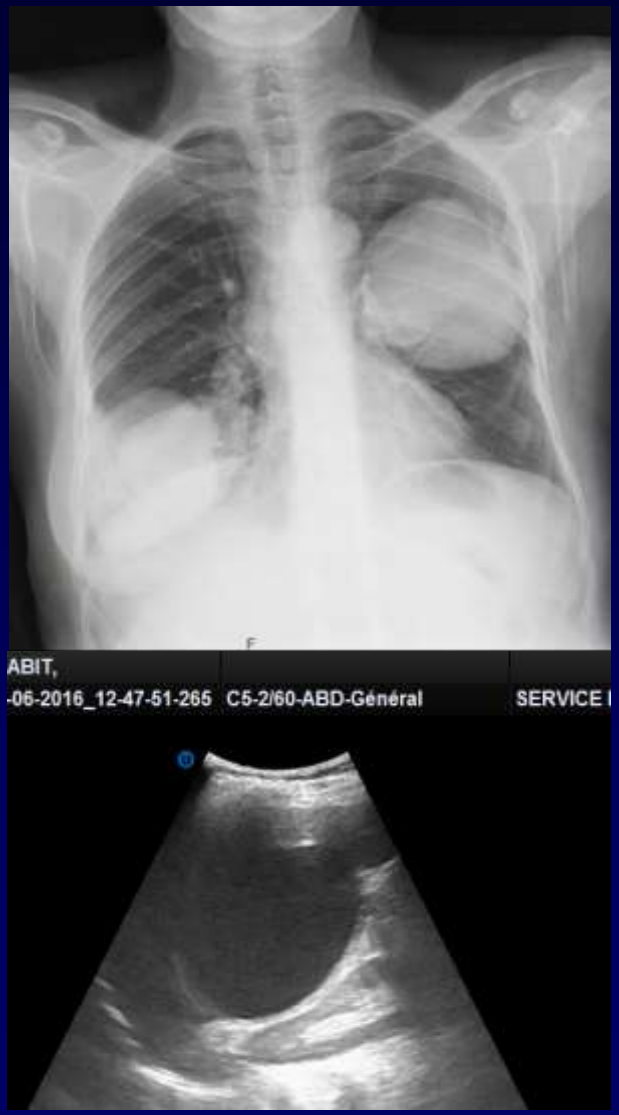


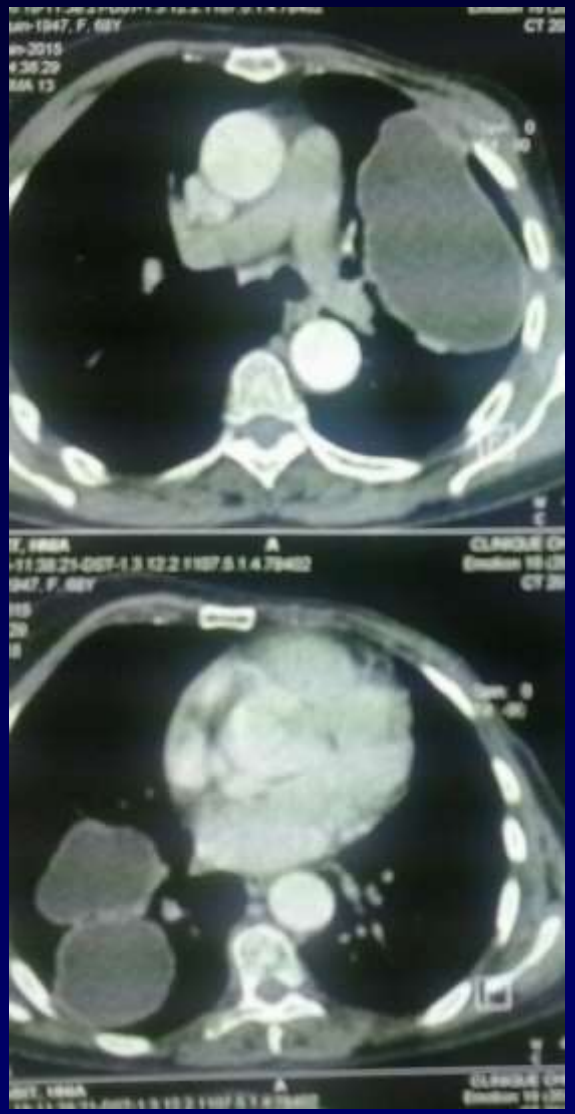
Adénocarcinome bronchique

Carcinome bronchique à grandes cellules.

Kyste hydatique pulmonaire

- Simple
- Densité liquidienne
- Paroi fine
- Limites nettes
- Échographie
- Complications
- Sérologie





Tératome pulmonaire

- Tumeur germinale
- Gonades et médiastin antérieur
- Exceptionnel dans le poumon : premier cas décrit par Mohr en 1839
- Prépondérance féminine : 2ème et 4ème décade; CULMEN
- Douleur thoracique, hémoptysie, toux, fièvre, trichoptysie (expectoration de cheveux)
- Clinique est fonction de siège, volume, composition

- -Macroscopie : tumeur de 2 à 3 cm: Kystique multiloculée
- -Microscopie : multiples éléments ectodermiques (dents, phanères, cheveux), mésodermiques (os, graisse et muscles) et endodermiques (épithélium respiratoire et tractus gastro-intestinal).
- Le plus souvent mature.

Figure 2
Gross surgical specimen showing encapsulated, partially cystic lesion filled with hair and sebaceous material.

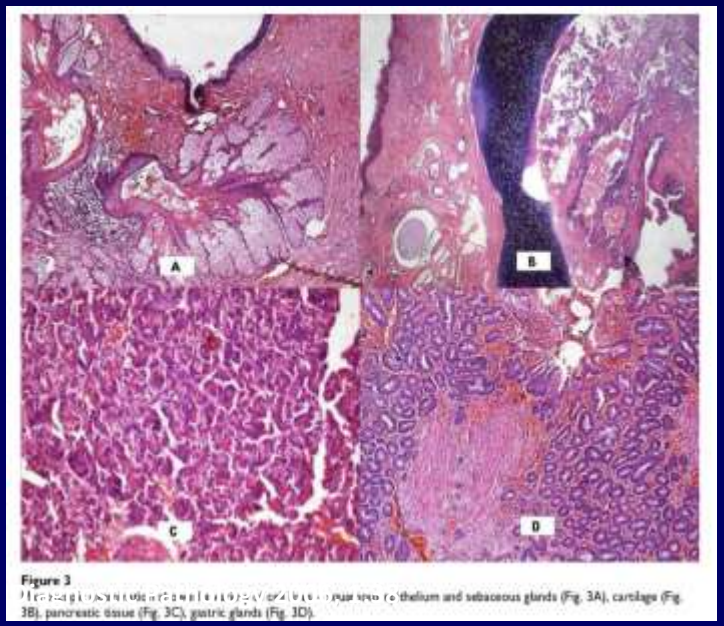


Figure 3
...thelium and sebaceous glands (Fig. 3A), cartilage (Fig. 3B), pancreatic tissue (Fig. 3C), gastric glands (Fig. 3D).

Il est parvenu une formation nodulaire non orienté pesant 155.7g et mesurant 7.5x6.2x4.5cm. Elle est bosselée, de couleur brunâtre, de consistance ferme et siège de remaniements hémorragiques. A l'ouverture, présence d'un néoplasme multinodulaire bien limité encapsulé mesurant 7.2x6x4cm. Il est de couleur blanchâtre de consistance ferme, fasciculé et siège de remaniements hémorragiques et calciques. Il reste à ras de toutes les limites. Des prélèvements systématiques ont été réalisés.

L'examen histologique des prélèvements réalisés au niveau des formations nodulaires incluses en totalité montre qu'il s'agit d'un parenchyme pulmonaire siège d'une prolifération tumorale. Celle-ci est faite d'une part d'un tissu cutané mature, bordé par un épithélium malpighien souvent surmonté de kératine compacte

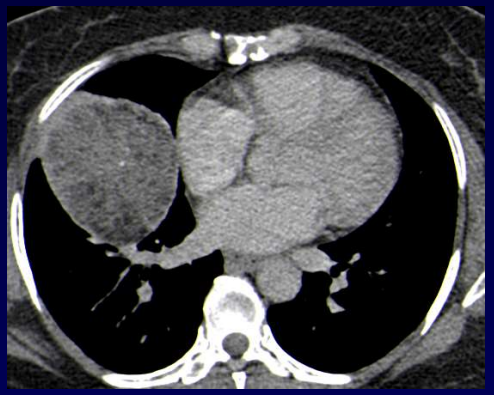
D'autre part, elle comporte un tissu cartilagineux et adipeux mature de morphologie conservée.

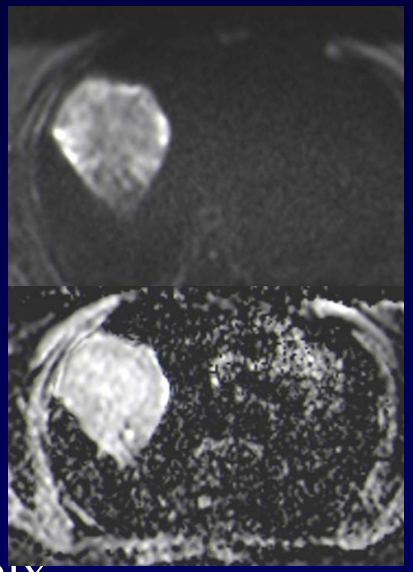
Les limites d'exérèses passent en tissu sain.

CONCLUSION :

- Aspect morphologique compatible avec un tératome pulmonaire mature multitissulaire.

- Masse lobulée, volumineuse
- Composantes multiples à des proportions variables :
  - -Kystique
  - -Solide
  - -Graisseuse
  - -Calcique (dents)





- IRM : T1 FS, Diffusion

- Résection chirurgicale complète : traitement de choix
  - Pneumotomie permettant l'accouchement de la masse sans résection parenchymateuse aucune.

- Bon pronostic

take home points

- Tumeur rare dans le poumon (CULMEN)
- Diagnostic radiologique
- Composantes tissulaires multiples

Table 1 Clinical and radiological comparison of intrapulmonary teratoma, hydatid cyst of lung, and lung abscess

	Radiography	Signs and Symptoms	Involvement Features
Intrapulmonary Teratoma	• Typically cystic masses often with focal calcification and peripheral translucency • Air fluid level is suggestive of bronchial communication if present [9, 19]	• Chest pain • Hemoptysis • Cough • Trichoptysis (most specific) [19]	• Location: left upper lobe [9] • Unilateral [19]
Hydatid cyst	• Typically, a well-defined homogenous radio-opacity • Air fluid level in case of a complicated cyst [20]	• Usually asymptomatic for many years • Chest pain • Dyspnea • Dry cough • Hemoptysis [20]	• Location: lower lobes specially the right basal lobe • Bilateral in 20% of the cases [20]
Acute Lung abscess (less than 6 week)	• Usually circumscribed with not so well-defined surrounding to lung parenchyma • Air fluid level mostly present [21]	• Productive Cough • Fever • Night sweats [21]	• Location: posterior segments of the upper lobes and the superior segments of the lower lobes (if caused by aspiration) [21] • Usually unilateral [22]
Chronic lung abscess	• Usually irregular star-like shape with well-defined surrounding to lung parenchyma • Air fluid level mostly present [21]	• Productive Cough • Fever • Night sweats • Weight loss [21]	• Location: posterior segments of the upper lobes and the superior segments of the lower lobes (if caused by aspiration) [21] • Usually unilateral [22]

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Case Reports > BMJ Case Rep. 2012 Aug 14;2012:bcr0220125770.
doi: 10.1136/bcr.02.2012.5770.

Intrapulmonary cystic teratoma mimicking malignant pulmonary neoplasm

Abhishek Chandrakant Sawant [1], Ajay Kandra, Swapna Reddy Narra

Affiliations + expand

PMID: 22892230 PMCID: PMC3433504 DOI: 10.1136/bcr.02.2012.5770
Free PMC article

Abstract

Benign cystic teratoma of lung is an extremely rare tumour, which was first described in literature by Mohr in 1839. Intrapulmonary teratoma is thought to be a derivative of the third endo-dermal pharyngeal pouch, which is an anlage of the thymus. The authors present a rare case of mature cystic teratoma in a young male involving the right upper lobe of the lung. Diagnosis is often missed and patients are treated for various infectious conditions. Treatment is complete resection for both benign and malignant teratomas and carries excellent prognosis. Benign cystic teratoma, if not excised may cause grave complications like life-threatening haemoptysis or malignant transformation with metastatic disease.

Primary malignant teratoma of lung: report of a case and review of the literature

Francesca Giunchi [1], Juan José Segura

Affiliations – collapse

Affiliation

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PMID: 22180529 DOI: 10.1177/1066896911431454

Abstract

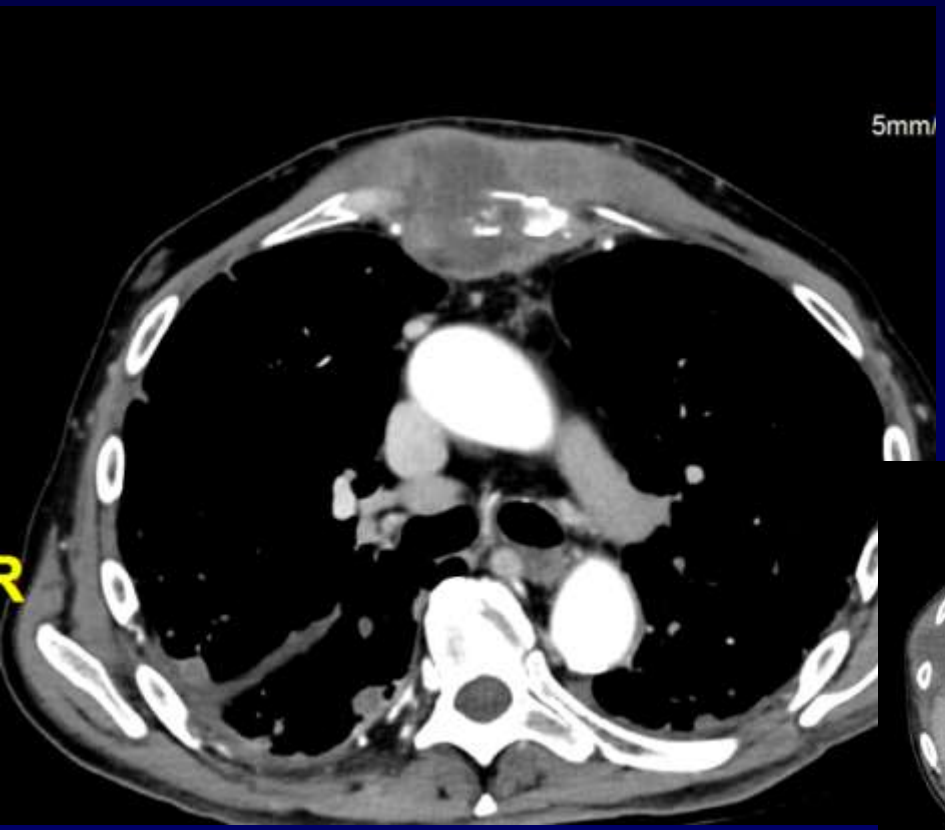
We describe a rare case of malignant teratoma involving the entire right lung. A 28 years old man was admitted to the hospital with severe respiratory failure and general malaise. Chest X-ray showed a dense opacity of the entire right lung, accompanied by pleural effusion. At autopsy, the right lung was completed replaced by a mass of variegated appearance combining cystic spaces and solid areas. Microscopically, the lung tumor exhibited a polymorphous histological picture. Most of the tissue had a malignant mesenchymal appearance, which included areas of chondrosarcoma, chondroblastic osteosarcoma, well differentiated liposarcoma, and undifferentiated pleomorphic sarcoma. Other areas of the tumor showed malignant epithelial components consistent with bronchial and urothelial mucosa with also scattered islands of pigmented epithelium of probable neuronal or retinal nature.

