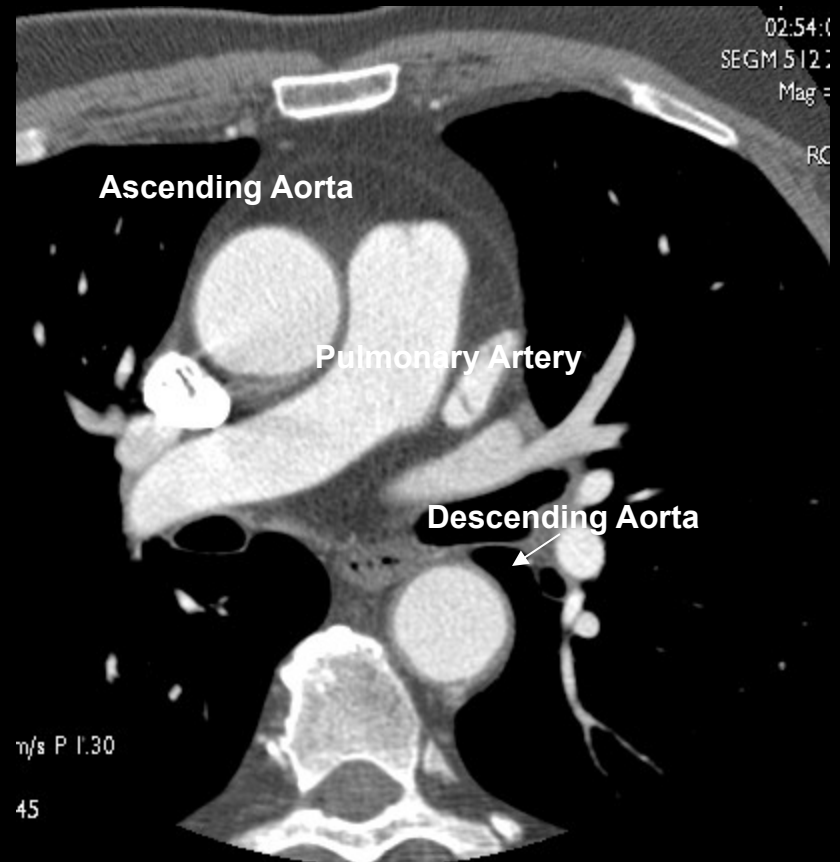
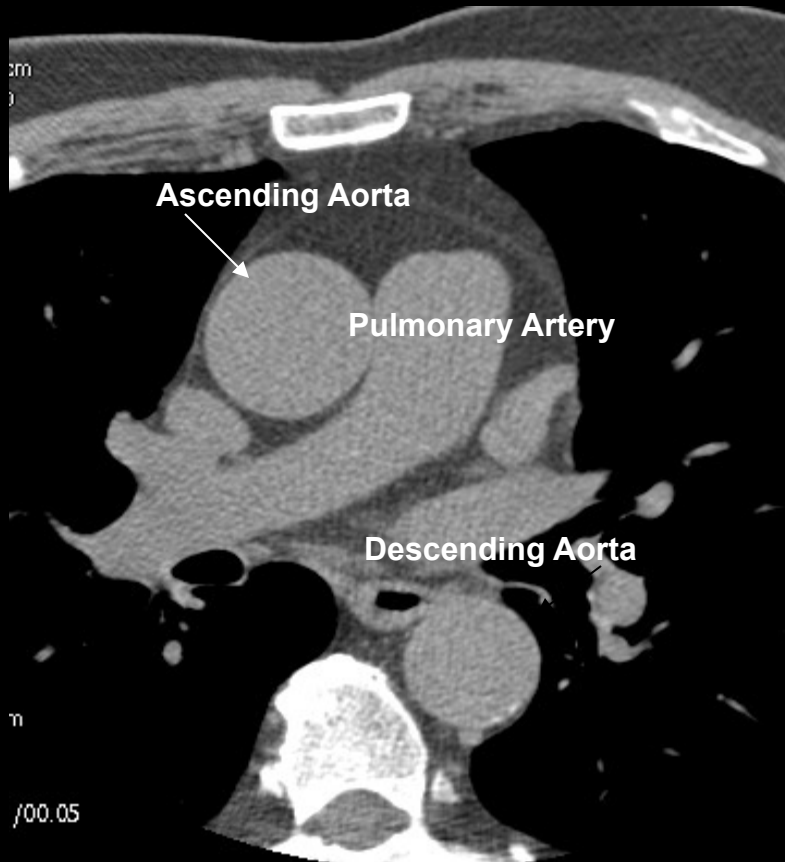


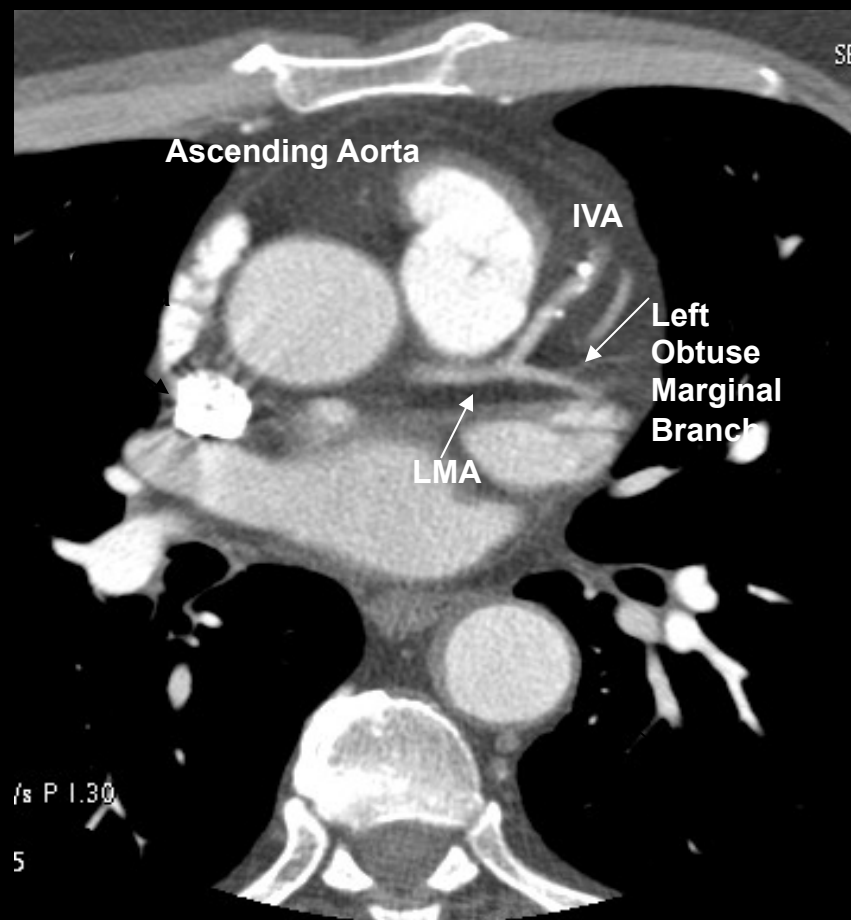
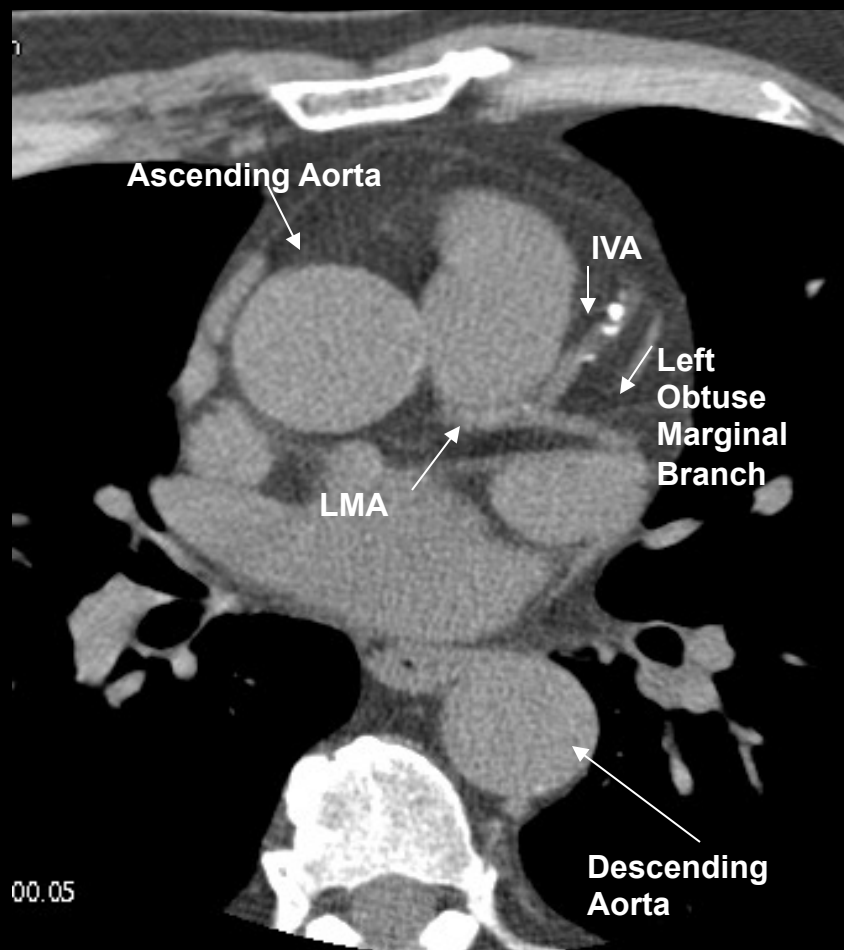
A decorative graphic consisting of two teal squares. The top square is smaller and has a dashed white border. The bottom square is larger and is solid teal.