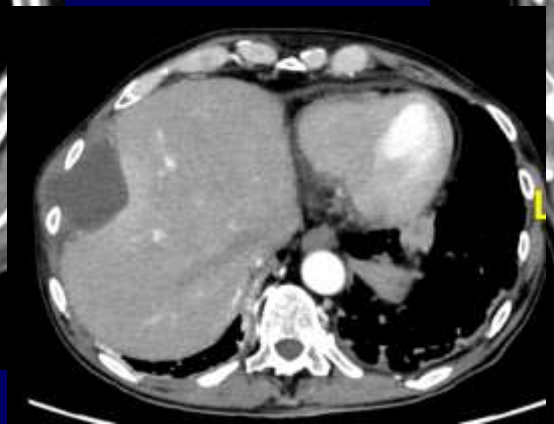
QUIZ n° 5

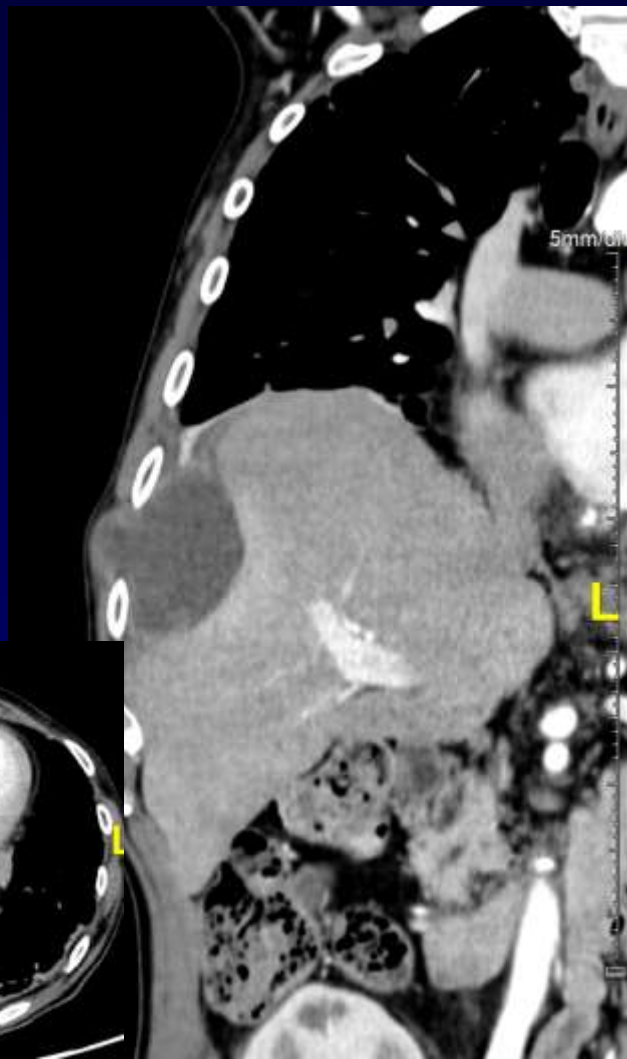
PY Marcy
R Dagan
F Renacco
O Gisserot

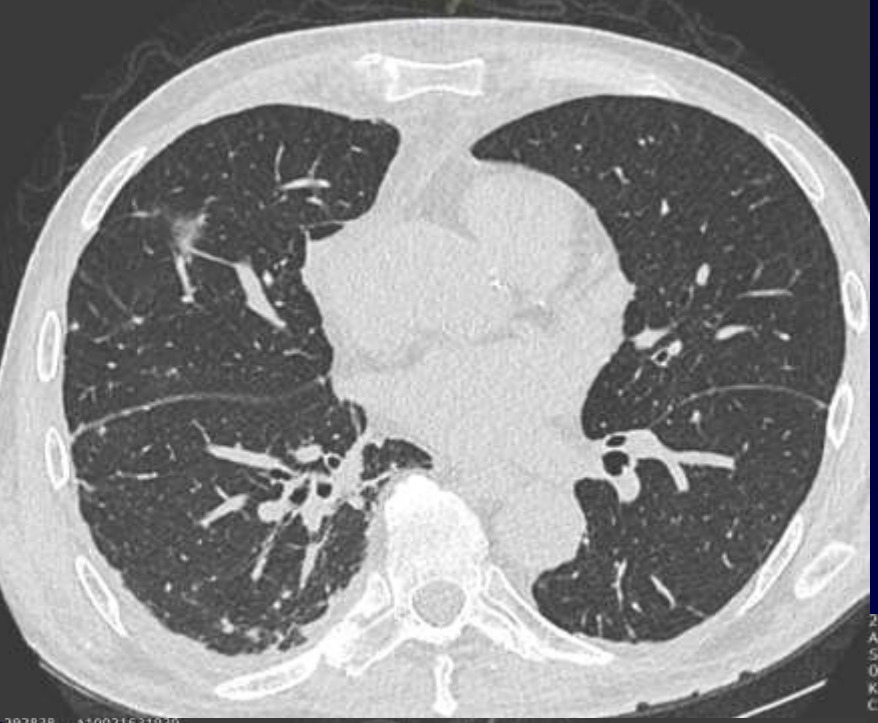
Patient 71ans, IMC 23, ACFA, adressé pour masse sternale par cardiologues.

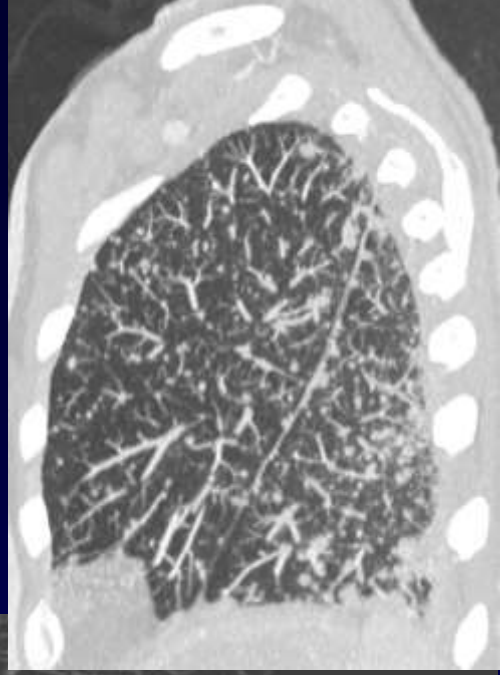
ATCD: HTA, ATCD K Prostate, I. RÉNALE (Greffon iliaque), Parathyroidectomie 2021.

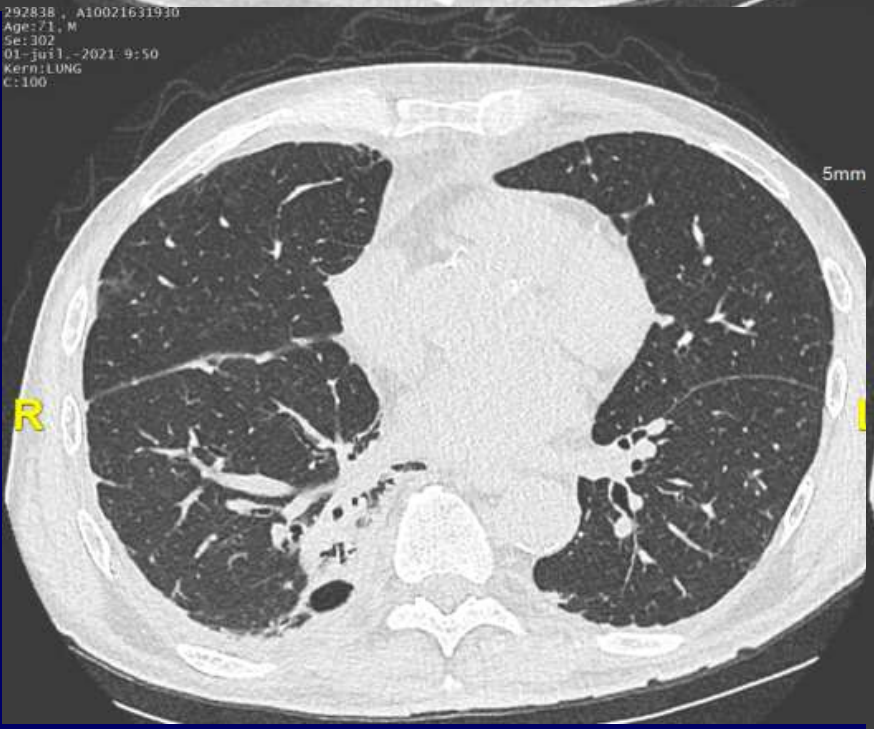








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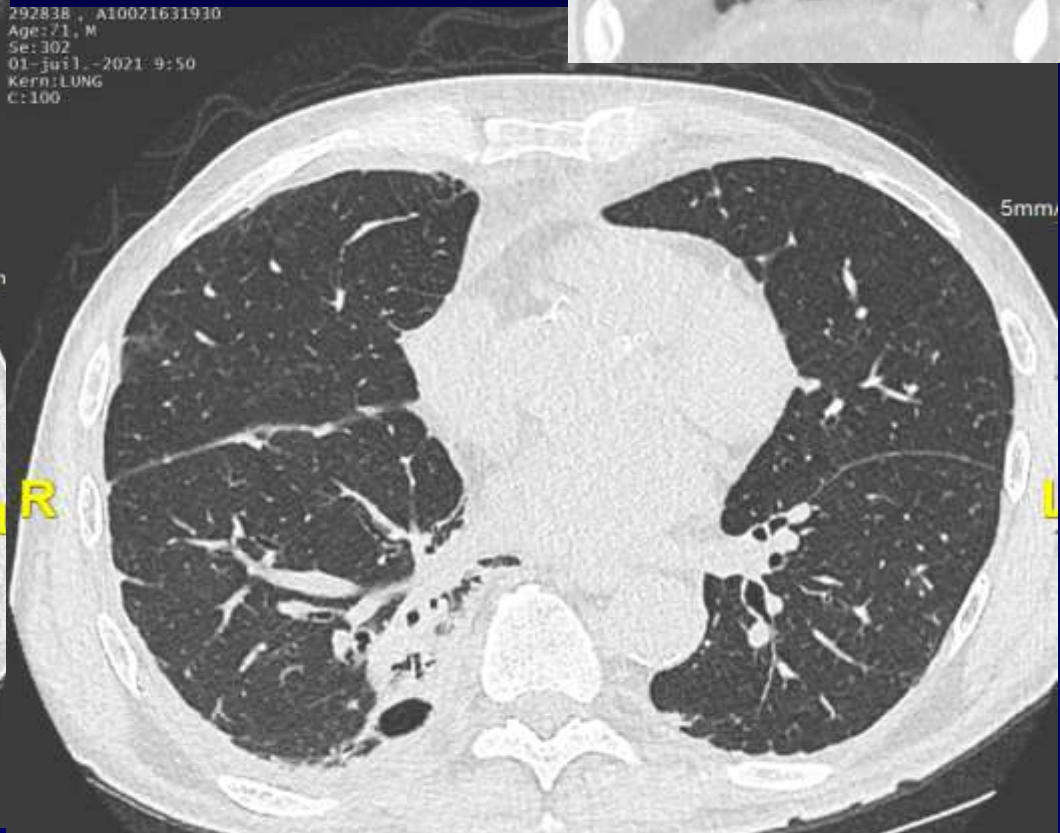
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Diagnostic ?

- :

A. Affection à Nocardia

B. Actinomycose

C. Tuberculose

D.Tumeur maligne pulmonaire primitive

E. Métastases disséminées au thorax et au foie

- :

A. Affection à Nocardia

B. Actinomycose

C. Tuberculose

D.Tumeur maligne pulmonaire primitive

E. Métastases disséminées au thorax et au foie

Diagnostic ?

Affection à Nocardia

Infection opportuniste tellurique,

Abcès nécrosants invasifs

Terrain immuno déprimé

- Bactérie Gram + anaérobie
- *Nocardia asteroides* : bactérie tellurique (compost, eau douce & salée, poussières) opportuniste à filaments,
- Inoculations cutanée ou inhalation: syndromes dermatologiques ou systémiques (poumon, SNC, cœur, rein, œil, articulation, os…)

- Terrain:
  - Homme >> Femme, tout âge,
  - Immuno suppression (lympho prolifératif, ChimioT, Corticoïdes), SIDA
  - OH chronique et pneumopathie chronique

- Clinique: Fièvre, toux, crachats, dyspnée, hémoptysie…

- Evolution:
  - Guérison spontanée
  - Poussées
  - Chronique, pseudo néoplasique, tuberculose – like, mycose- like
  - Léthale.

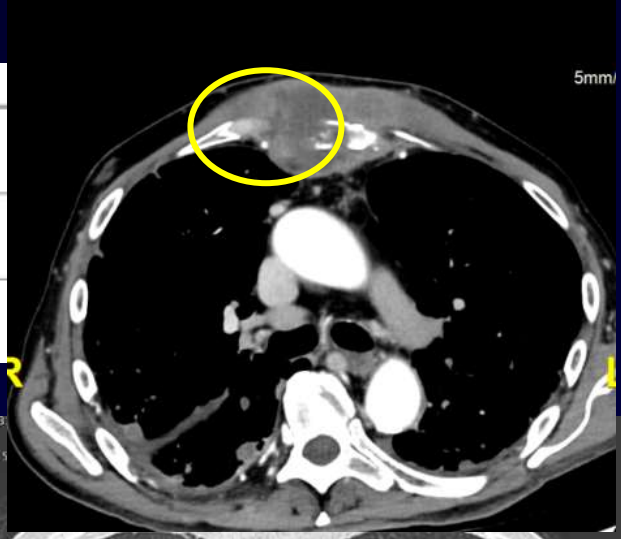
Table 1.1

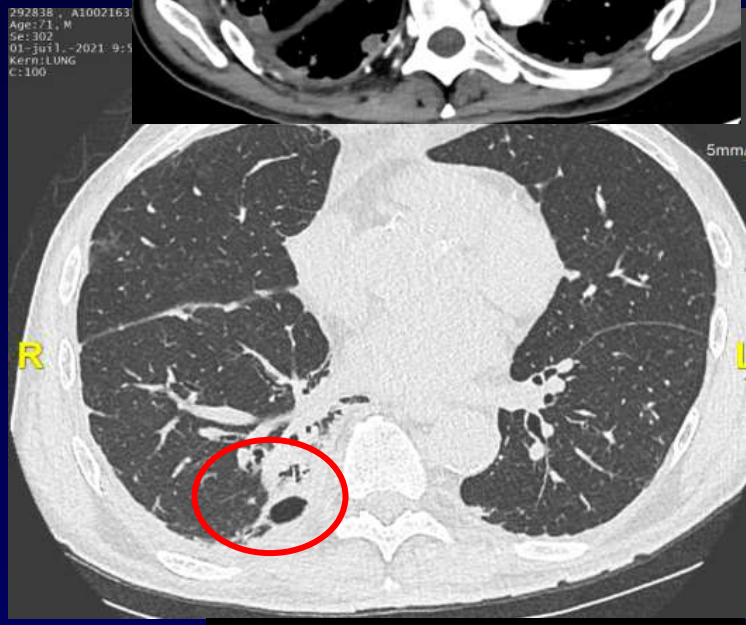
Pertinent characteristics of selected bacterial pulmonary infections

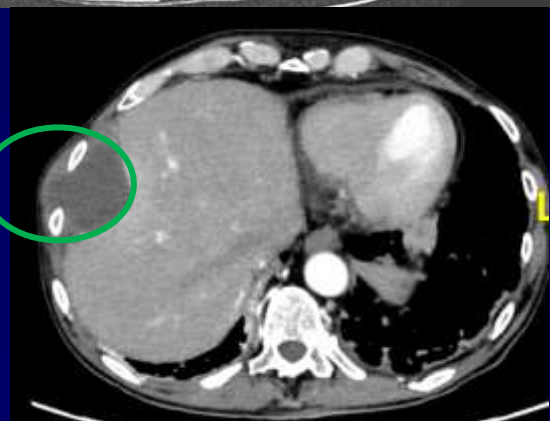
	Actinomycosis	Nocardiosis	Botryomycosis
Infectious agent	*Actinomyces israelii*	*Nocardia asteroides*	*Staphylococcus aureus*, *Escherichia coli* and *Pseudomonas aeruginosa*
Distribution	Commensal of oropharynx, gastrointestinal and female genital tracts	Soil worldwide	Worldwide
Predisposing condition	Chronic pulmonary disease, alcoholism, poor oral hygiene	Immunosuppression	Immunosuppression
Histological pattern	Abscess formation with sulfur granules and Splendore-Hoeppli phenomenon	Necrotizing abscess formation	Eosinophilic granules with suppurative abscesses and Splendore-Hoeppli phenomenon
Special stains	Gram stain +, acid-fast stain –	Gram stain +, acid-fast stain +	Gram stain depending on underlying agent
Morphology of etiologic agent	Slender, beaded, and branched filamentous bacteria	Slender, beaded, and branched filamentous bacteria	Bacterial cocci or bacilli depending on underlying agent
Ancillary testing	Tissue culture, RNA sequencing	Tissue culture, RNA sequencing	Tissue culture
Treatment	Antibiotics +/− surgery	Antibiotics +/− surgery	Antibiotics and surgery

Weissferdt A. Infectious Lung Disease. Diagnostic Thoracic Pathology. 2019;3-71.

Chest radiograph	CT findings
• Lobar consolidation	• Consolidation with areas of abscess formation, cavitation, solitary nodules, or mass
	• Pleural thickening, effusion, empyema necessitans
• Pleural effusion	• Disseminated disease in immunocompromised: multiple nodules and areas of cavitation







- RT

Condensations, infiltrats et nodules irréguliers, syndromes cavitaires .

- CT

Contact pleural ++, voire paroi thorax ++

-Syndrome cavitaire (paroi épaisse)

-Pleurésie 30%

-aux Vx, plèvre, paroi thorax: empyèmExtension directe, fistule broncho pleurale.

-Verre dépoli , pneumonie organisée

-Traitement: Trimethoprime-sulfamethoxazole / 6 à 12mois

-Mortalité 15 à 30%.

CASE REPORT Open Access

A clinical case report of brain abscess caused by *Nocardia brasiliensis* in a non-immunocompromised patient and a relevant literature review

Jian-Wei Zhu[1†], Hui Zhou[2†], Wei-Qiang Jia[1], Jian You[3] and Ru-Xiang Xu[1*]

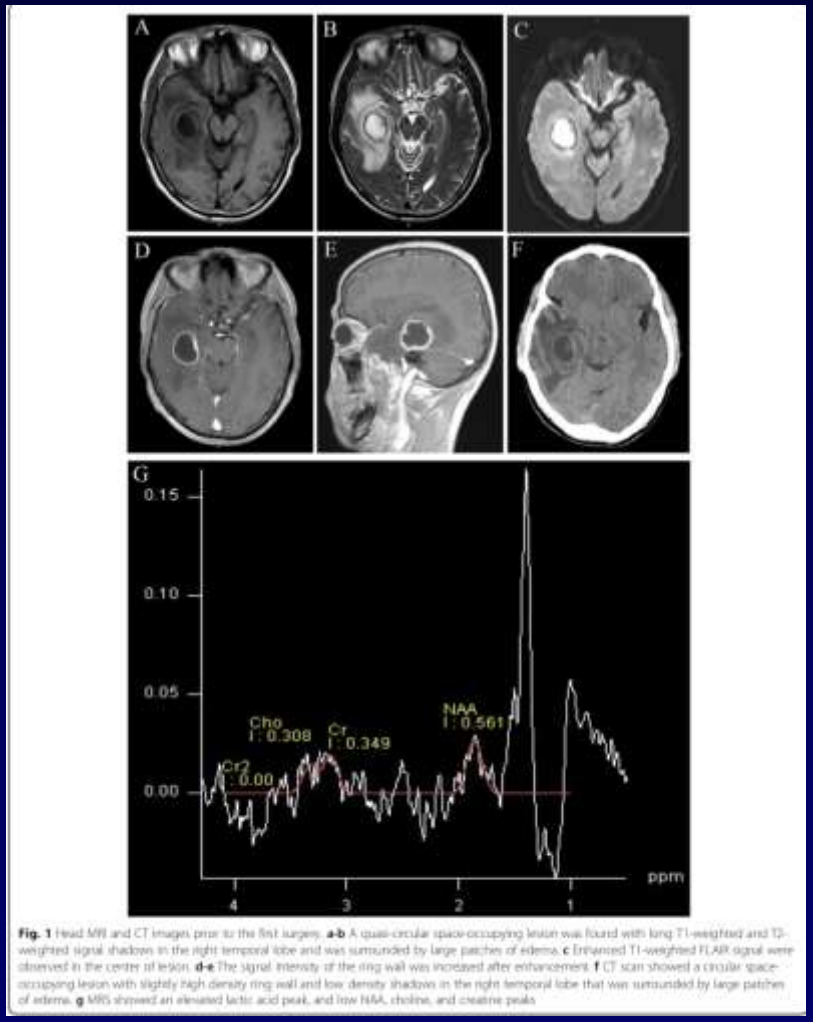
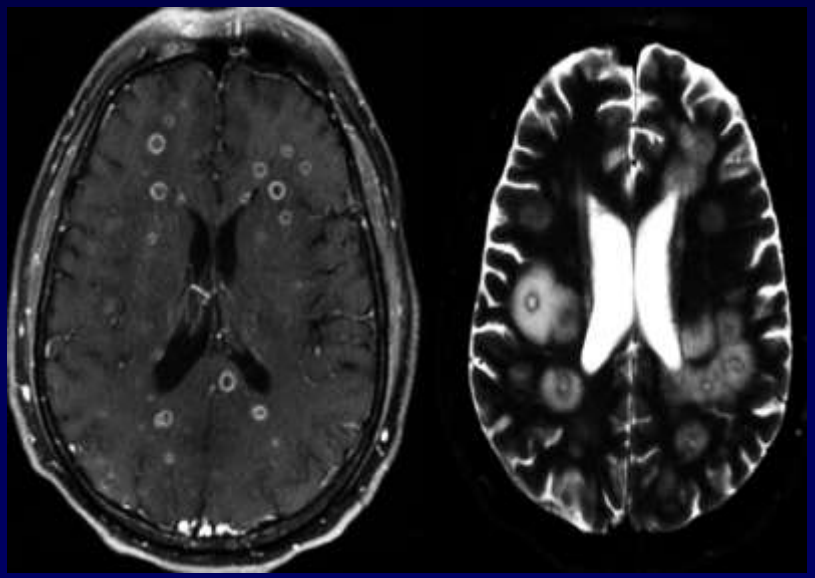


Fig. 1 Head MRI and CT images prior to the first surgery. **a-b** A quasi-circular space-occupying lesion was found with long T1-weighted and T2-weighted signal shadows in the right temporal lobe and was surrounded by large patches of edema. **c** Enhanced T1-weighted FLAIR signal were observed in the center of lesion. **d-e** The signal intensity of the ring wall was increased after enhancement. **f** CT scan showed a circular space-occupying lesion with slightly high density ring wall and low density shadows in the right temporal lobe that was surrounded by large patches of edema. **g** MRS showed an elevated lactic acid peak, and low NAA, choline, and creatine peaks

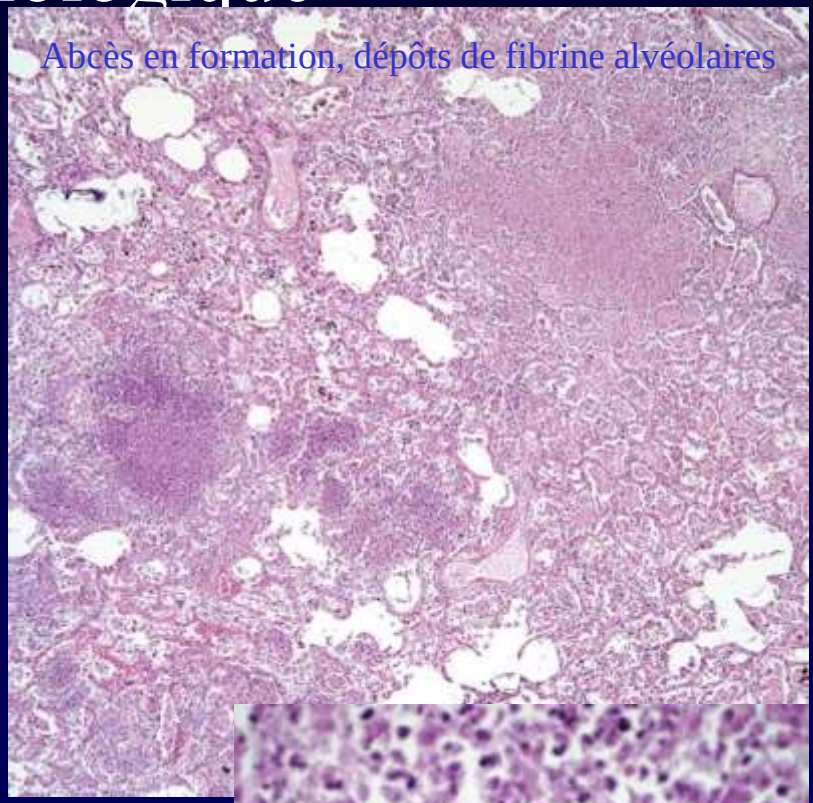


SPECTRO IRM:

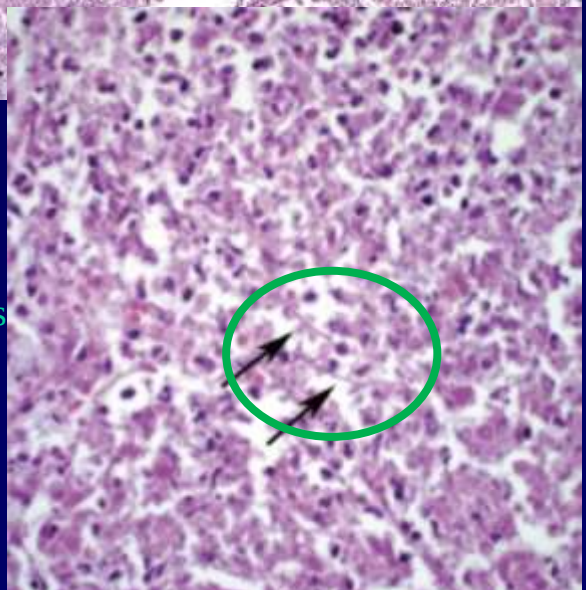
Pics Lactates & Créatine, NAA. bas

Diagnostic bactériologique

- Examen direct et mise en culture
- Différencier filaments Nocardia de Actinomycose (séquençage ARN)
- Prélèvements
  - Crachats
  - LBA
  - Liquide pleural
- Biopsie (percutanée du sternum)



Abcès en formation, dépôts de fibrine alvéolaires



Filaments de Nocardia
nécrose , débris cellulaires

Weissferdt A. Infectious Lung Disease. Diagnostic Thoracic Pathology. 2019;3-71.

Notre patient : Evolution rapidement défavorable par poussées

Pneumopathie hypoxémiante

Choc septique (REA SAMU)

Hyperleucocytose + PN

CRP 359., PCT 2.88.

I. Rénale aigüe, Acidoe métabolique.

Patient sous Isuppresseurs.

- Evolution favorable sous C3G –TIENAM / 6semaines
- Relais Bactrim per os, drainage abcès sternal

- Nouveau choc léthal avec défaillance polyviscérale à J21.

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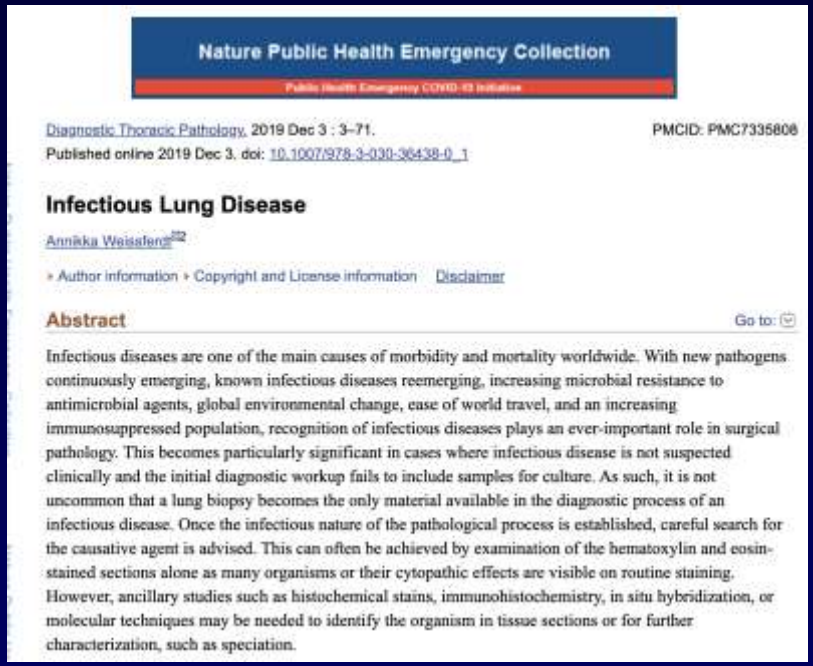
- Zhu JW, Zhou H, Jia WQ, You J, Xu RX. A clinical case report of brain abscess caused by Nocardia brasiliensis in a non-immunocompromised patient and a relevant literature review. *BMC Infect Dis*. 2020;20(1):328.



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Diagnostic Thoracic Pathology. 2019 Dec 3 : 3–71. PMCID: PMC7335808
Published online 2019 Dec 3. doi: 10.1007/978-3-030-36438-0_1

Infectious Lung Disease

Annikka Weissferdt

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Abstract Go to:

Infectious diseases are one of the main causes of morbidity and mortality worldwide. With new pathogens continuously emerging, known infectious diseases reemerging, increasing microbial resistance to antimicrobial agents, global environmental change, ease of world travel, and an increasing immunosuppressed population, recognition of infectious diseases plays an ever-important role in surgical pathology. This becomes particularly significant in cases where infectious disease is not suspected clinically and the initial diagnostic workup fails to include samples for culture. As such, it is not uncommon that a lung biopsy becomes the only material available in the diagnostic process of an infectious disease. Once the infectious nature of the pathological process is established, careful search for the causative agent is advised. This can often be achieved by examination of the hematoxylin and eosin-stained sections alone as many organisms or their cytopathic effects are visible on routine staining. However, ancillary studies such as histochemical stains, immunohistochemistry, in situ hybridization, or molecular techniques may be needed to identify the organism in tissue sections or for further characterization, such as speciation.

take home points

- Tableau pseudo néoplasique mais avec CRP et PCT très élevées
- Cavitation + Invasion
- Biopsie + Examen direct (filaments (ARN) et Mise en culture.

QUIZ n° 6

PY Marcy
C Parsai
A Lacout
PolyCliniques ELSAN

Patiente 41 ans, sportive (confinée).

TV d'effort pré syncopale +++

ATCD Med & CHIR : néant

Examen clinique rigoureusement normal.

Pas de faiblesse musculaire.

ECHO CARDIO TRANS THORACIQUE : normale.

Epreuve d'effort : reproduit les Tachycardies d'effort pré syncopales.

COROSCANNER: normal, Péricarde sec, pas de signe d'invasion.

IRM CARDIO:

Pas de Cardiomyopathie droite ou gauche.

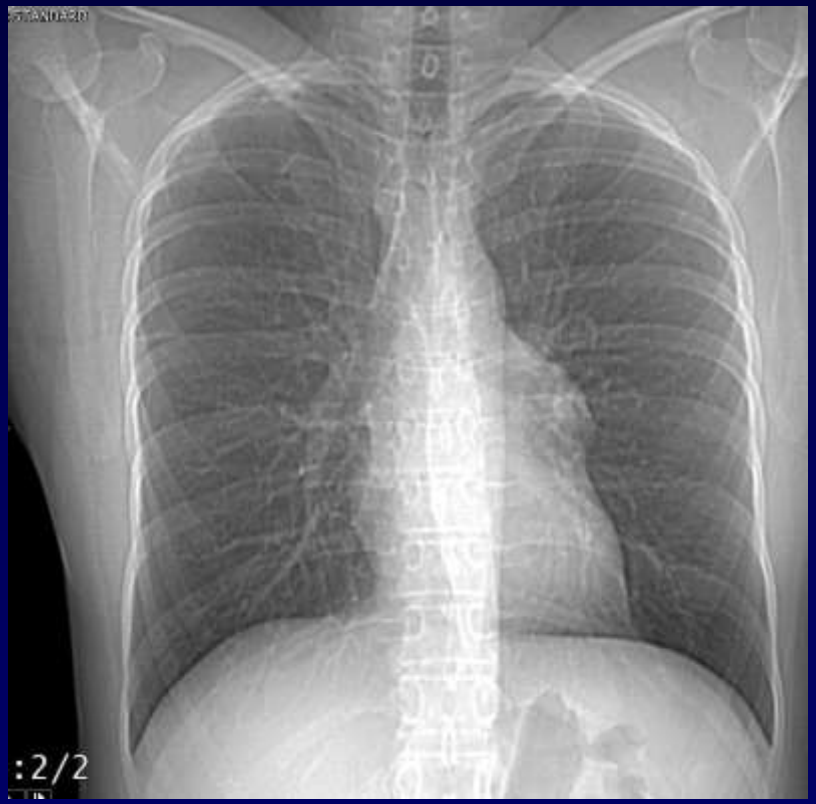
VG TD : 57ml/m2, VGTS 15ml/m2 (s2 corporelle 1.7m2).

VD TD: 46ml/m2, VDTS : 20ml/m2. FEVD 56%.

Cinétique normale du VD. Minime lame péricardique.

Pas de rehaussement tardif.