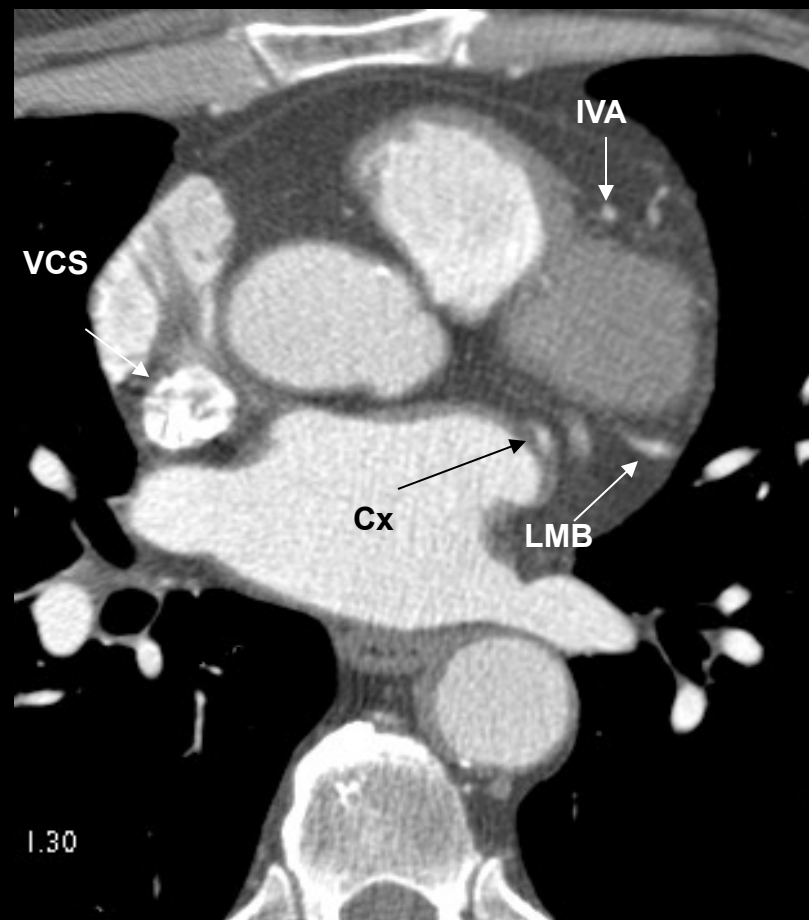
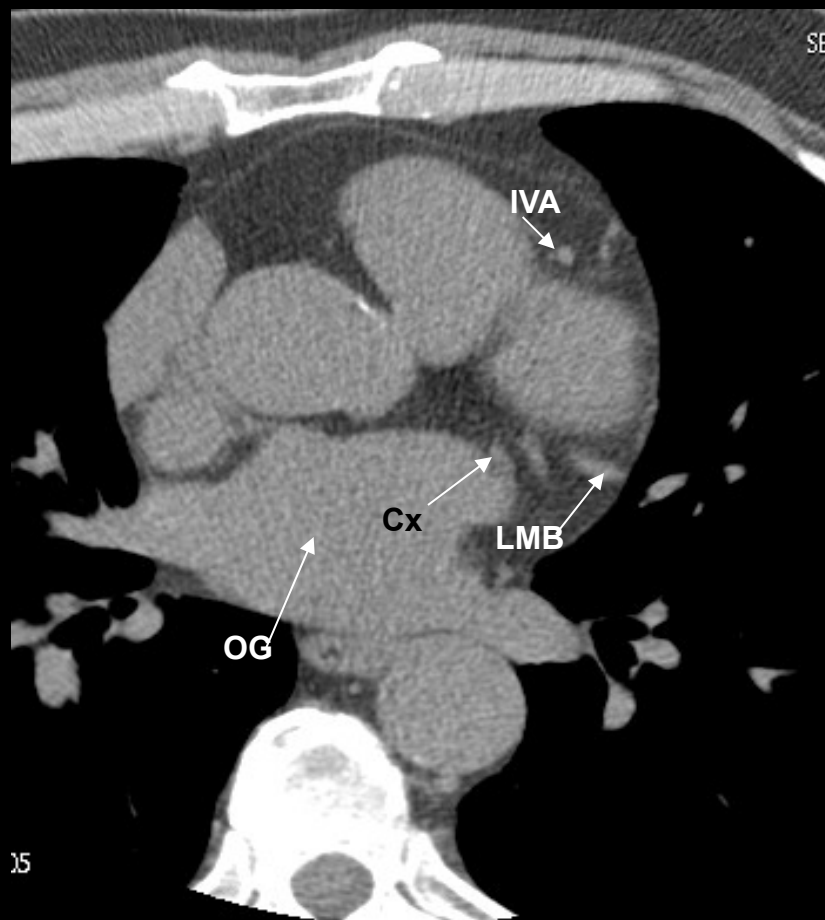
2/ RADIOANATOMIE DU MEDIASTIN

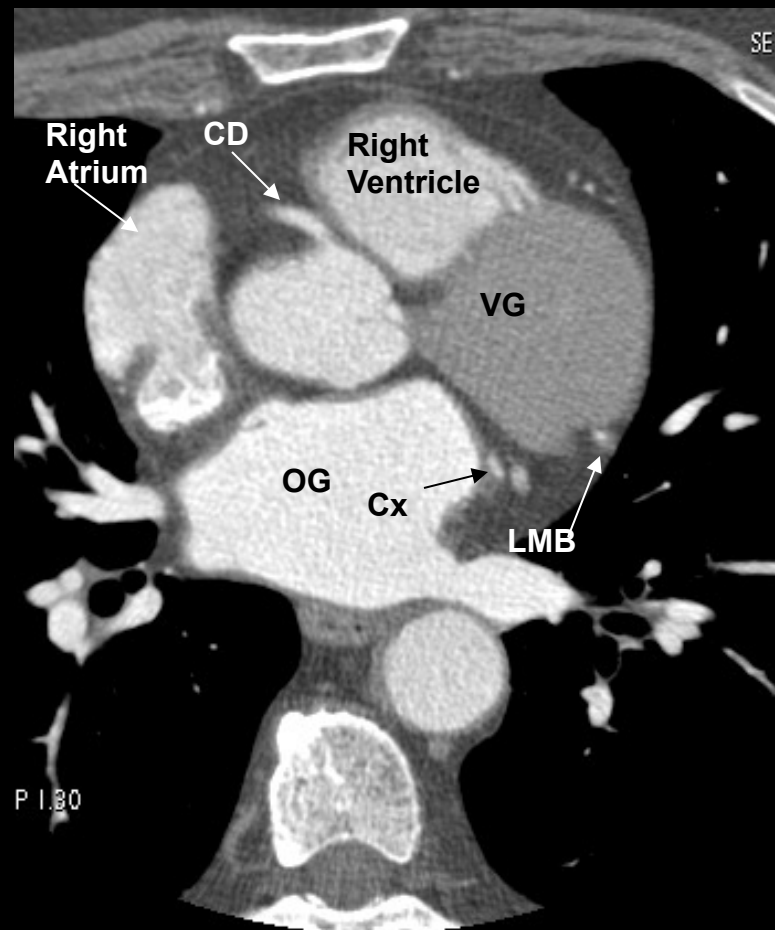
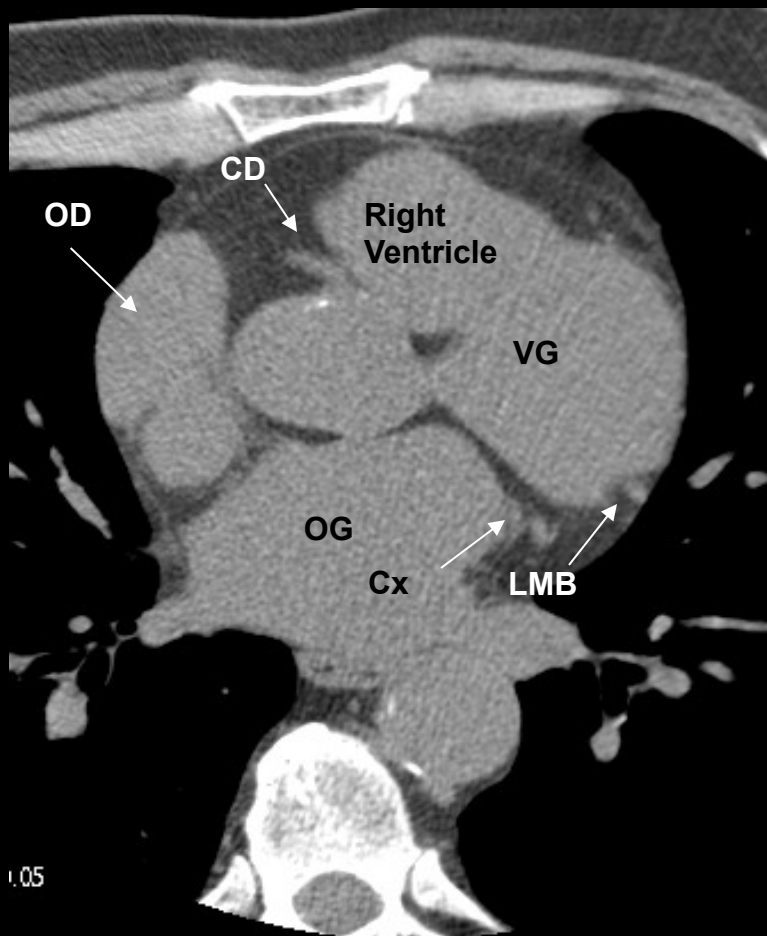
- **VAISSEAUX**
- **CŒUR**
- **ŒSOPHAGE**
- **CHAINES GANGLIONNAIRES**

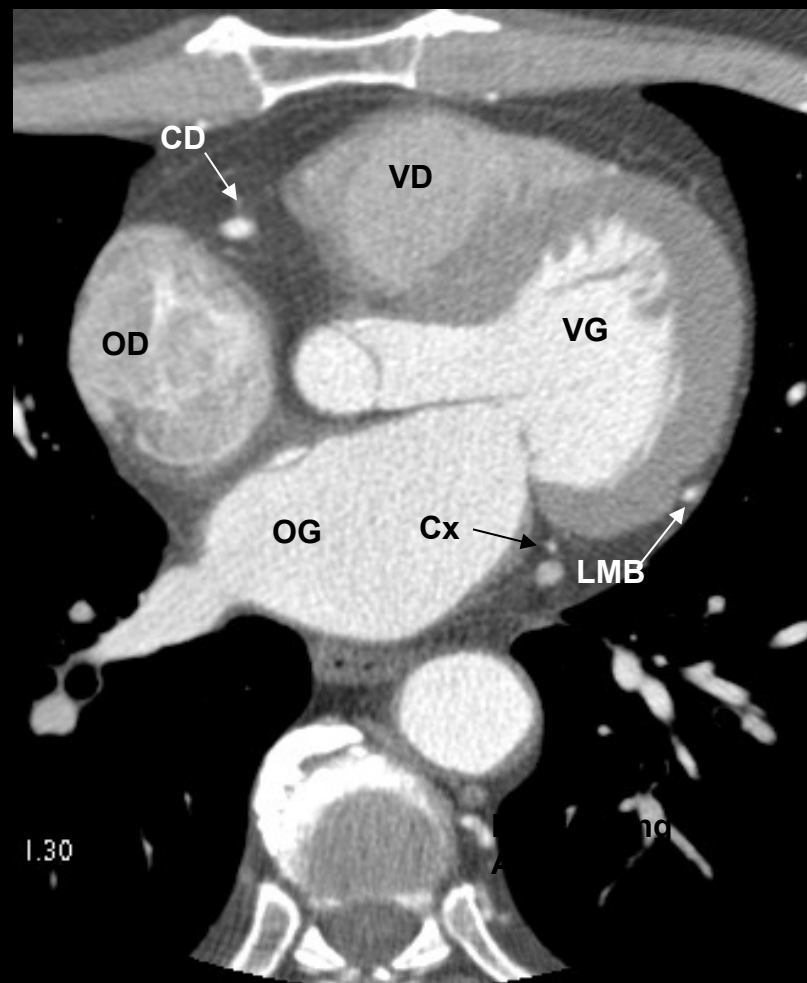
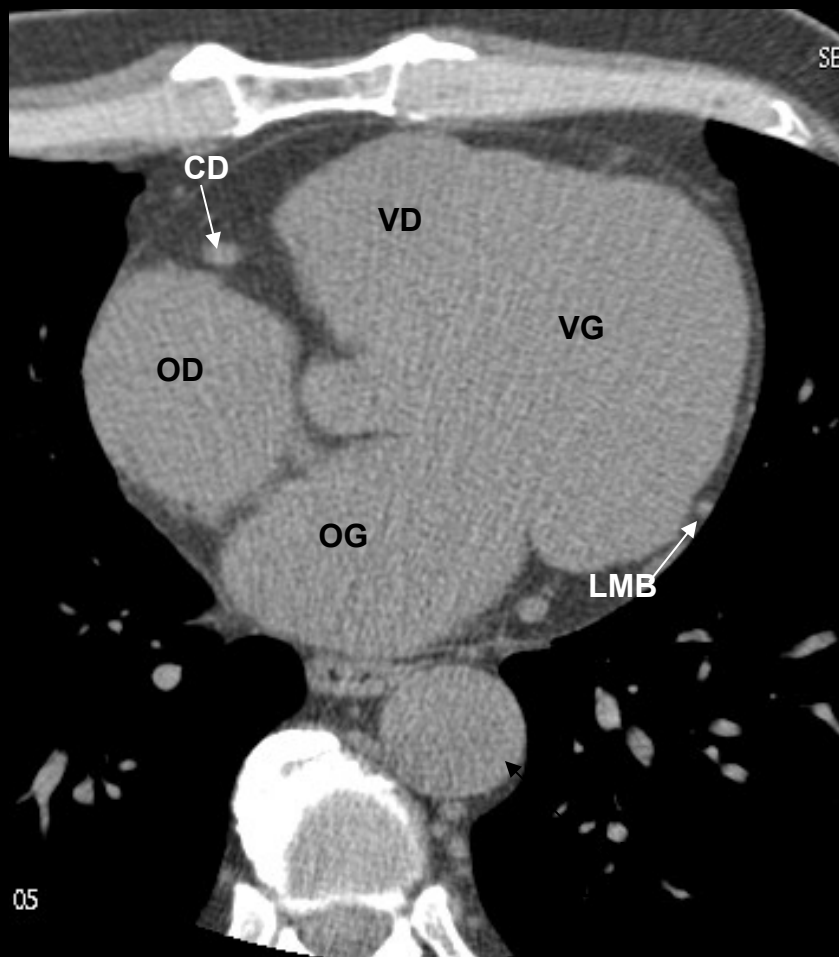