TUB THORAX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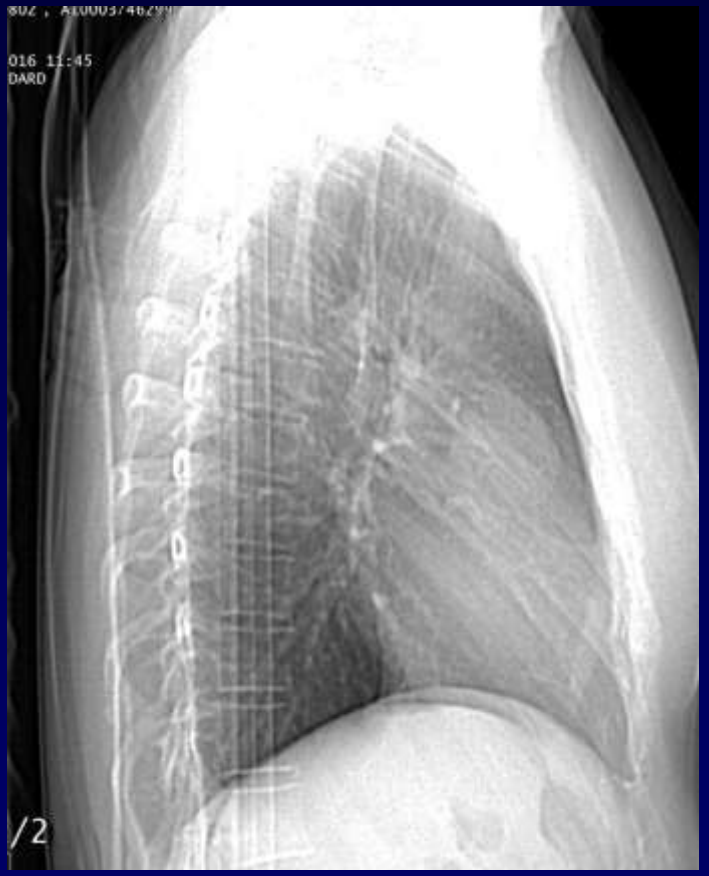
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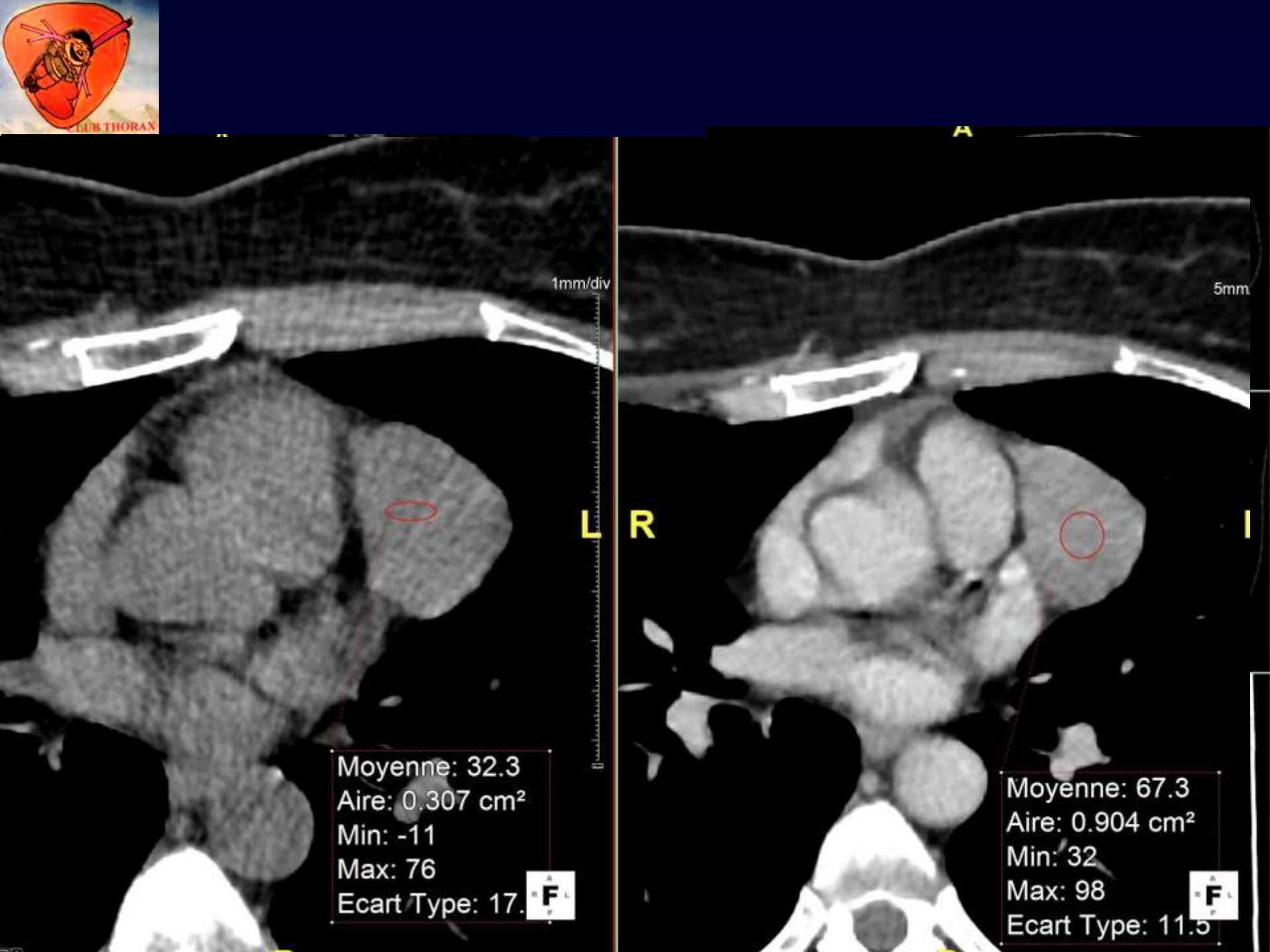
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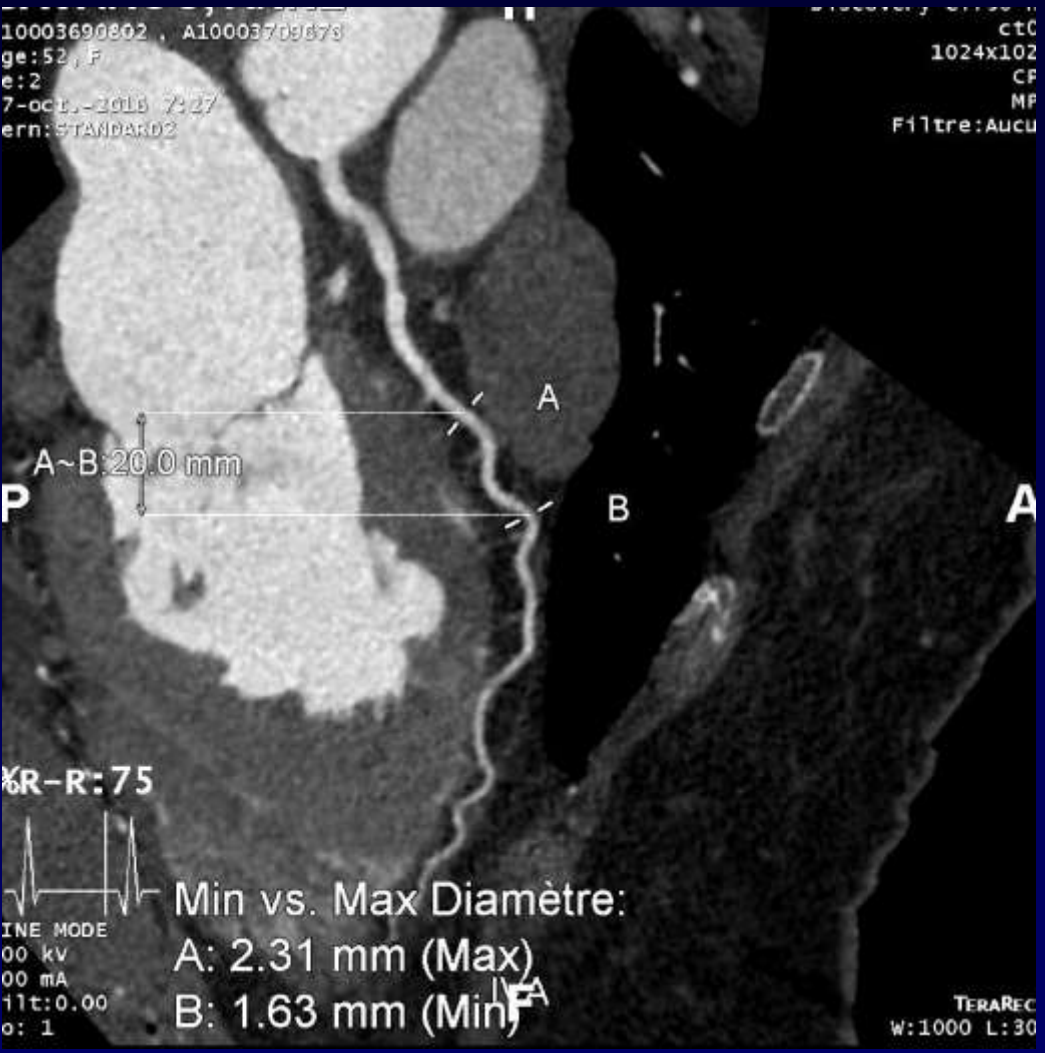
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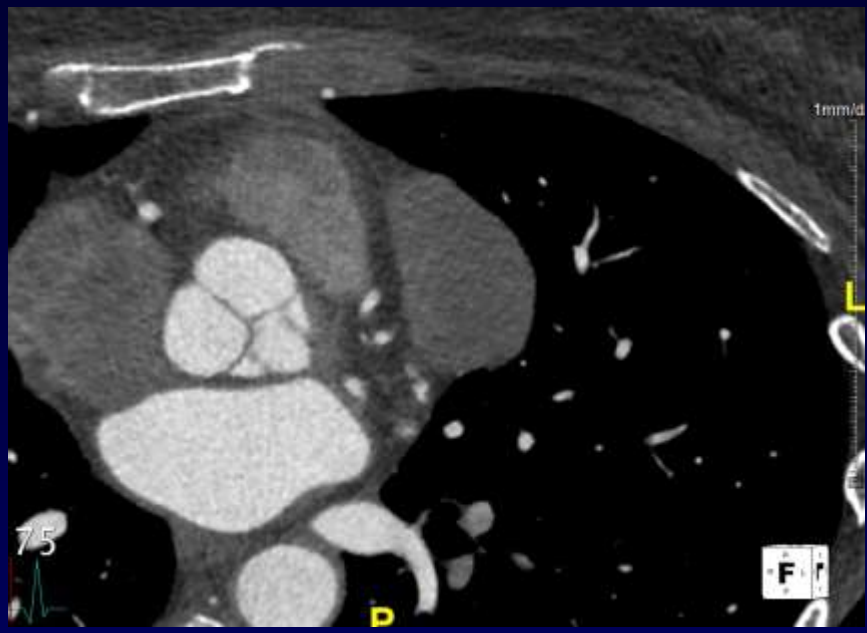
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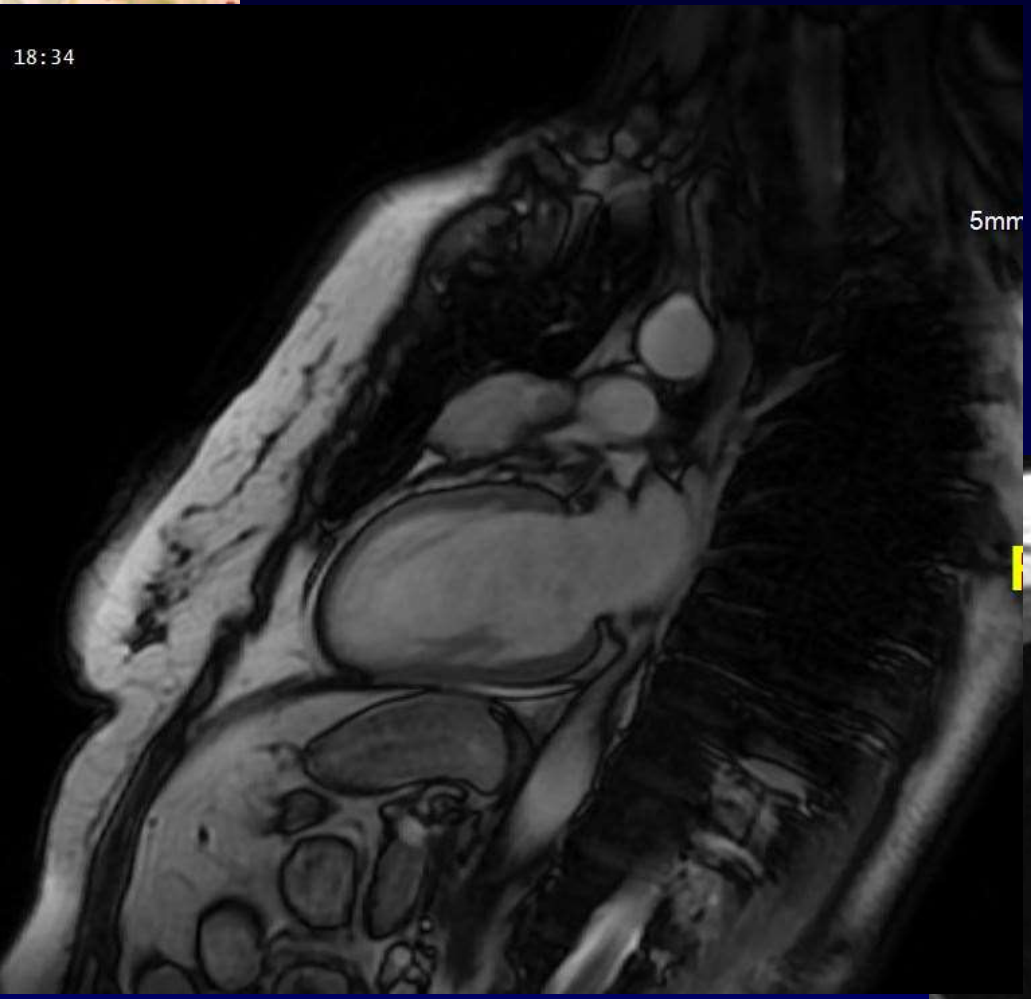
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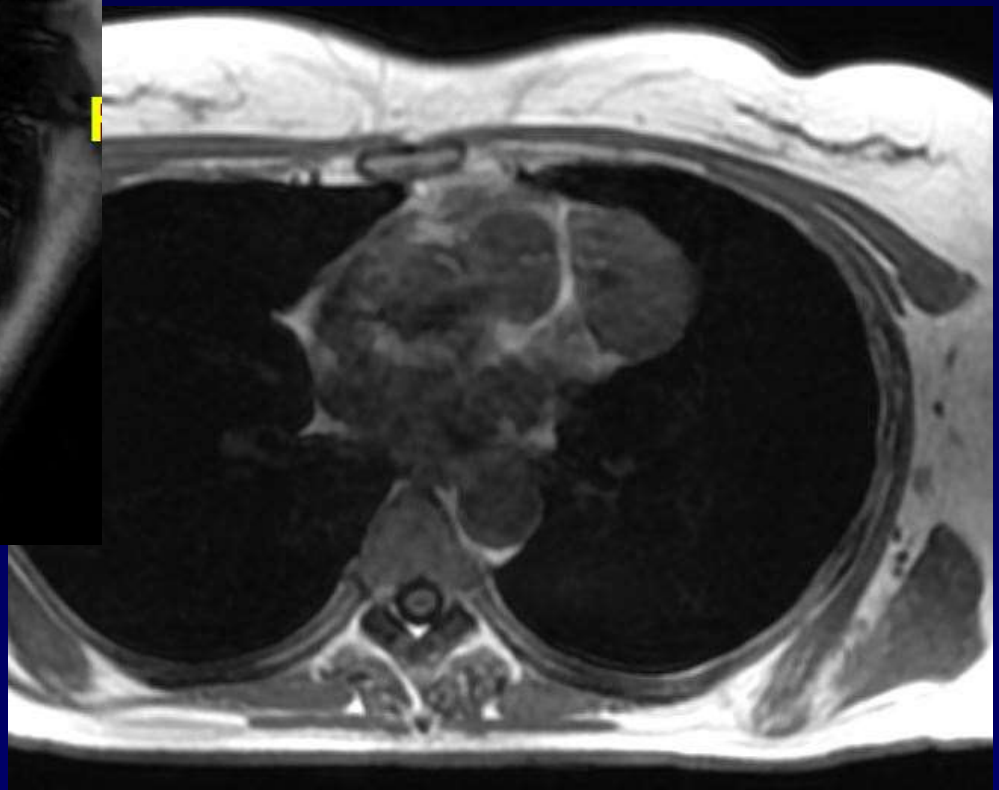

Diagnostic ?

A. Fibrome pleural avec hypoglycémie

B. Myocardite et thymome médiastinal

C. Thymome médiastinal

D. Schwannome du N Phrénique

E. Anévrysme artériel pulmonaire

Diagnostic ?

Thymome médiastinal Stade I,

contact avec infundibulum artériel pulmonaire.

- CHIRURGIE en deux temps
- RECUL : trois ans sans épisode de TV à l'effort.
- Contrôles CT normaux.
- ECG et contrôles CARDIO NORMAUX

SUIVI CT à trois ans

THYMOME

1/3 : Nécrose kystique

1/3 sont R+

4P: Péricarde, Phrénique, Plèvre, Poumon

VCS, ADP.

Croissance LENTE

Métas rares.

Pronostic = Qualité de l'acte CHIR & Staging

WHO Classification Schemes for Thymoma

Description	1999 WHO Classification	2004 WHO Classification
Spindle cells	A	A
Mixed spindle cells and lymphocytes	AB	AB
Lymphocytes > epithelial cells	B1	B1
Mixed lymphocytes and epithelial cells	B2	B2
Predominance of epithelial cells	B3	B3
Thymic carcinoma	C	Thymic carcinoma

WHO Variable au sein même du thymome !

Many different staging systems for thymoma have been proposed (12–15). The Masaoka-Koga staging system (13) is the most commonly used and is the staging system recommended by the ITMIG (16), since it has been shown to correlate with survival in multiple series (17). Masaoka-Koga staging is based on the gross and microscopic properties of the tumor. Stage I tumors are characterized by complete encapsulation; stage II, by microscopic invasion through the capsule (IIa) or macroscopic invasion into surrounding fat (IIb); stage III, by invasion into a neighboring organ such as the pericardium, great vessels, or lung; and stage IV, by pleural or pericardial dissemination (IVa) or lymphatic-hematogenous metastasis (IVb). The focus of staging has been

THYMOME

-1.Signes COMPRESSIFS

(VCS, Œsophage), Paralysie Phrénique.

Dyspnée, Toux, Douleur.

-2.Syndrome SYSTEMIQUE PARANEOPLASIQUE Sécrétion d' Hormones, de Cytokines, AntiCorps

Terrain auto immun

- MYASTHENIE (50%) +++ indépendamment de malignité et TNM
- 10 à 15% des Myasthénies ont un Thymome.
- LUPUS LEAD; HASHIMOTO; COLITE ULCEREUSE; POLYMYOSITE, ANEMIE HEMOLYTIQUE; ADDISON.

- 50% des syndromes médiastinaux antérieurs, 20% des synd médiastinaux

- EVOQUER Thymome MALIN si :
  - 1. Symptomatologie clinique ++
  - 2.TDM:
    - Signes d'Invasion 4P (VCS, CD etc…)
    - Tumeur peu elliptique et peu sphérique en 3D

Yamazaki M, et al. Quantitative 3D Shape Analysis of CT Images of Thymoma: A Comparison With Histological Types. AJR Am J Roentgenol. 2020 Feb;214(2):341-347

take home points

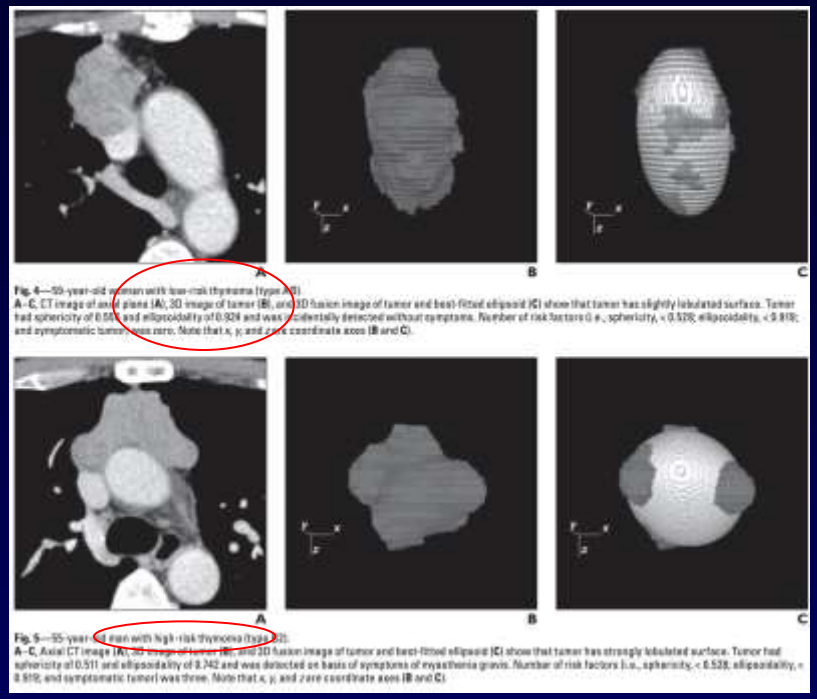

TABLE 1: Clinical Characteristics and Conventional Imaging Findings of Low- and High-Risk Thymomas

Characteristic or Finding	Low-Risk Thymomas ($n = 23$)	High-Risk Thymomas ($n = 21$)	p
Age > 60 y	9 (39.1)	7 (33.3)	0.761
Sex ratio (no. of men:no. of women)	11:12	10:11	1.000
Mode of detection of tumor			< 0.001
Incidental	17 (73.9)	4 (19.0)	
Presence of symptoms	6 (26.1)[a]	17 (81.0)[b]	
Longest diameter > 5 cm	10 (43.5)	11 (52.4)	0.763
Visual shape classification			0.149
Round-oval	11 (47.8)	5 (23.8)	
Lobulated	10 (43.5)	10 (47.6)	
Irregular	2 (8.7)	6 (28.6)	
Calcification	5 (21.7)	9 (42.9)	0.197
Cystic or necrotic change	4 (17.4)	6 (28.6)	0.481
Heterogeneous enhancement	10 (43.5)	15 (71.4)	0.076

Note—Except where indicated, data are number (percentage) of thymomas.
[a]Five cases of myasthenia gravis and one case of body weight loss.
[b]Eleven cases of myasthenia gravis and six cases of other symptoms.

TDM:

Localisation, Densité ?, Invasion ?,

VRD : Ovale / Ellipse = bénignité

Yamazaki M, et al. Quantitative 3D Shape Analysis of CT Images of Thymoma: A Comparison With Histological Types. AJR Am J Roentgenol. 2020 Feb;214(2):341-347

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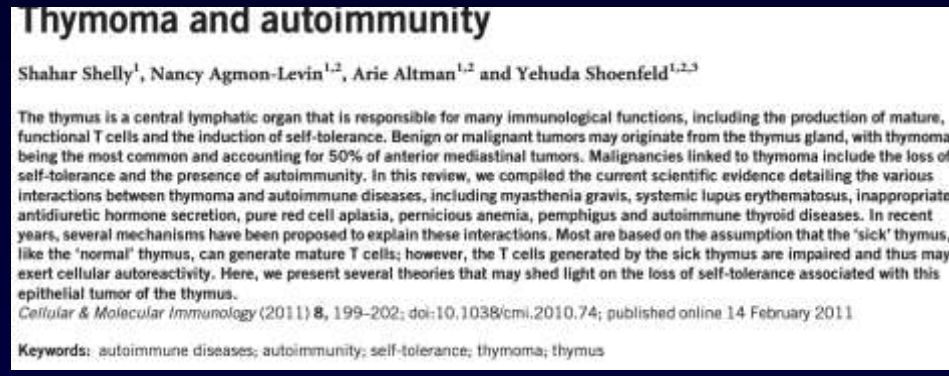


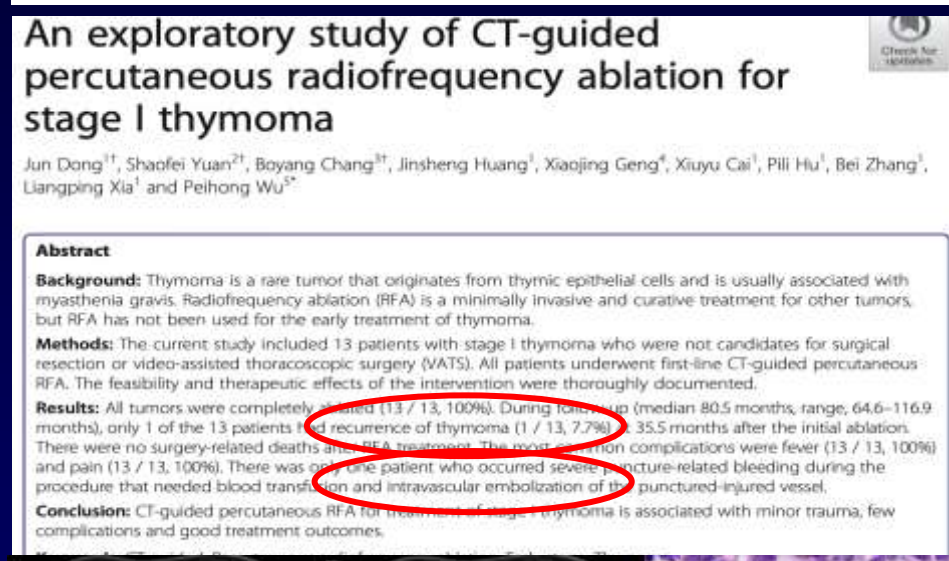
Thymoma and autoimmunity

Shahar Shelly[1], Nancy Agmon-Levin[1,2], Arie Altman[1,2] and Yehuda Shoenfeld[1,2,3]

The thymus is a central lymphatic organ that is responsible for many immunological functions, including the production of mature, functional T cells and the induction of self-tolerance. Benign or malignant tumors may originate from the thymus gland, with thymoma being the most common and accounting for 50% of anterior mediastinal tumors. Malignancies linked to thymoma include the loss of self-tolerance and the presence of autoimmunity. In this review, we compiled the current scientific evidence detailing the various interactions between thymoma and autoimmune diseases, including myasthenia gravis, systemic lupus erythematosus, inappropriate antidiuretic hormone secretion, pure red cell aplasia, pernicious anemia, pemphigus and autoimmune thyroid diseases. In recent years, several mechanisms have been proposed to explain these interactions. Most are based on the assumption that the 'sick' thymus, like the 'normal' thymus, can generate mature T cells; however, the T cells generated by the sick thymus are impaired and thus may exert cellular autoreactivity. Here, we present several theories that may shed light on the loss of self-tolerance associated with this epithelial tumor of the thymus.

Cellular & Molecular Immunology (2011) **8**, 199–202; doi:10.1038/cmi.2010.74; published online 14 February 2011

Keywords: autoimmune diseases; autoimmunity; self-tolerance; thymoma; thymus



An exploratory study of CT-guided percutaneous radiofrequency ablation for stage I thymoma

Jun Dong[1†], Shaofei Yuan[2†], Boyang Chang[3†], Jinsheng Huang[1], Xiaojing Geng[4], Xiuyu Cai[1], Pili Hu[1], Bei Zhang[1], Liangping Xia[1] and Peihong Wu[5*]

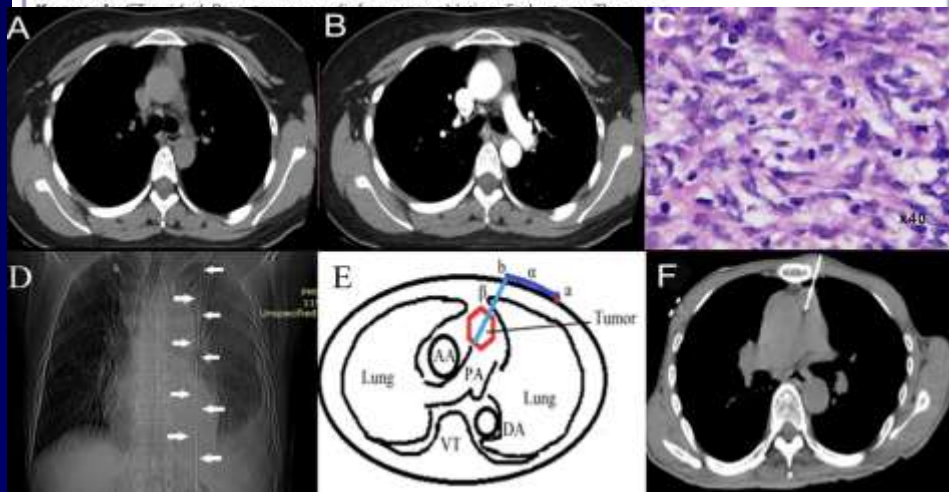
Abstract

Background: Thymoma is a rare tumor that originates from thymic epithelial cells and is usually associated with myasthenia gravis. Radiofrequency ablation (RFA) is a minimally invasive and curative treatment for other tumors, but RFA has not been used for the early treatment of thymoma.

Methods: The current study included 13 patients with stage I thymoma who were not candidates for surgical resection or video-assisted thoracoscopic surgery (VATS). All patients underwent first-line CT-guided percutaneous RFA. The feasibility and therapeutic effects of the intervention were thoroughly documented.

Results: All tumors were completely ablated (13 / 13, 100%). During follow-up (median 80.5 months, range, 64.6–116.9 months), only 1 of the 13 patients had recurrence of thymoma (1 / 13, 7.7%) at 35.5 months after the initial ablation. There were no surgery-related deaths after RFA treatment. The most common complications were fever (13 / 13, 100%) and pain (13 / 13, 100%). There was only one patient who occurred severe puncture-related bleeding during the procedure that needed blood transfusion and intravascular embolization of the punctured-injured vessel.

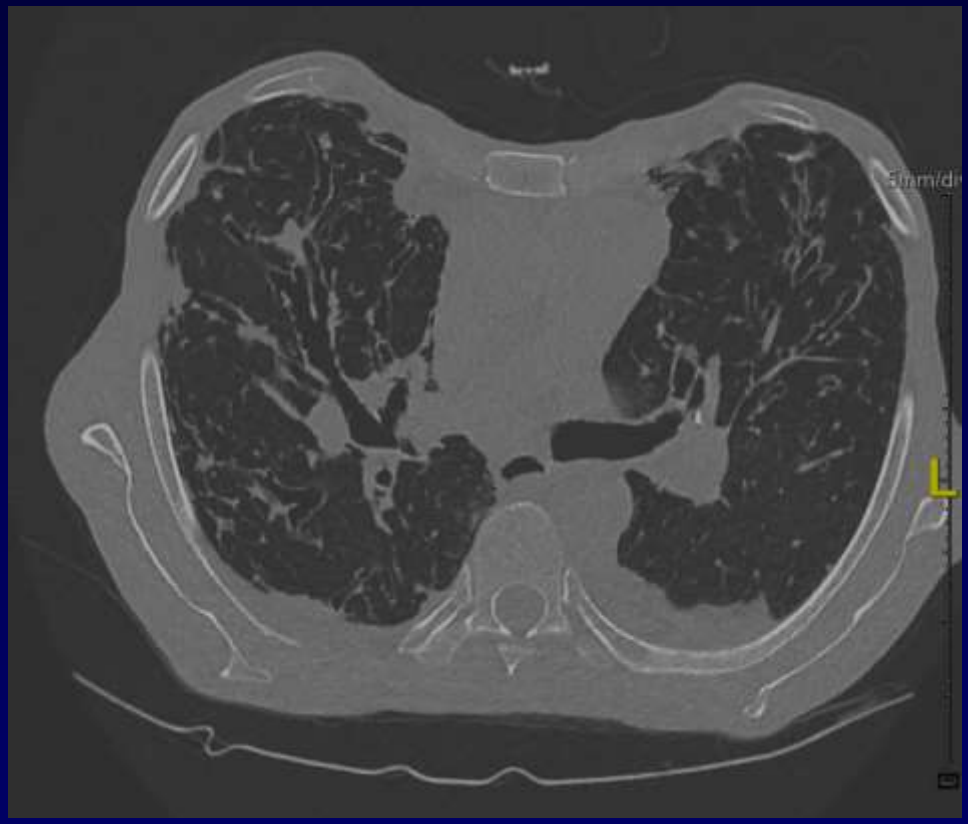
Conclusion: CT-guided percutaneous RFA for treatment of stage I thymoma is associated with minor trauma, few complications and good treatment outcomes.