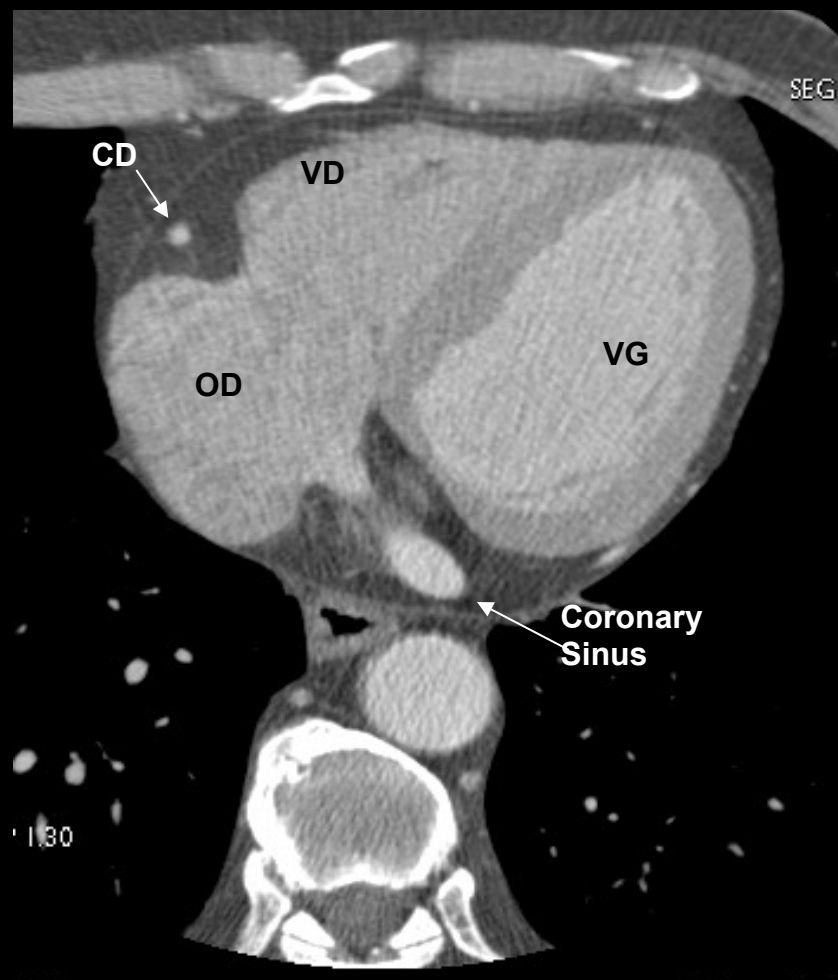
LMA - Left Main Artery (tronc commun)
LAD - Left Anterior Descending Artery (inter ventriculaire IVA)
LCX - Left Circumflex Artery (circonflexe)
LMB - Left Obtuse Marginal Branch (branche marginale gauche)
RCA - Right Coronary Artery (coronaire droite)
PDA - Posterior Descending Artery (rétro ventriculaire postérieure)

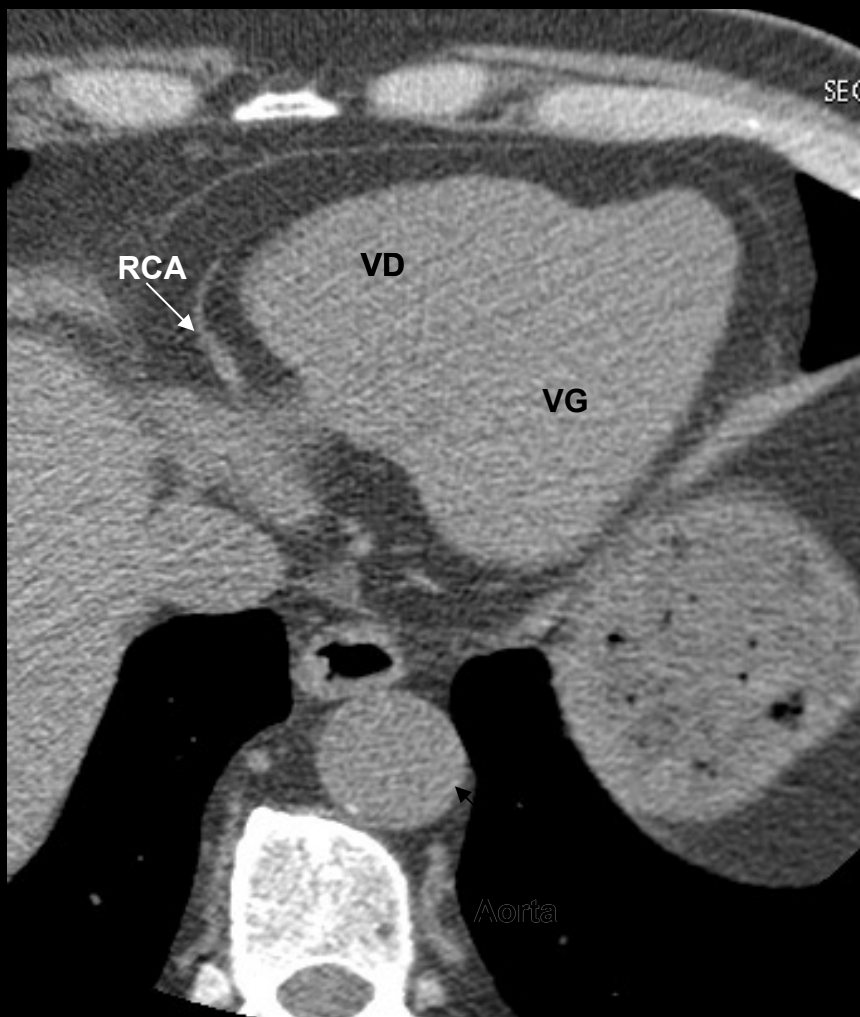








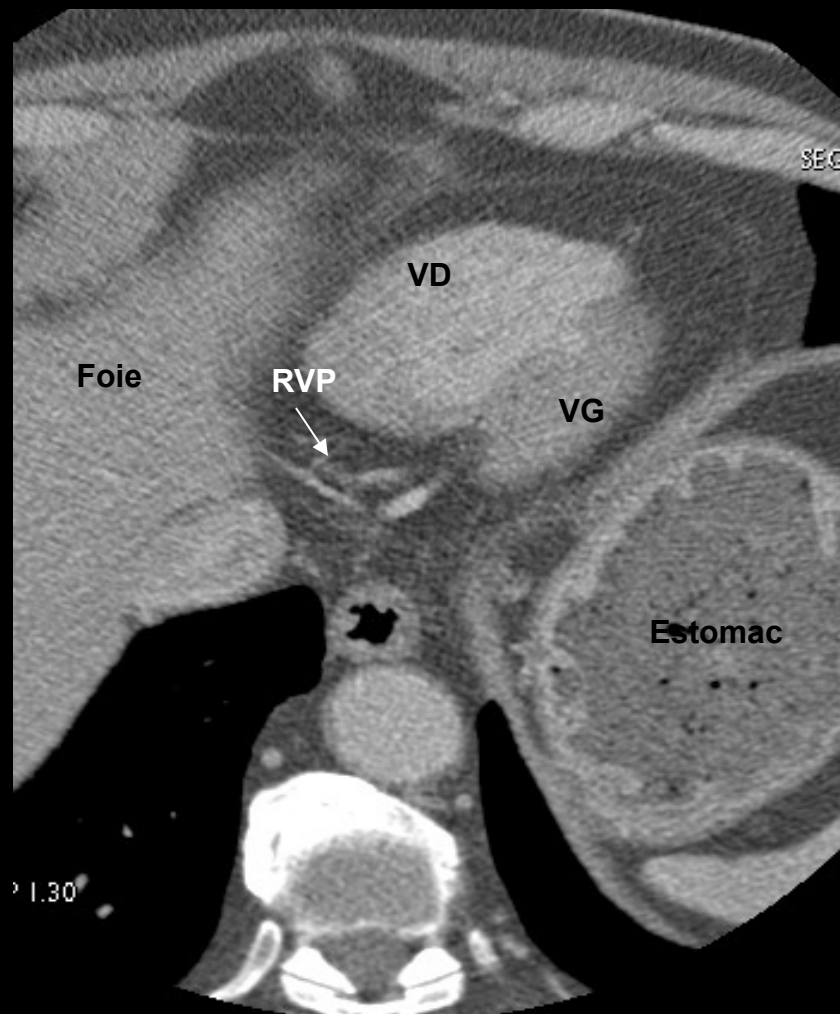




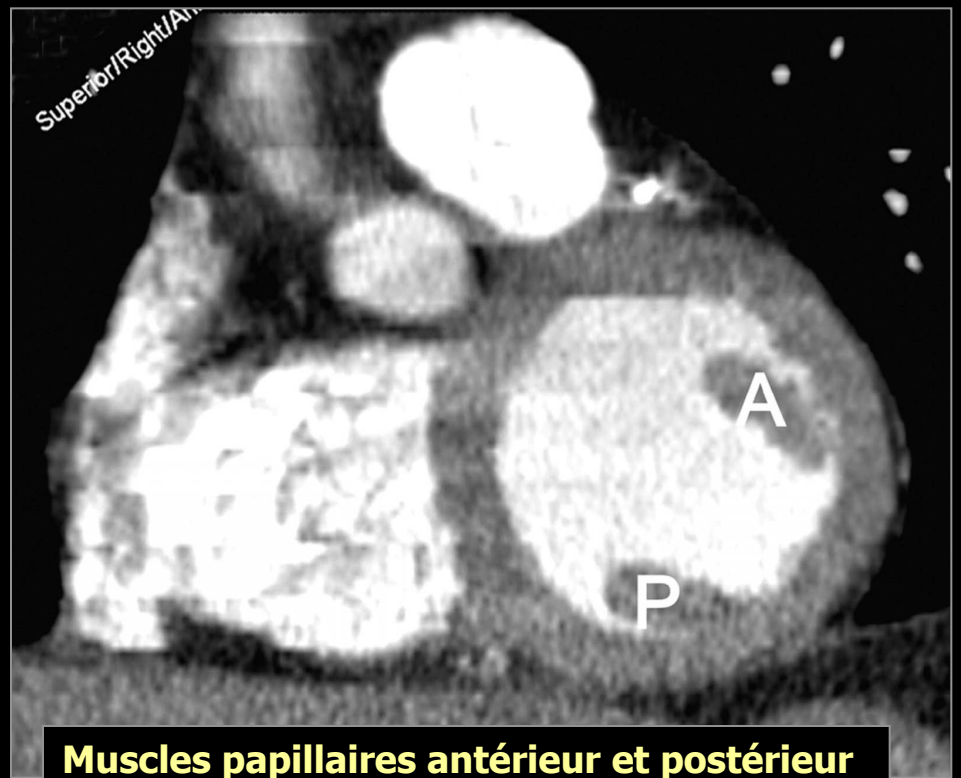
✗ Impossible d'afficher l'image. Votre ordinateur manque peut-être de mémoire pour ouvrir l'image ou l'image est endommagée. Redémarrez l'ordinateur, puis ouvrez à nouveau le fichier. Si le x rouge est toujours affiché, vous devrez peut-être supprimer l'image avant de la réinsérer.