QUIZ n° 7

PY Marcy
S Agostini
A Lacout
G Botto
PolyCliniques ELSAN

- Patient 81 ans, apyrétique, Emphysème & DDB non colonisée
- SaO2 91% sous O2 -3l
- Polypnée de repos
- VEMS < 1
- Hospitalisé pour « aggravation respiratoire »
- Amélioration sous diurétiques

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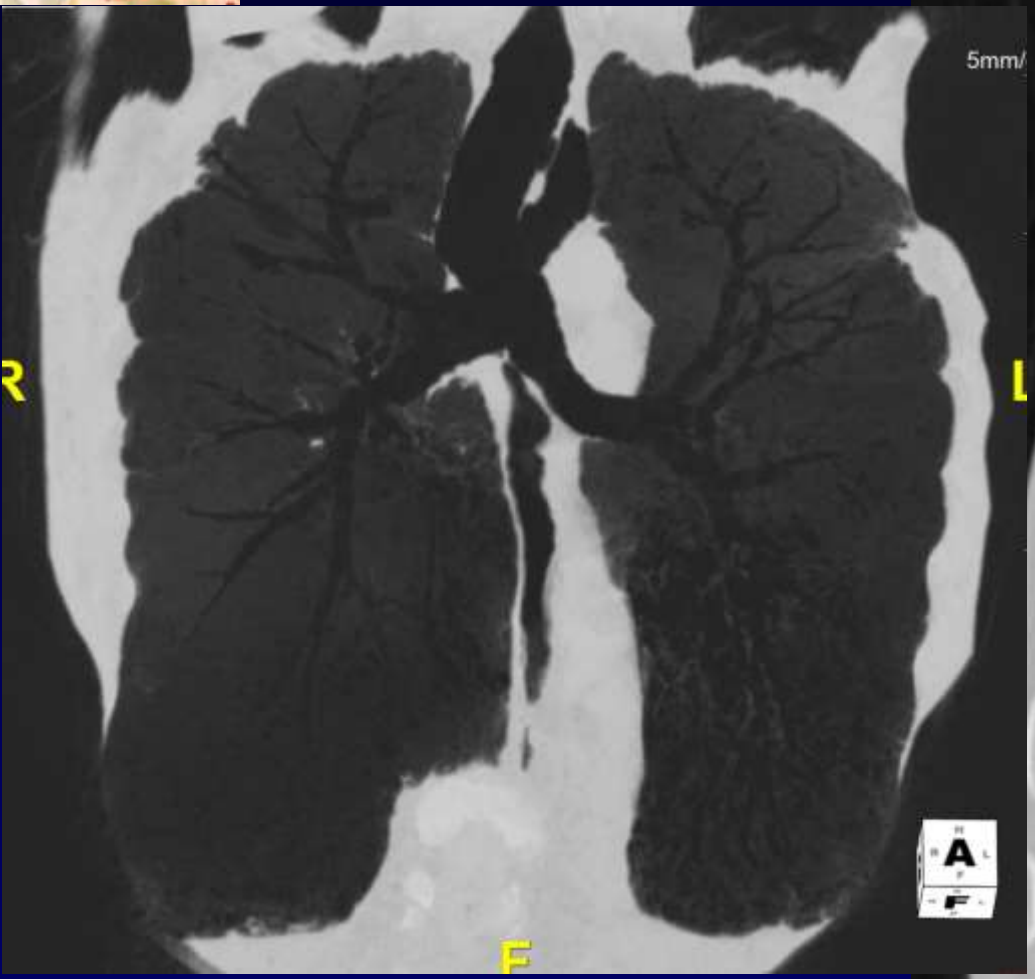
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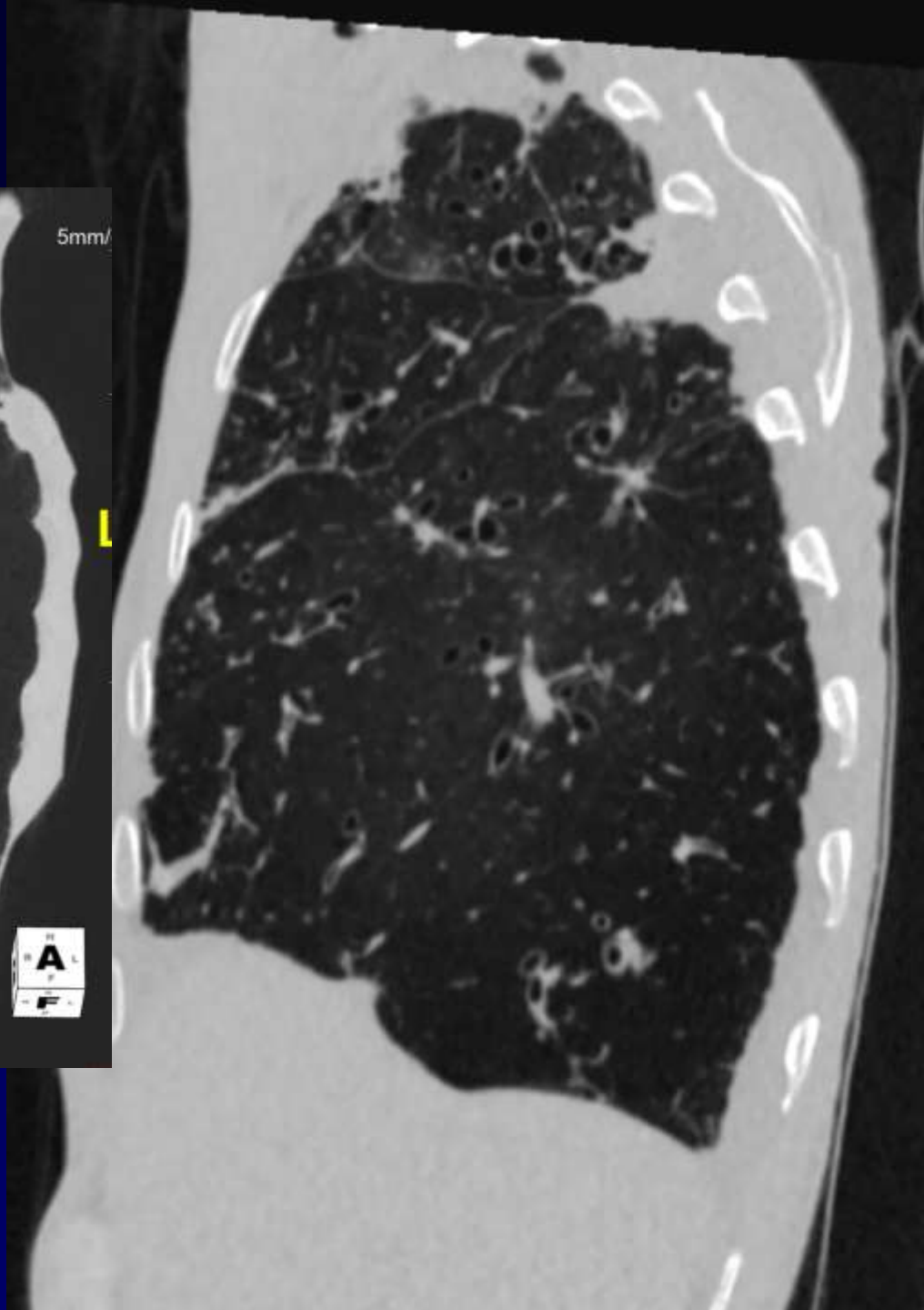

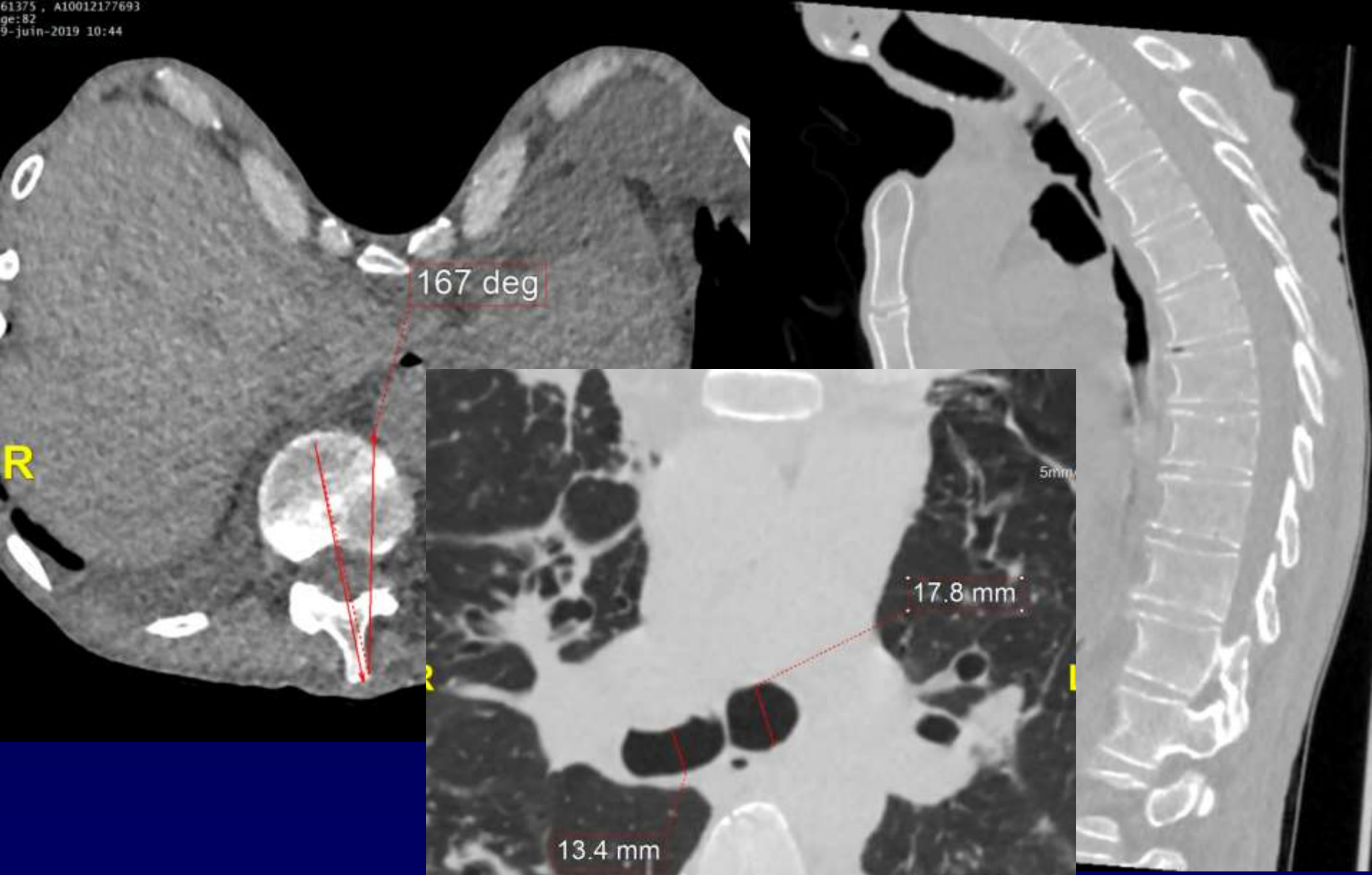
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5mm
F
d

Diagnostic ?

A. Pectus Excavatum (PE)

B. Trachéobronchomalacie (TBM)

C. Syndrome de Mounier Kuhn

D. TBM & PE & pleurésie bilatérale

E. Asthme & TBM

A. Pectus Excavatum (PE)

B. Trachéobronchomalacie (TBM)

C. Syndrome de Mounier Kuhn

D. TBM & PE & pleurésie bilatérale

E. Asthme & TBM

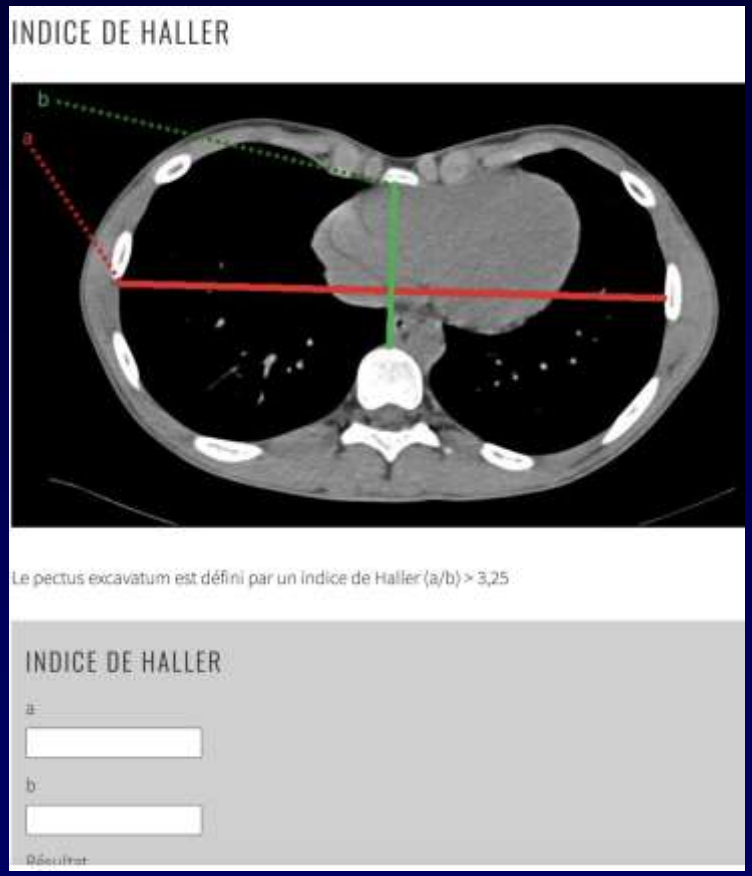
Diagnostic ?

Pectus Excavatum & Trachéobronchomalacie & Pleurésie bilatérale

Indice de HALLER

Le pectus excavatum est défini par un indice de Haller (a/b) > 3,25

Valeur de l'IH est corrélée à sévérité de la maladie



Pinky bone

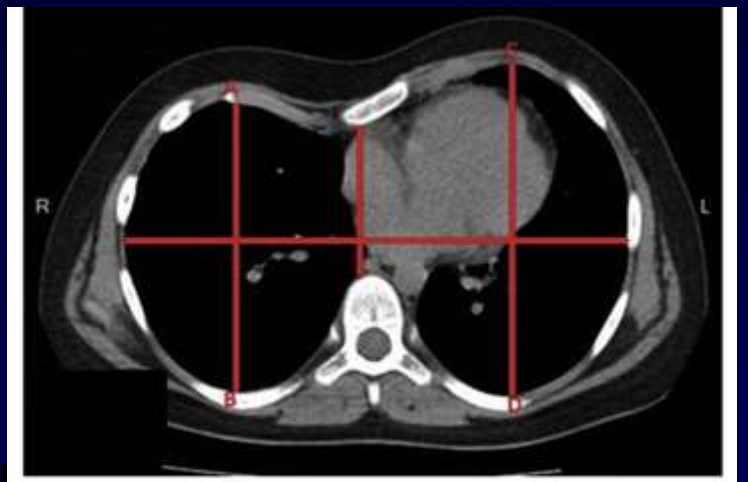


Fig. 2. Asymmetric pectus excavatum. Difference between AB and CD is more than 10 mm.

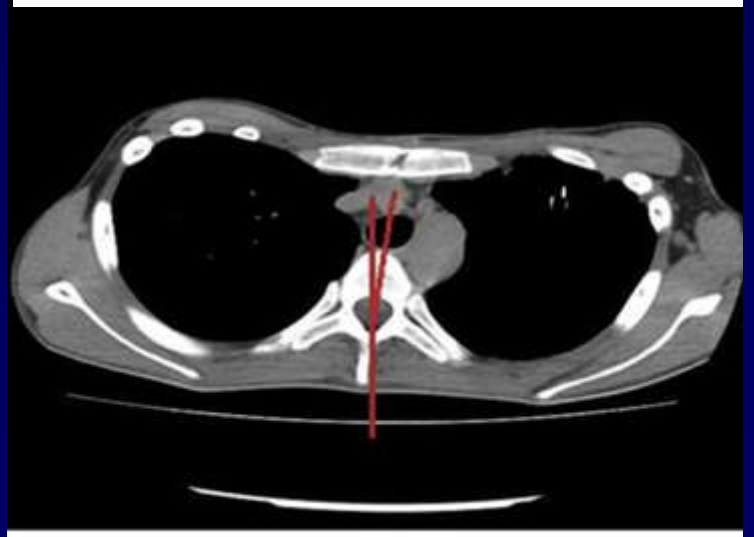
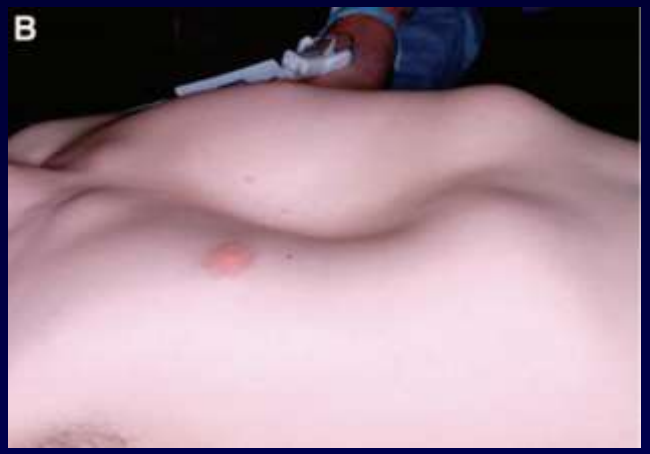


Fig. 5. Vertebral rotation angle according to Aaro-Dahlborn method.