RCA

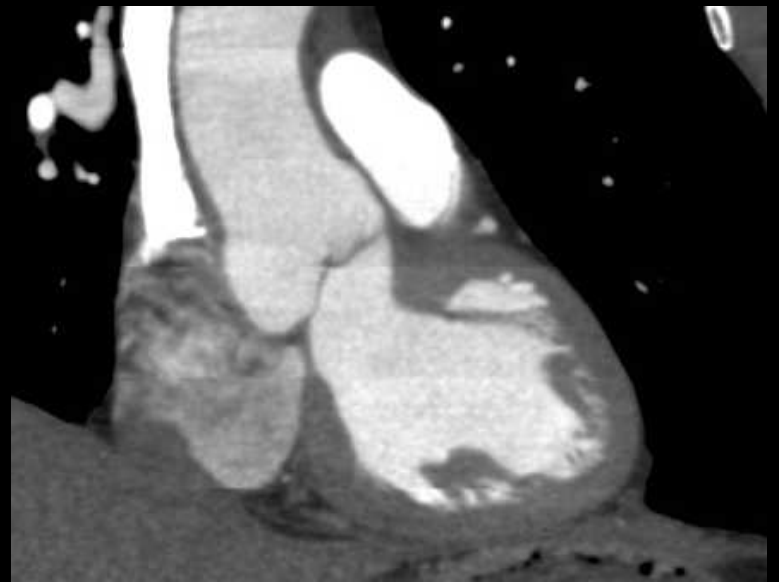
This block shows a red 'X' icon and a message in French indicating a display error. Below the message, the text 'RCA' is followed by a white arrow pointing downwards, likely intended to point to the right coronary artery in the corresponding CT scan image.



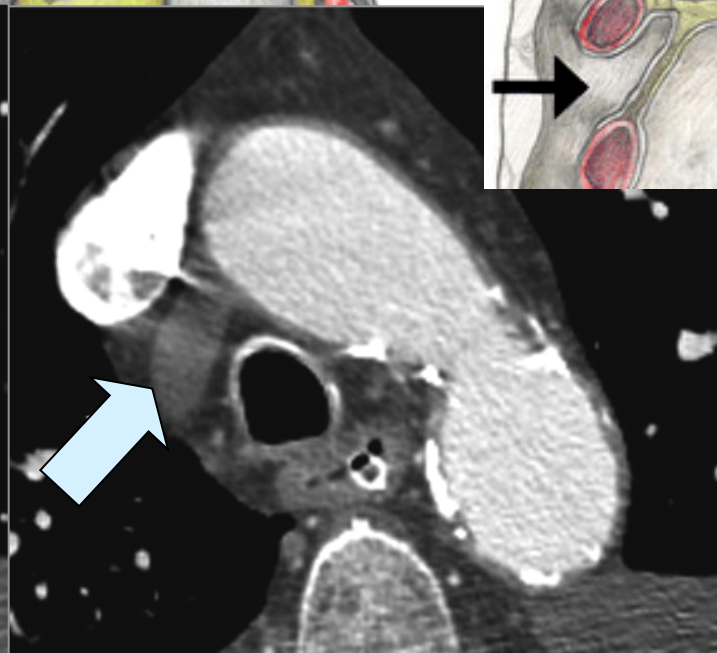
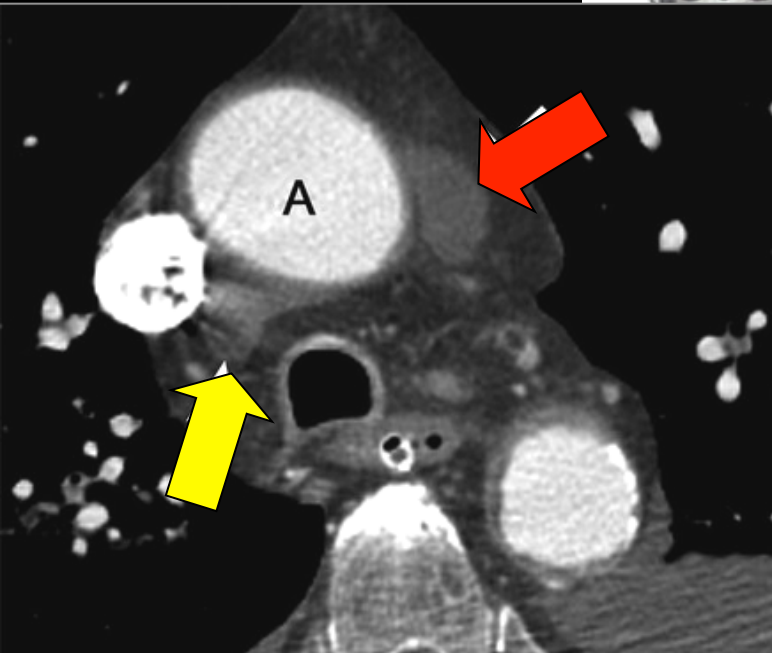
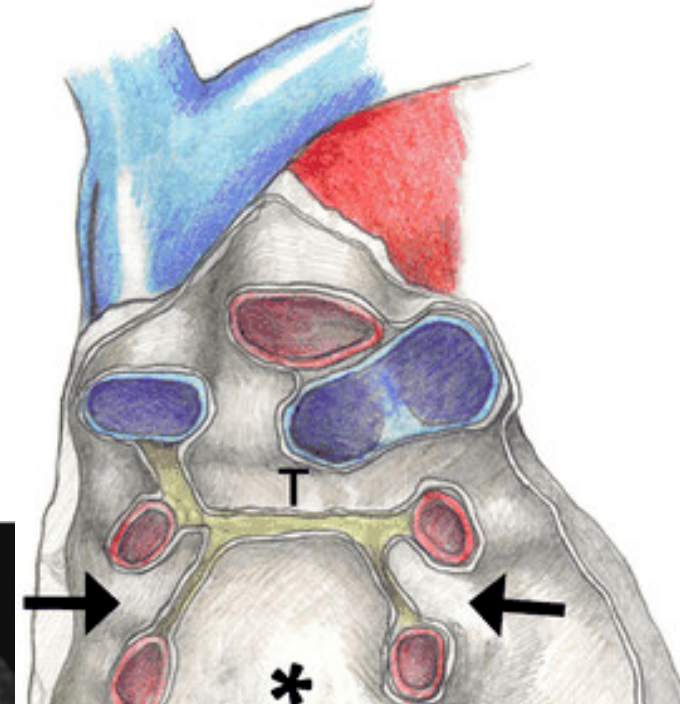
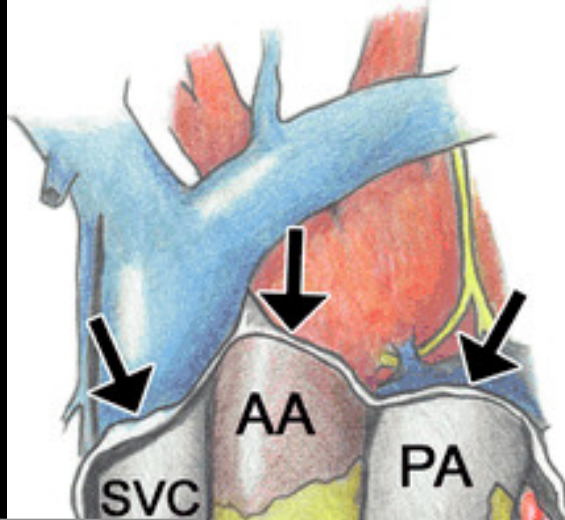
Ventricules



**Muscles papillaires antérieur et postérieur
Et cordages mitraux**



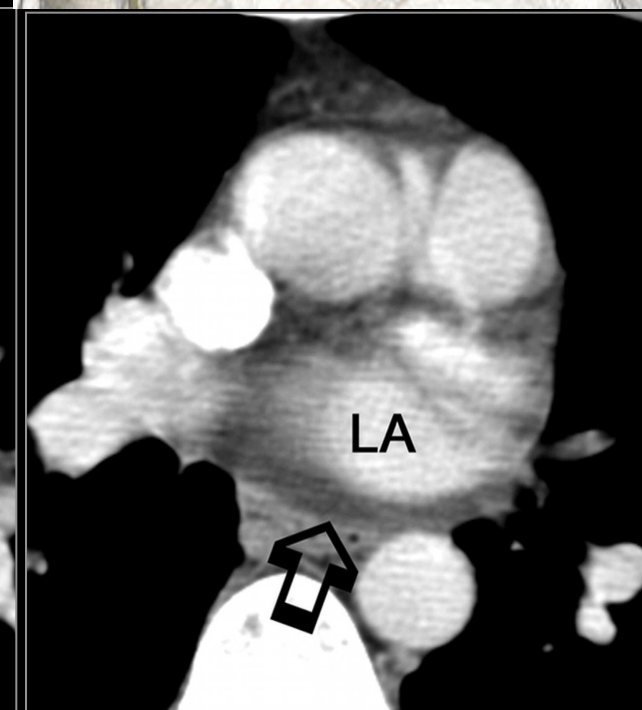
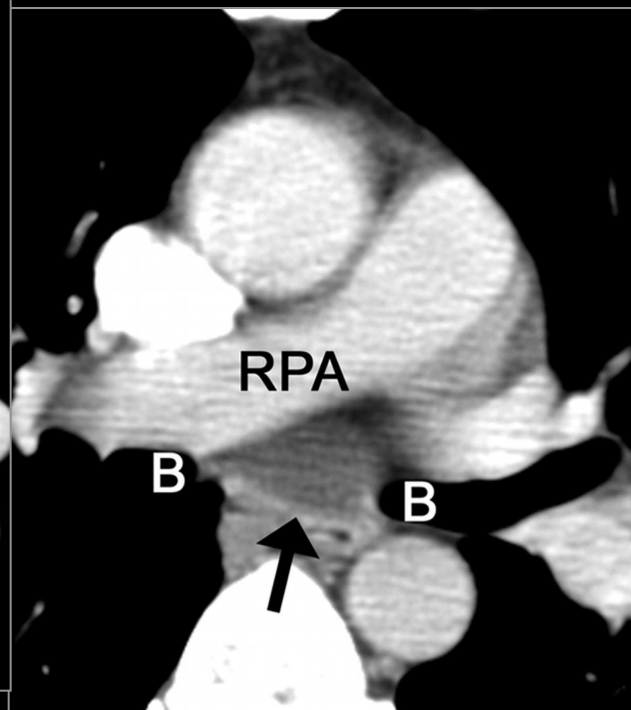
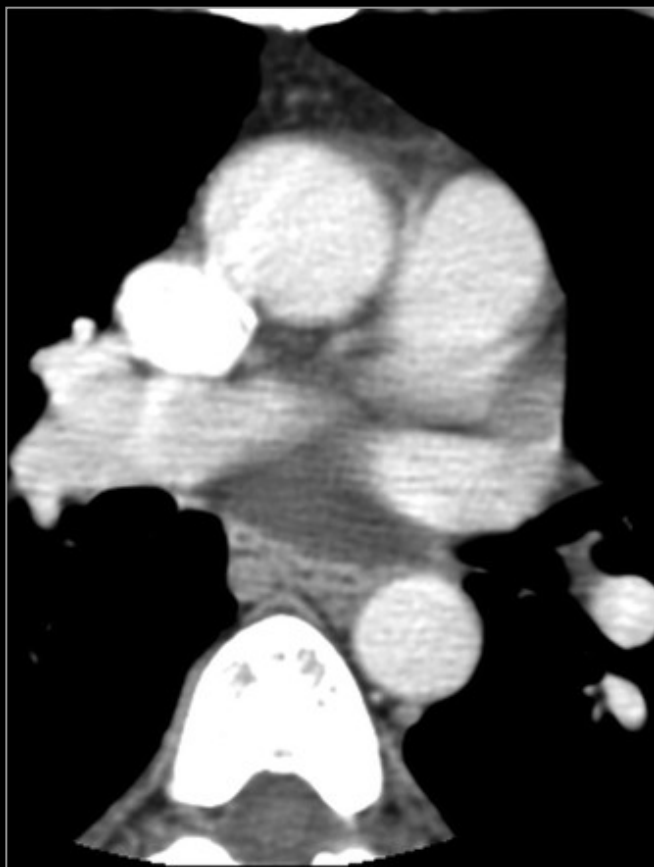
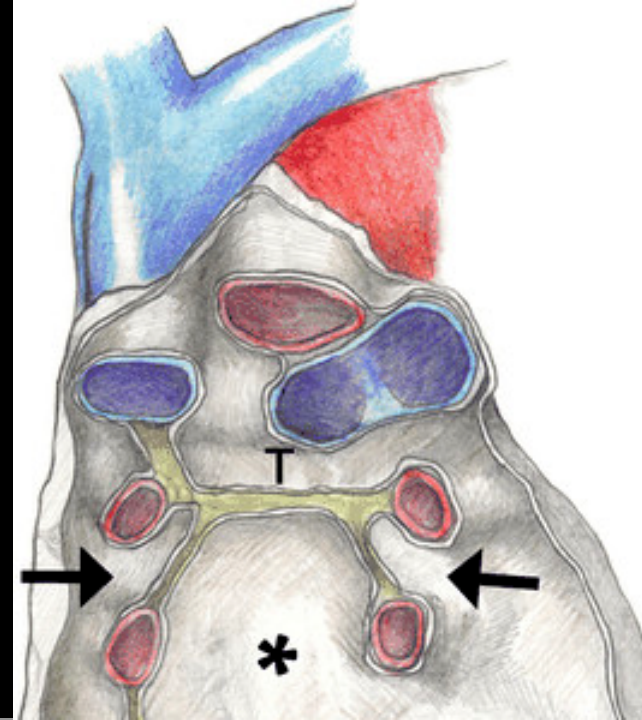
Recessus péricardiques