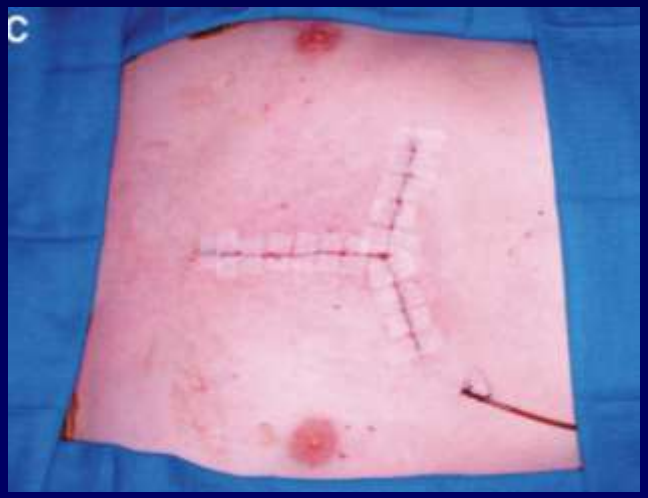


Table 2. Criteria for Surgical Referral

1. Symptomatic
2. Progression of the deformity
3. Paradoxical movement of the chest wall with deep inspiration
4. Computed tomograph with severity index >3.0
5. Cardiac compression or displacement
6. Pulmonary compression
7. Abnormal pulmonary function studies showing significant restrictive disease
8. Mitral valve prolapse
9. Any cardiac pathology secondary to compression of the heart
10. Significant body image disturbance

History of failed previous repair

Abnormal cardiopulmonary testing

Sévérité :

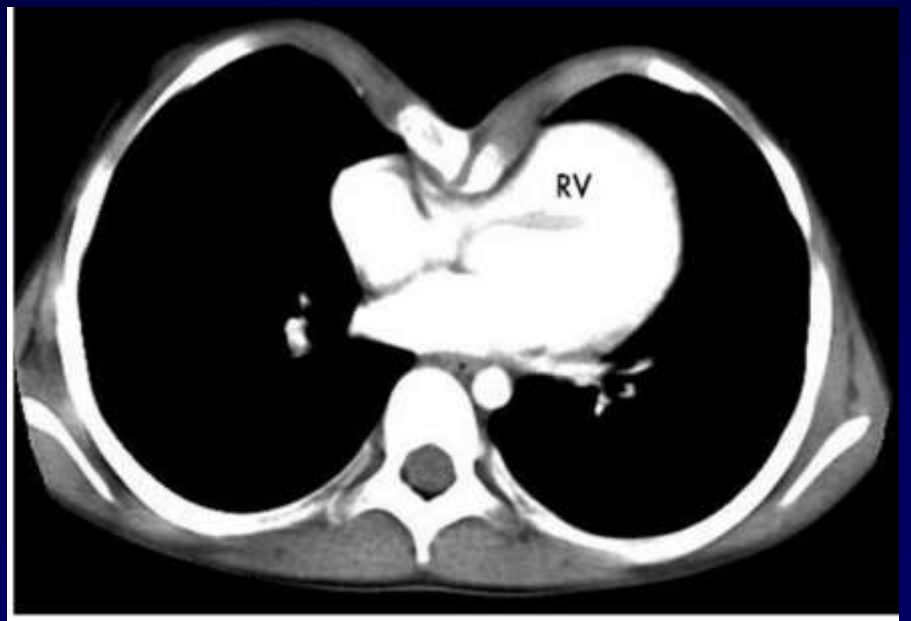
-IH, LDH élevées: Compression viscérale ?

-Cx cardio respiratoires

Berthier S, et al: Elevation of serum lactate dehydrogenase. Diagnostic, prognostic and evolutive values. Presse Med 2002, 31:107–112.

Malignant PE

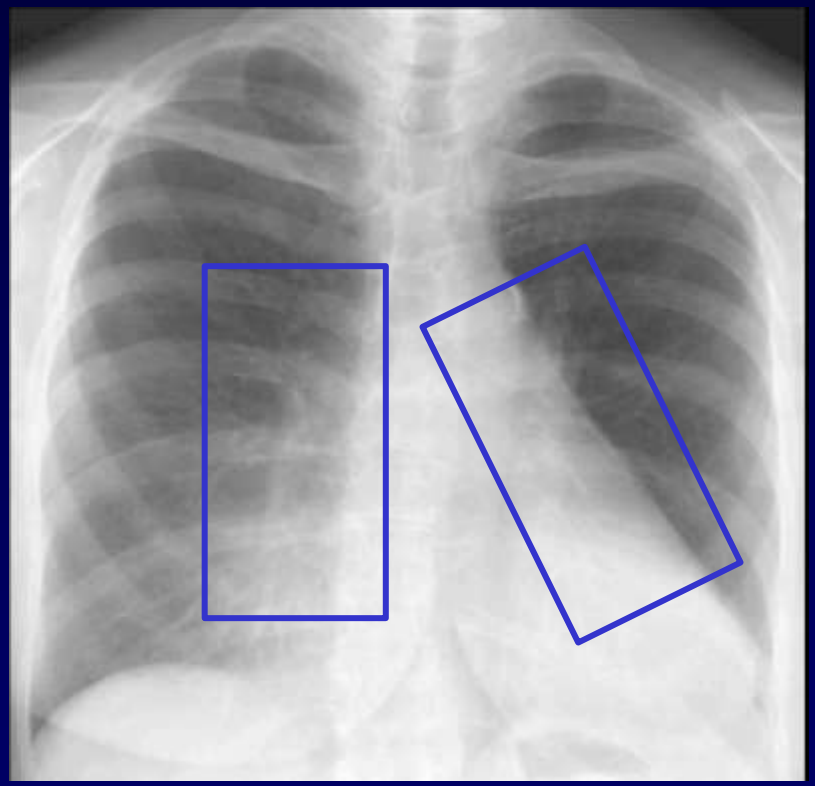
- Kamata S, et al. Pectus excavatum repair using a costal cartilage graft for patients with tracheobronchomalacia. J Pediatr Surg. 2001;36(11):1650-2.
- Abdullah F, Harris J. Pectus Excavatum: More Than a Matter of Aesthetics. Pediatr Ann. 2016; 45(11):e403-e406.
- Jayaramakrishnan K, et al. Does repair of pectus excavatum improve cardiopulmonary function? Interact Cardiovasc Thorac Surg. 2013;16(6):865-70.
- Crossland DS, Auldist AW, Davis AM. Malignant pectus excavatum. Heart. 2006;92(10):1511.
- Jaroszewski D, et al. Current management of pectus excavatum: a review and update of therapy and treatment recommendations. J Am Board Fam Med. 2010;23(2):230-9.
- Tomaszewski R, Wiktor Ł, Machała L. Evaluation of thoracic vertebrae rotation in patients with pectus excavatum. Acta Orthop Traumatol Turc. 2017;51(4):284-289.
- Berthier S, et al: Elevation of serum lactate dehydrogenase. Diagnostic, prognostic and evolutive values. Presse Med 2002, 31:107–112.



Chest computed tomographic scan with contrast showing right ventricular (RV) compression by the pectus excavatum.

take home points

- RT: luxation gauche du médiastin
  - Non visualisation du bord DROIT du médiastin
  - Rectitude du bord gauche
- Indice de HALLER

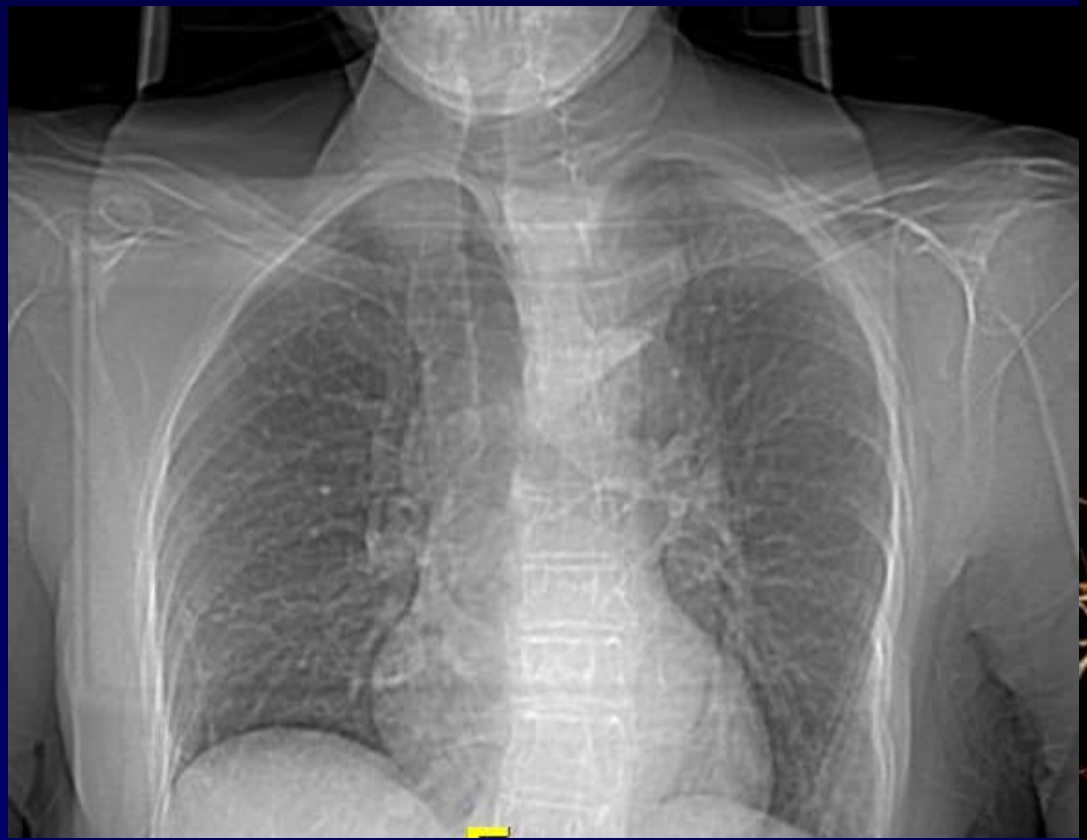


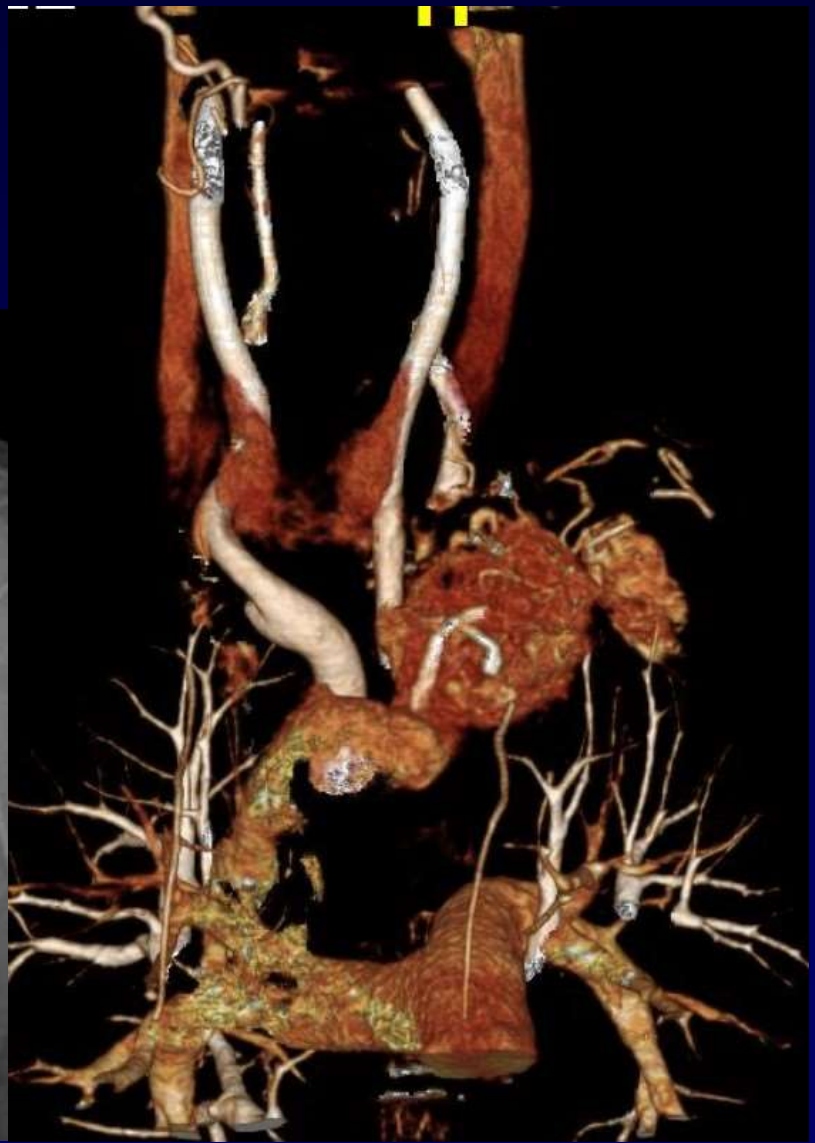
Oncle Paul

QUIZ n° 8

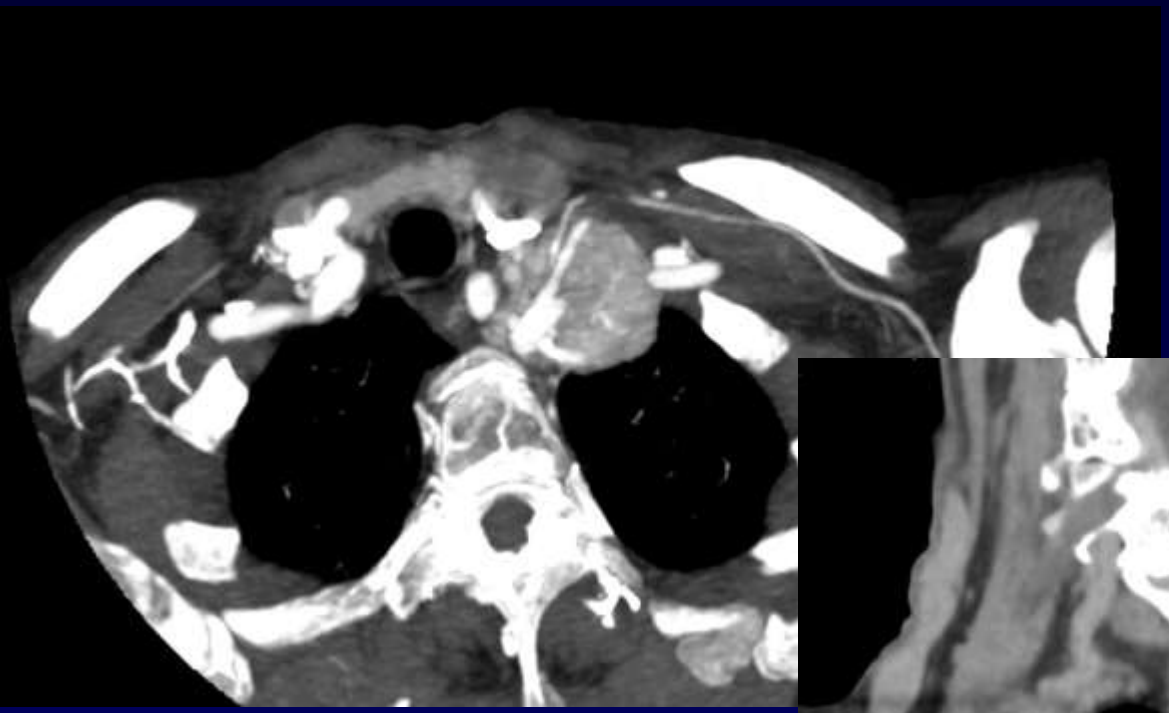
PY Marcy
R Dagan
G Botto
PolyCliniques ELSAN

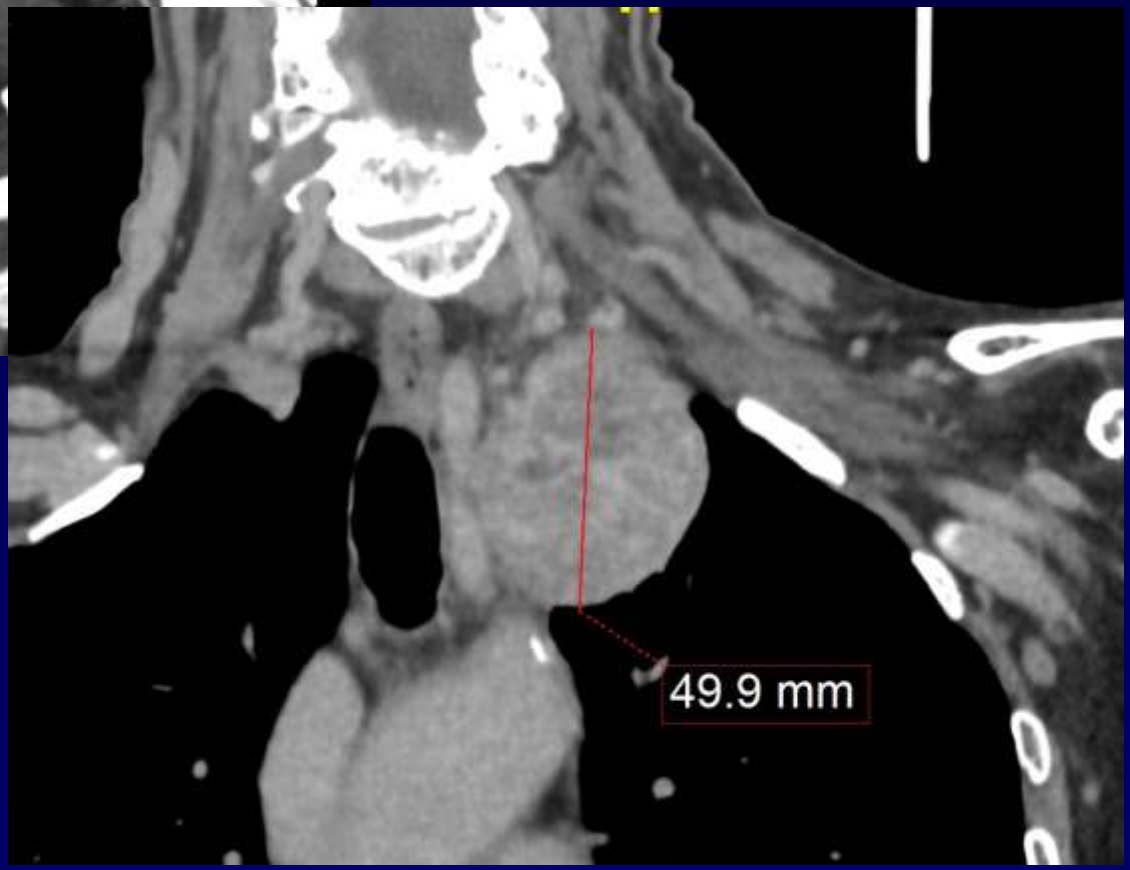
- PATIENTE 77ans, ATCD K REIN 2008.
- Douleur thoracique aigüe
- Clinique normale

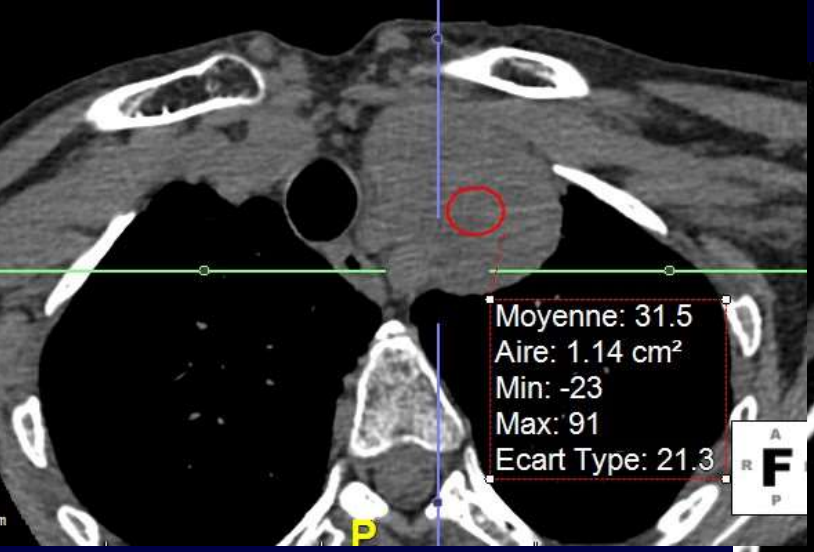


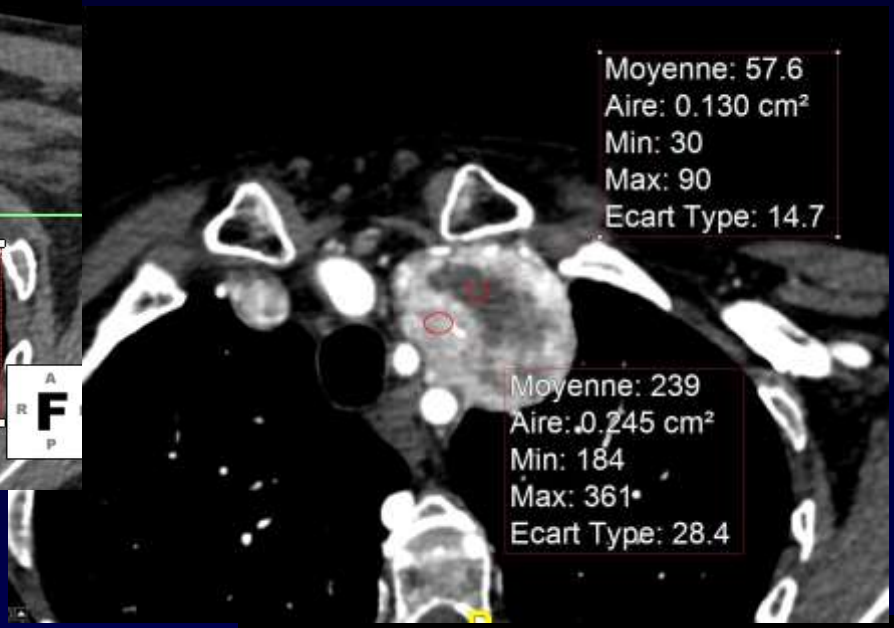


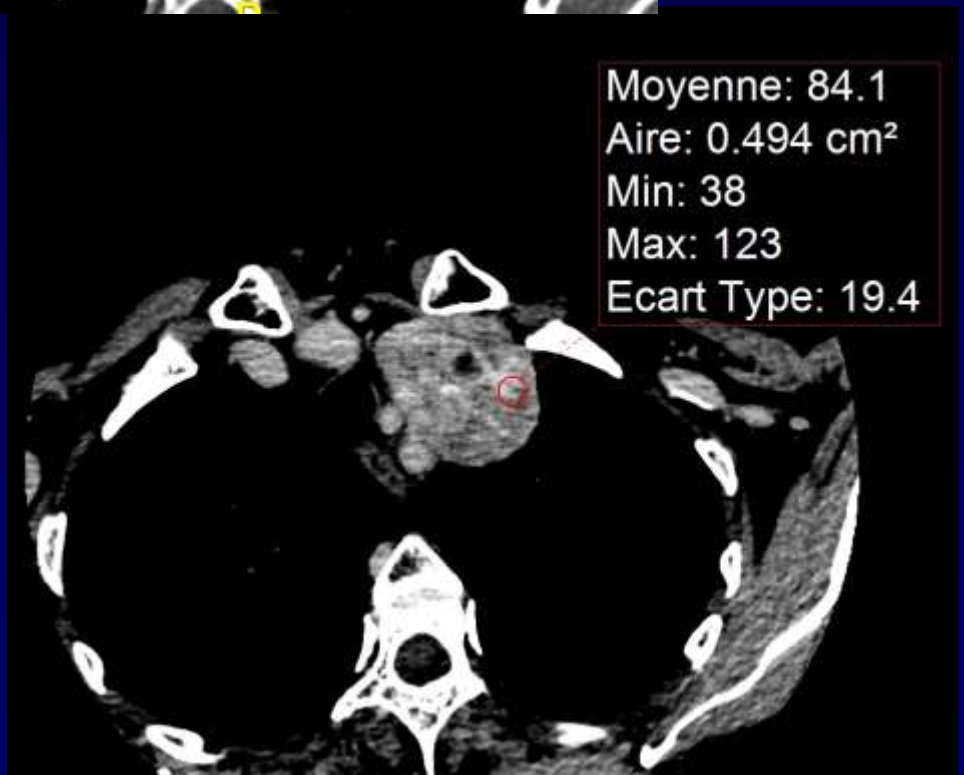

LUB THORAX




49.9 mm


Moyenne: 31.5
Aire: 1.14 cm²
Min: -23
Max: 91
Ecart Type: 21.3
A
R
F
P
P


Moyenne: 57.6
Aire: 0.130 cm²
Min: 30
Max: 90
Ecart Type: 14.7
Moyenne: 239
Aire: 0.245 cm²
Min: 184
Max: 361
Ecart Type: 28.4


Moyenne: 84.1
Aire: 0.494 cm²
Min: 38
Max: 123
Ecart Type: 19.4

Diagnostic ?

A.Thymome médiastinal

B. Goitre médiastinal

C. Adénomégalie du secteur VI gauche de Robbins

D. Tératome médiastinal

E. Adénome parathyroïdien de la PTIII gauche

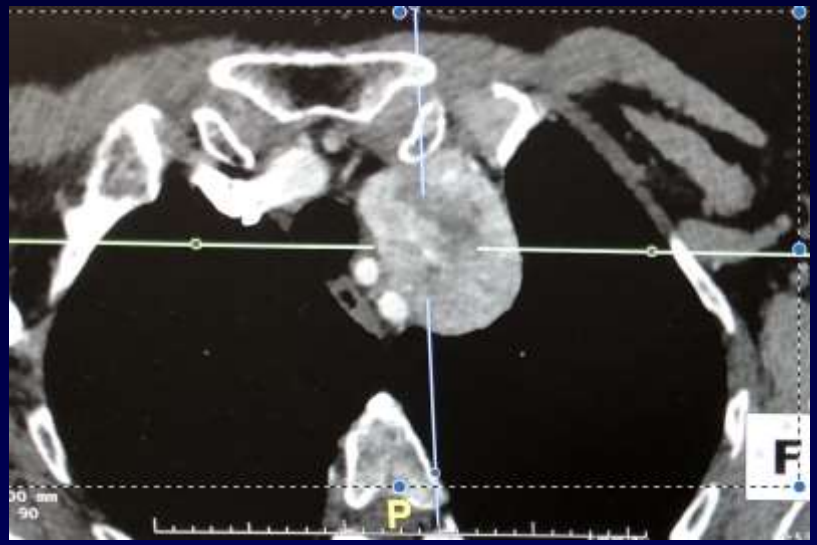
Diagnostic ?

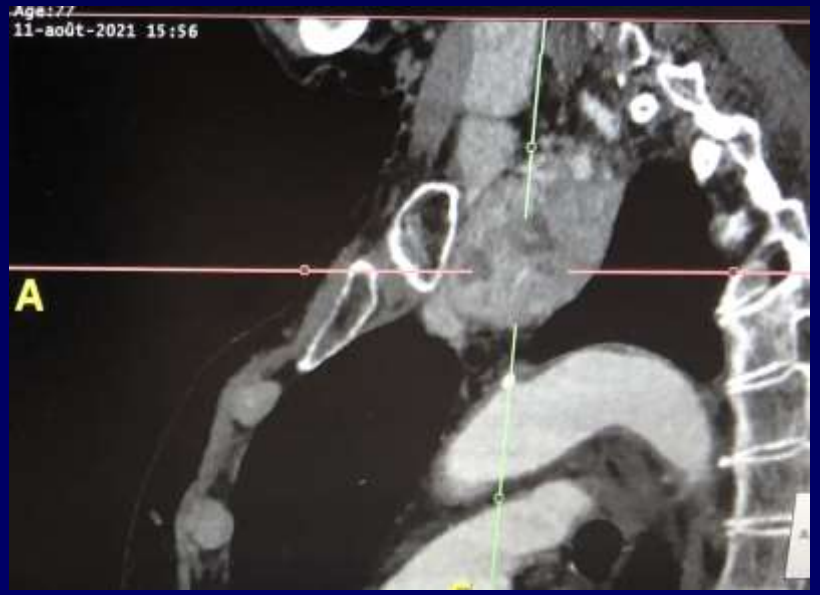
B. Goitre médiastinal

- Siège du compartiment

Ant, Moy, Post, Sup

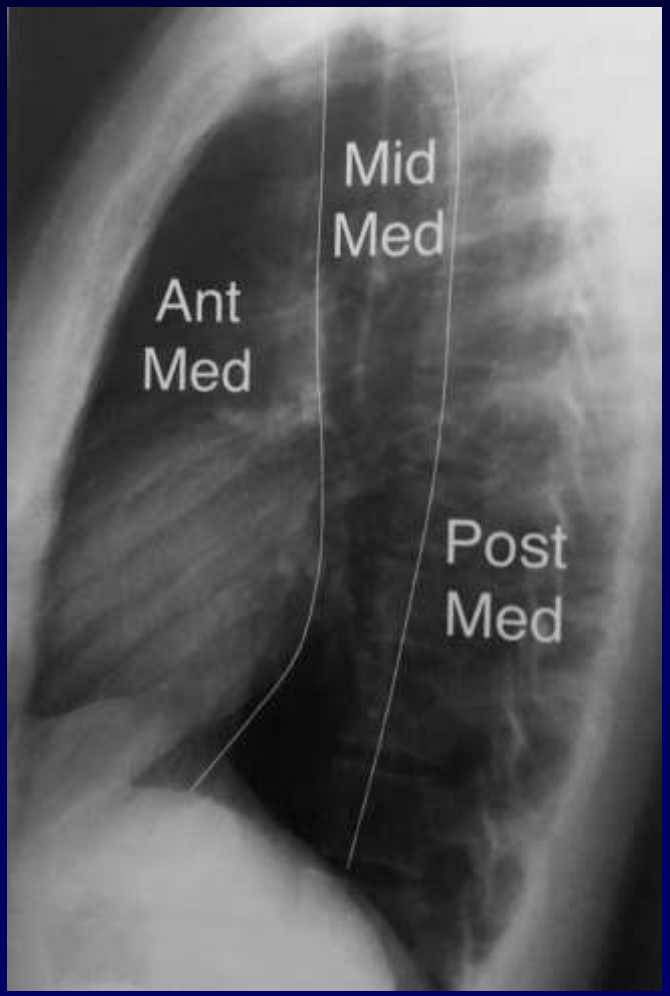
- Structure d'origine ?
- Nature
- Densité:
  - Graisse
  - Liquide
  - T mous
  - Ca++
  - Prise de contraste





TOPOGRAPHIE permet d'évoquer une gamme diagnostique

Classification de FELSON



TDM

Définit mieux la structure d'origine:

ADP, Veine, Artère, Thymus, Thyroide, Thymus, Trachée, Œsophage…

Régions spécifiques du médiastin:

Pré Vx, pré trachéal,

Sub carinaire, FAOP,

Angle cardiophrénique ant., Paravertébral

MEDIASTIN ANTERIEUR PRE VASCULAIRE
THYMUS THYROIDE PARATHYROIDE
T GERMINALE (tératome, séminome, non séminomateuse)
ADP (LMH),
KYSTE bronchogénique
VASCULAIRES (AO, gros vx)
MESENCHYME (lipomatose, lipome)
LYMPHANGIOME, HEMANGIOME

ANGLE CARDIO PHRENIQUE ANTERIEUR
ADP
KYSTE PLEURO PERICARDIQUE
HERNIE MORGANI LAREY
T GERMINALE
THYMOME

MEDIASTIN MOYEN
ADP, SARCOIDOSE, K BRONCHES, LMNH, LMH, CASTLEMAN
METAS, INFECTION (tuberculose), MEDIASTINITE FIBREUSE
KYSTE BRONCHOGENIQUE, T TRACHEE, MESENCHYME
T MYOFIBROBLASTIQUE, FIBROMATOSE MEDIASTINALE
FIBROME SOLITAIRE, THYROIDE, ANOMALIES VX (AO, gros VX)
LYMPHANGIOME, HEMANGIOME

ORIGINE THYROIDIENNE
10% des masses médiastinales

10% SYND MEDIASTINAL **TDM typique ++**
EPICENTRE ? CONNEXION AVEC THYROIDE CERVICALE ?
DENSITE 0s 30s 130s 100UH, >>> si IV, > 120sec INHOMOGENE: CA ++, KYSTIQUE
DIFFERENCIER K de GOITRE ? ADP, SCS
MED ANT: 75-90%, MED POST 10-25%

- -Scintigraphie I 123
- BIOLOGIE:
  - Thyroglobuline & TSH sériques

Corrélation grossière entre volume THYR et Tg (TSH normale)

- Tg in situ /wash out du produit de ponction + Cytologie (Score de Bethesda)

DIAGNOSTICS DIFFERENTIELS MASSES MEDIASTINALES HYPER VX

MASSE THYROIDIENNE
MASSE PARATHYROIDIENNE
TUMEUR CARCINOIDE
LYMPHANGIOME
HEMANGIOME
PARAGANGLIOME Métastase hypervasculaire
CASTLEMAN

Cytoponction écho guidée

- Notre patiente:

-ATCD de K rein 2008:
Méta rénale ?

-THYROIDE: Score Bethesda & Tg in situ

- .

MASSE THYROIDIENNE
MASSE PARATHYROIDIENNE
TUMEUR CARCINOIDE
LYMPHANGIOME
HEMANGIOME
PARAGANGLIOME Métastase hypervasculaire
CASTLEMAN

Ponction percutanée thyroïdienne et cervicale. pp301 – 321.
A Lacout, PY Marcy. In : Imagerie thyroïdienne et cervico-faciale; Sauramps Ed 2017.

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