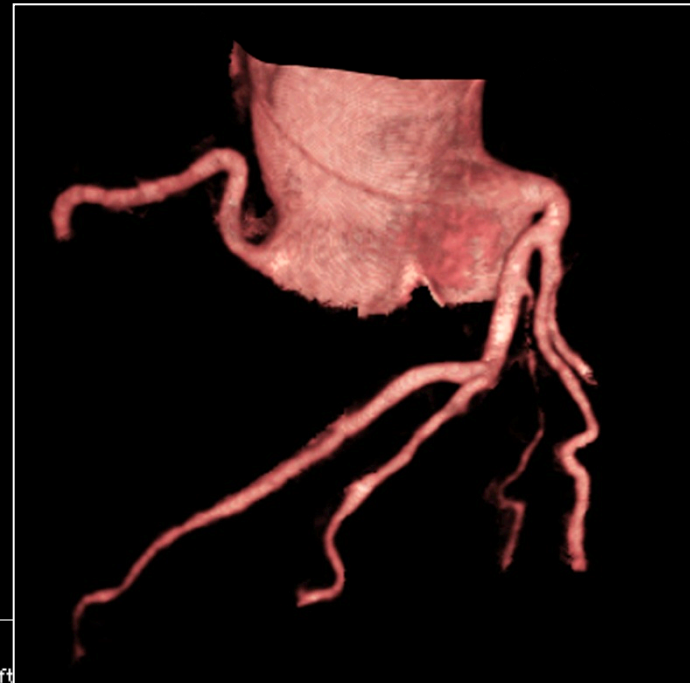
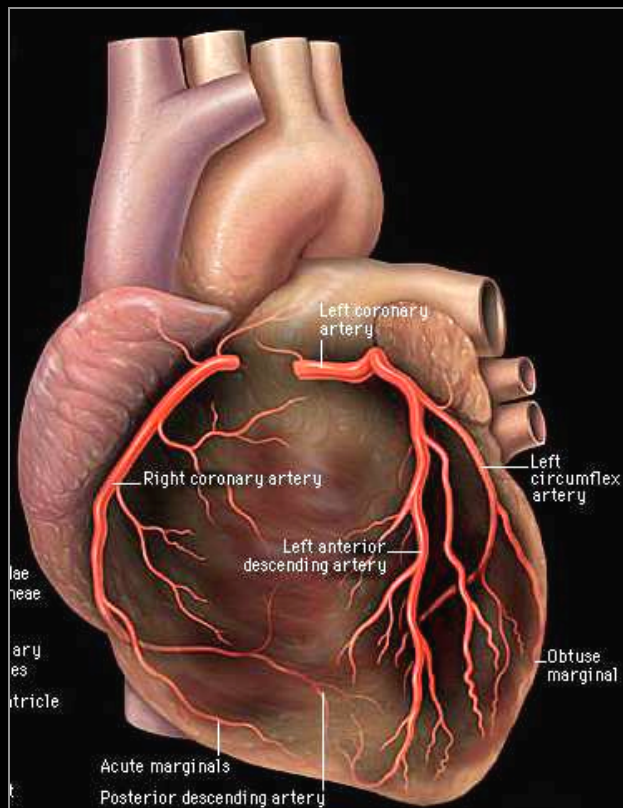


Recessus péricardique aortique supérieur
provient du sinus transverse
s' étend à la face antérieure de l' aorte ascendante avec des portions
antérieure, postérieure et latérale droite

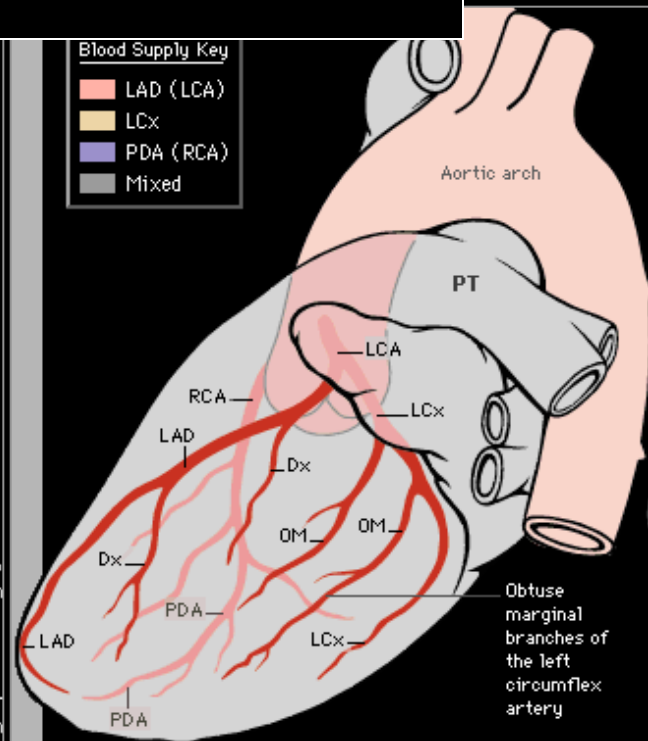
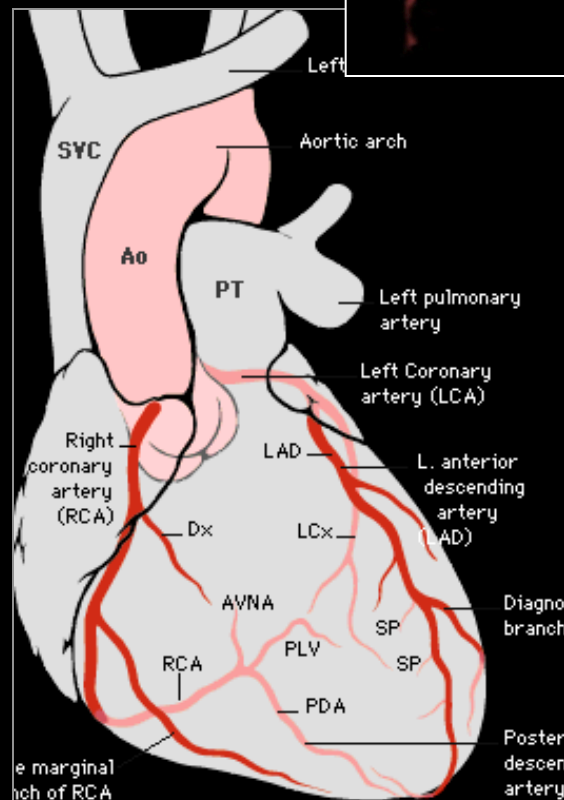
Recessus péricardique postérieur

Extension supérieure du sinus oblique
En arrière de l' AP droite sous carinaire



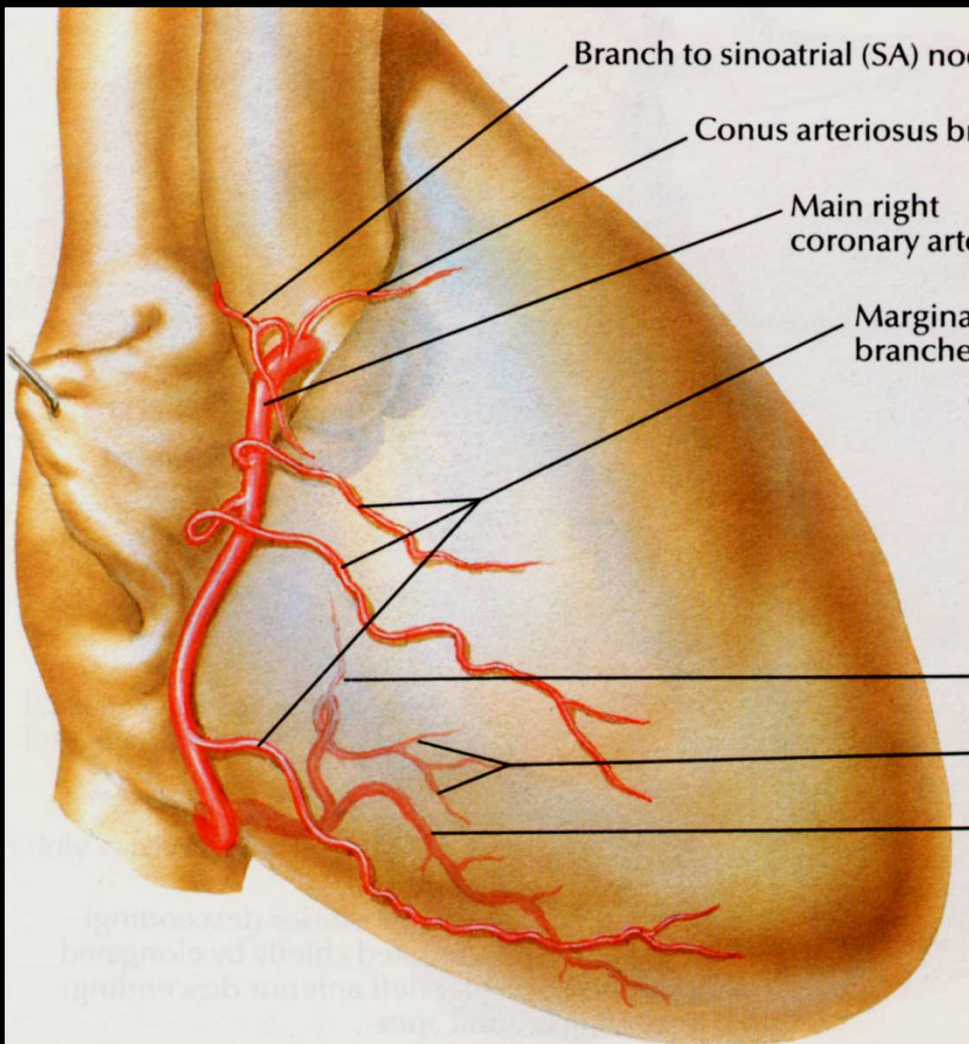


Étude des coronaires

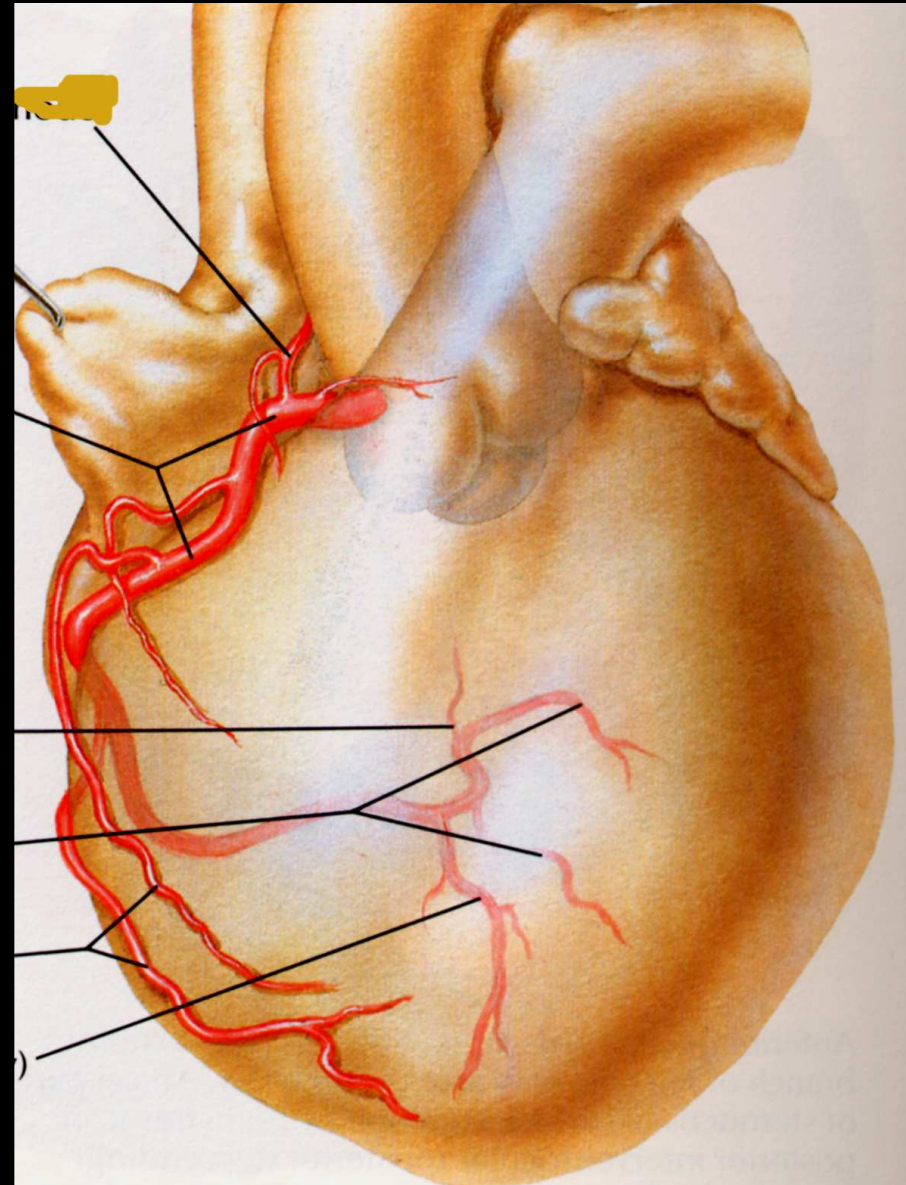


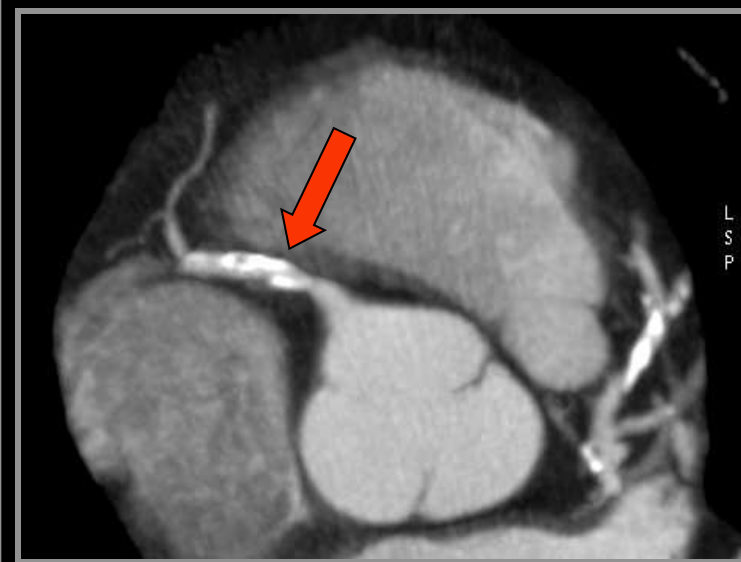
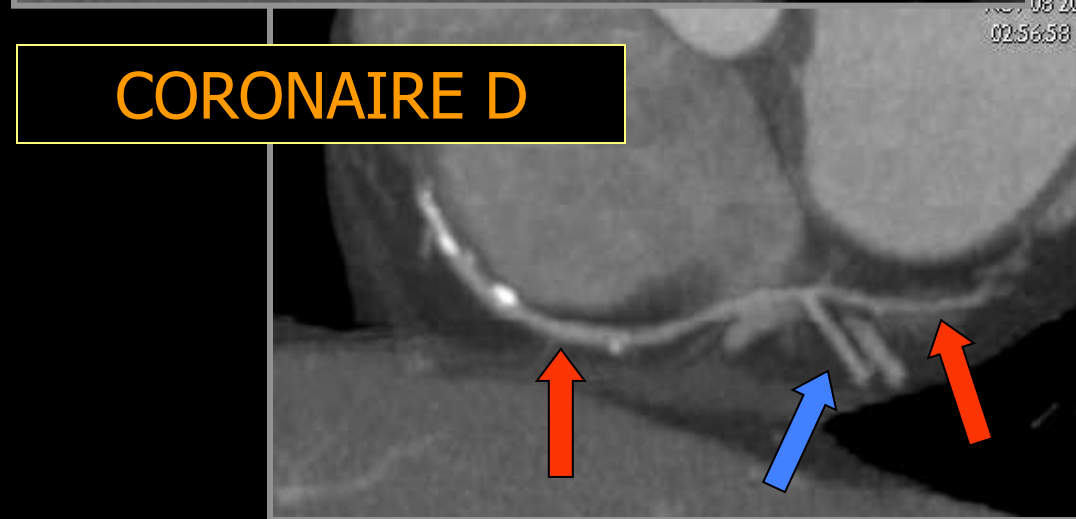
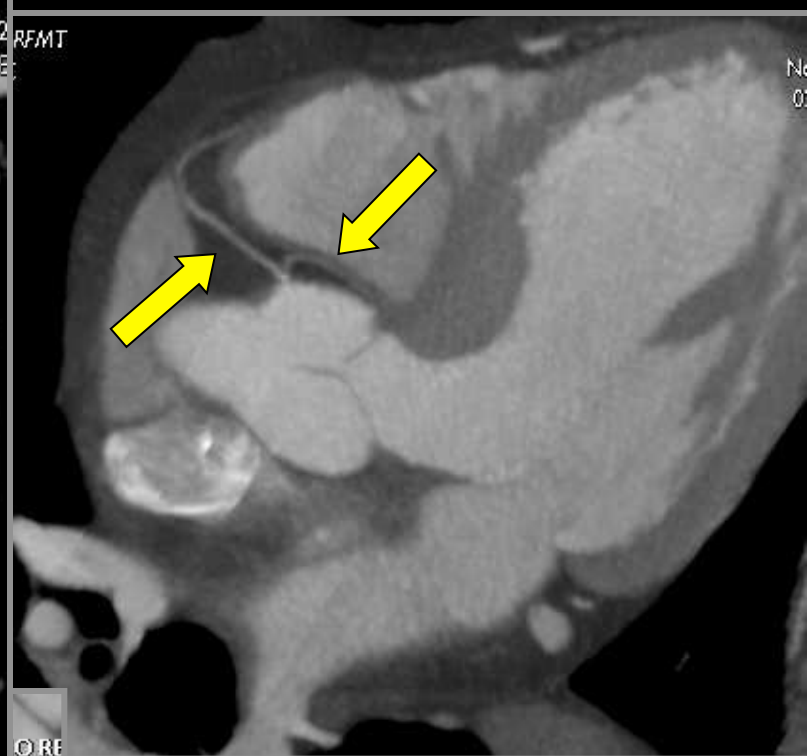
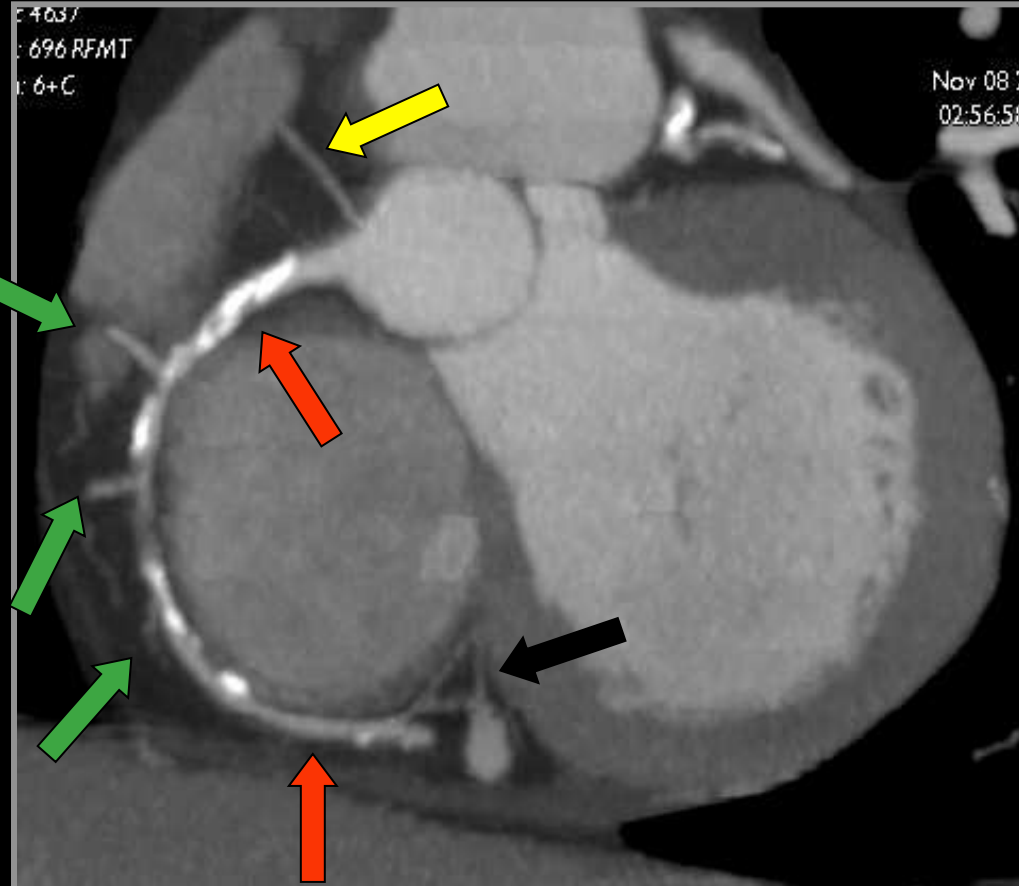
Blood Supply Key

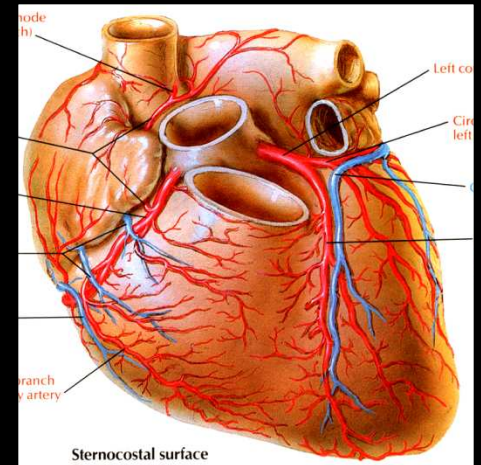
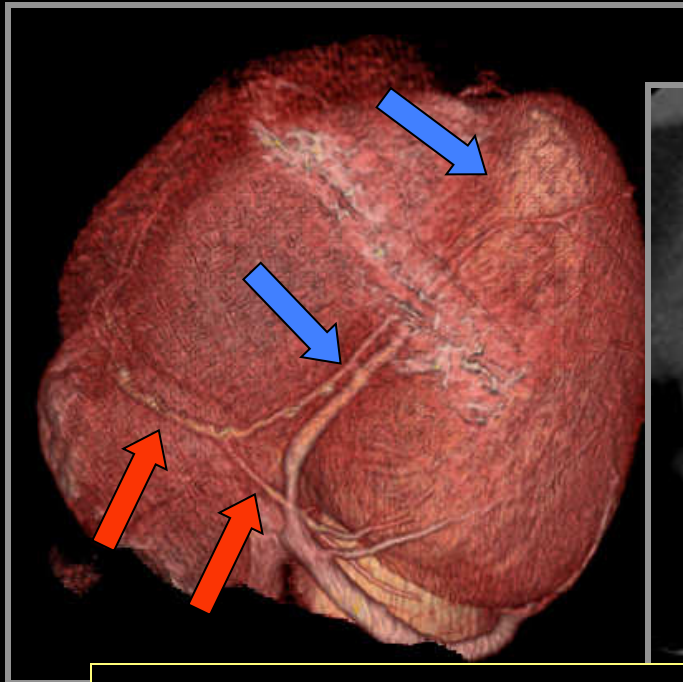
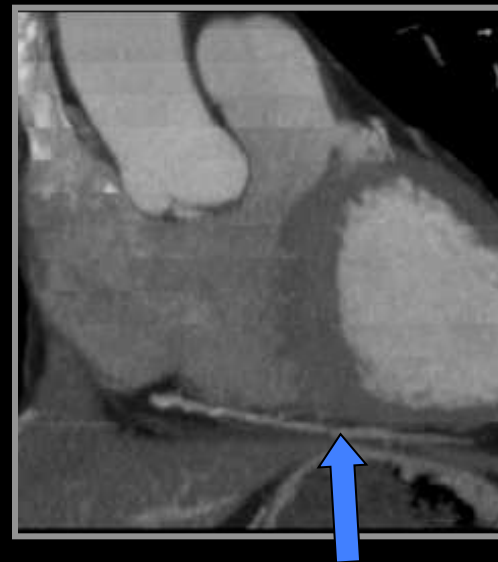
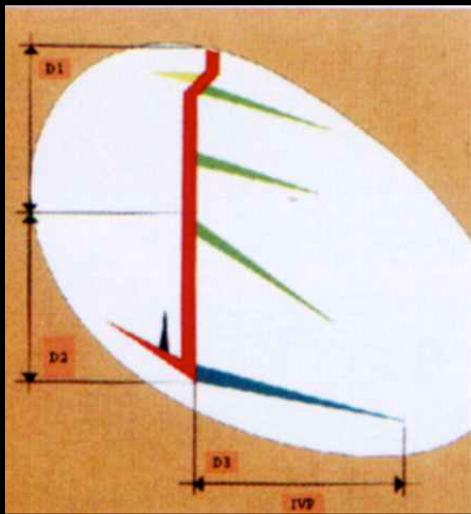
	LAD (LCA)
	LCx
	PDA (RCA)
	Mixed



**Coronaire
droite**

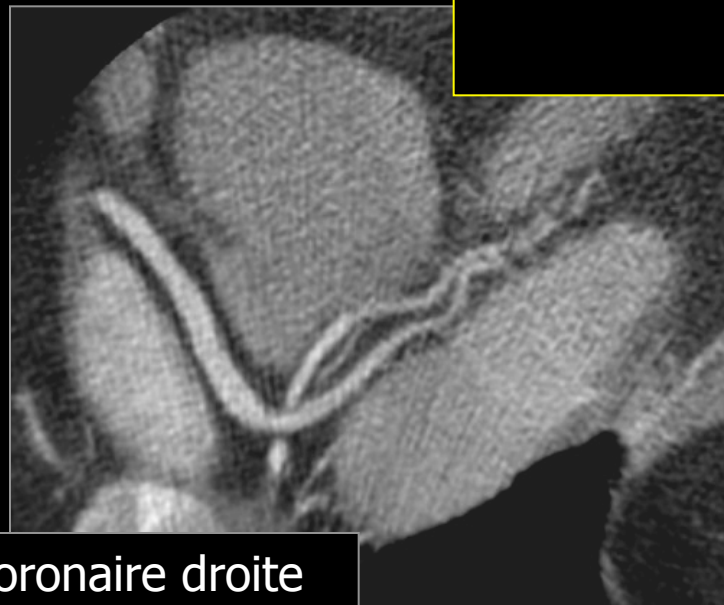
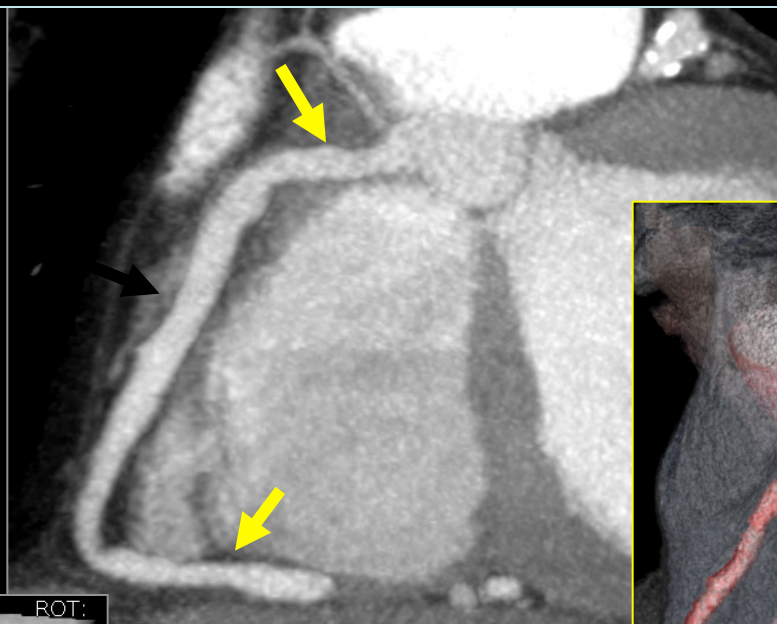




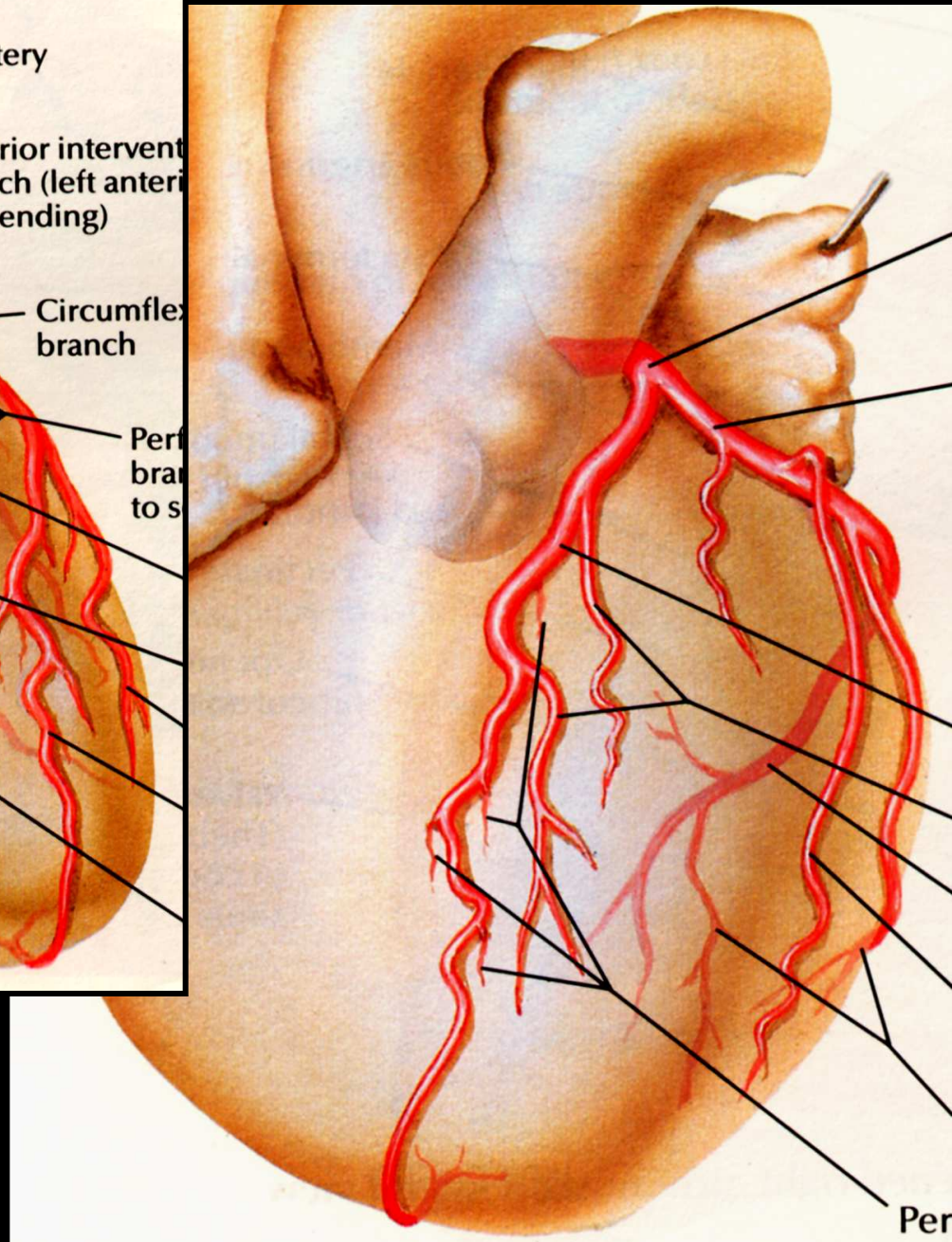
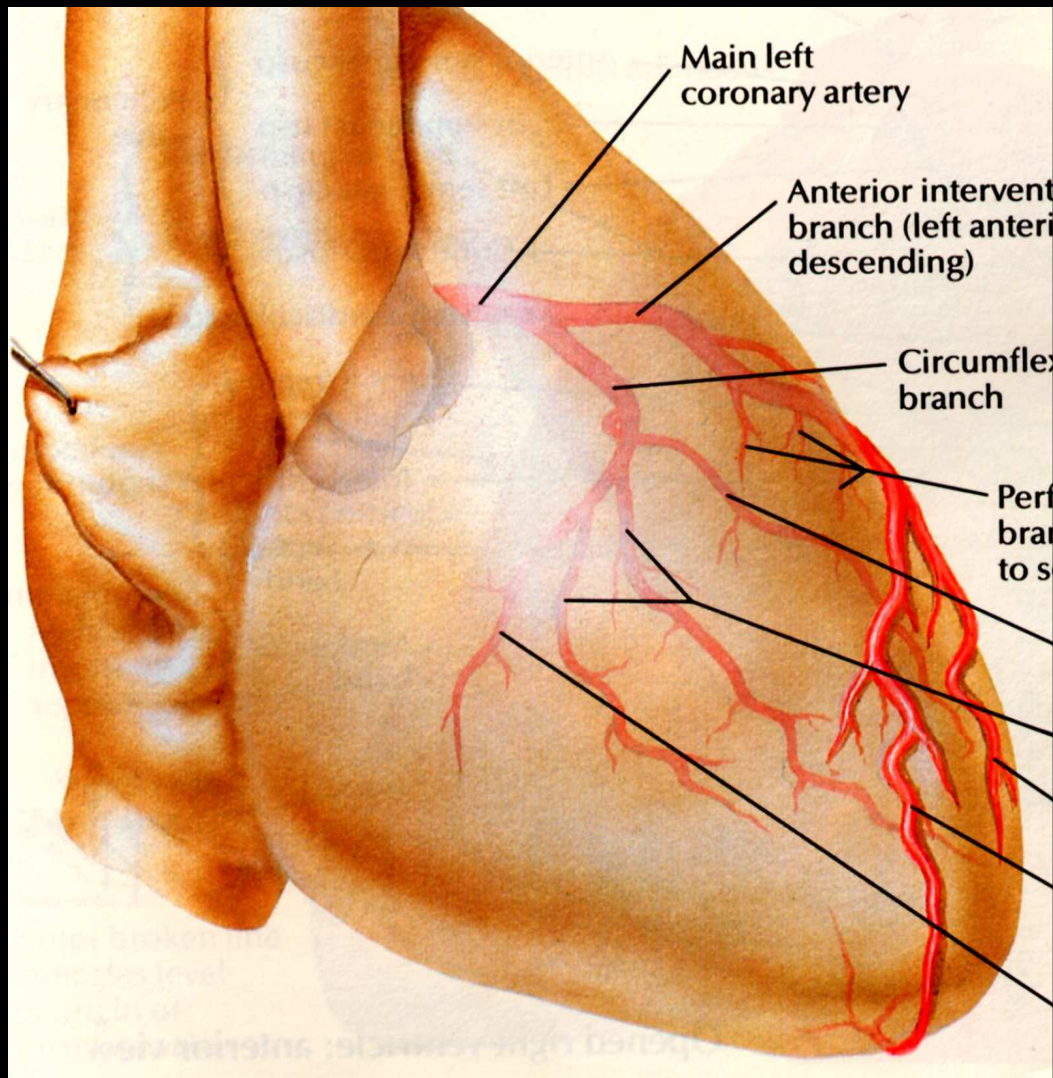


CORONAIRE D
 branche rétro et inter ventriculaire postérieure

**Homme de 54 ans, bilan coronarien angiographique non invasif
angor d'effort sans ischémie authentifiée**

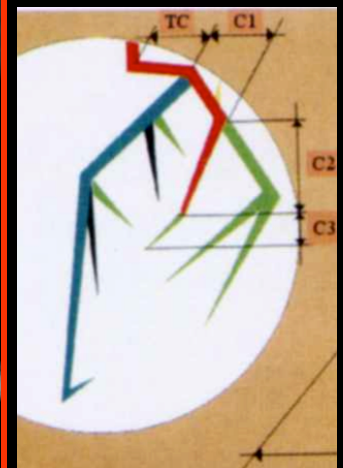
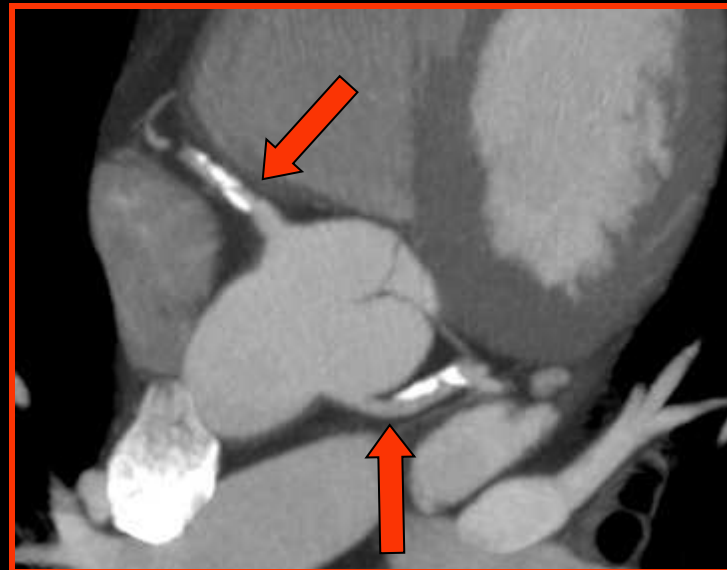
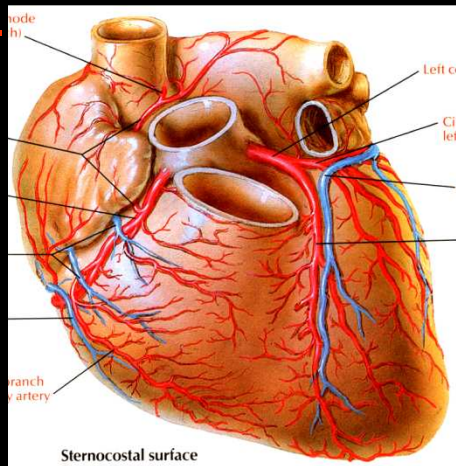
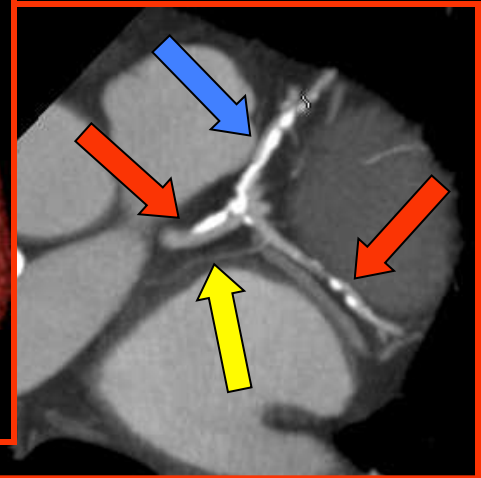
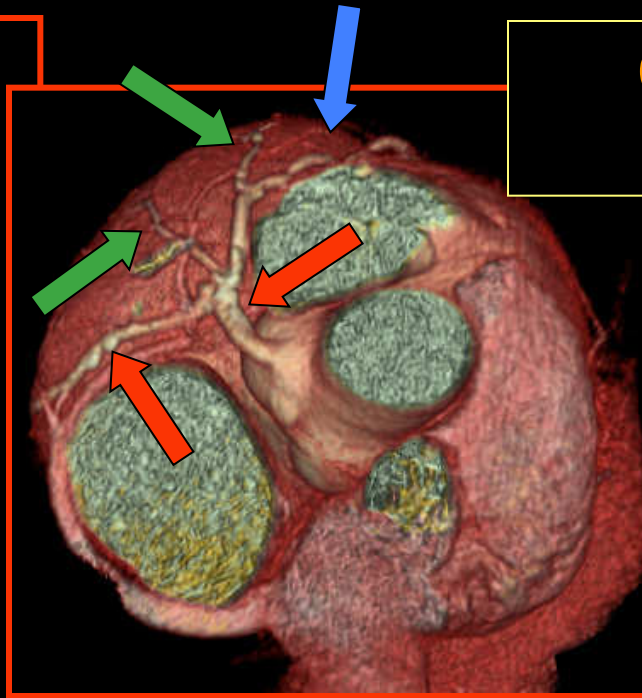
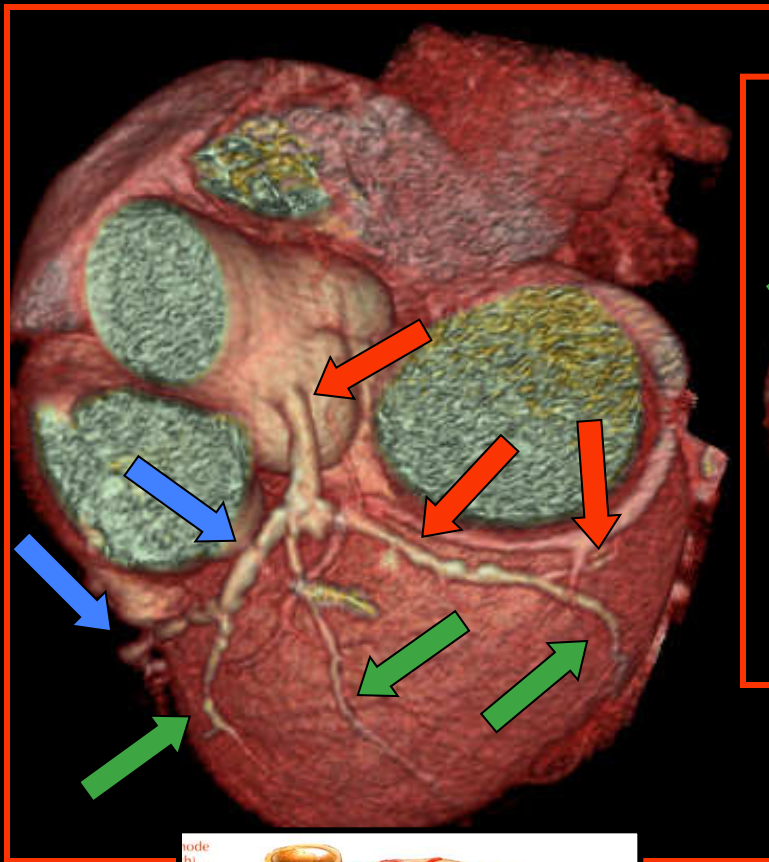


Artère coronaire droite

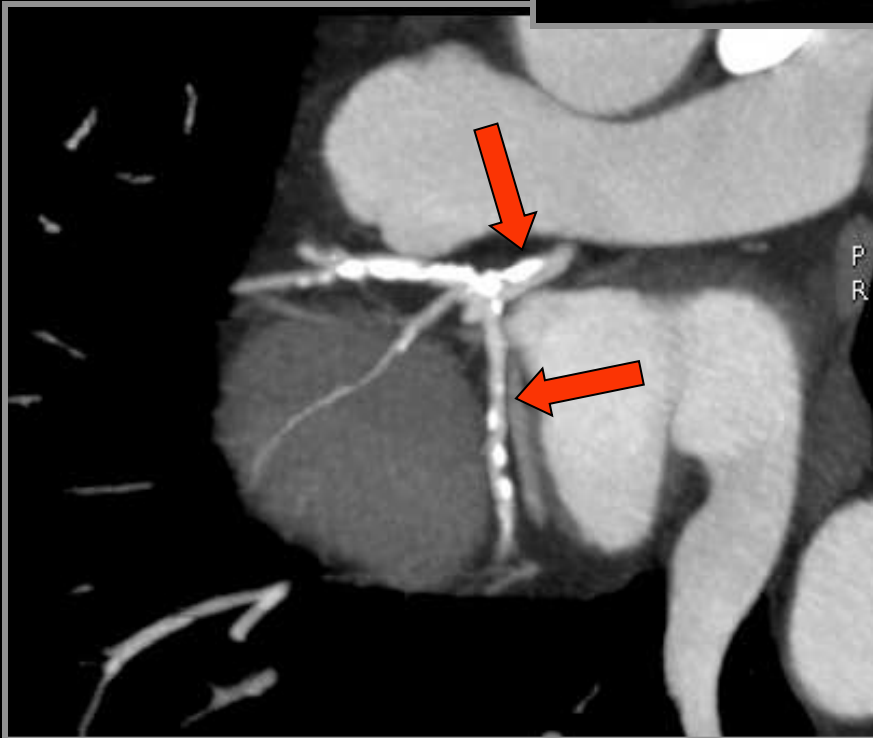
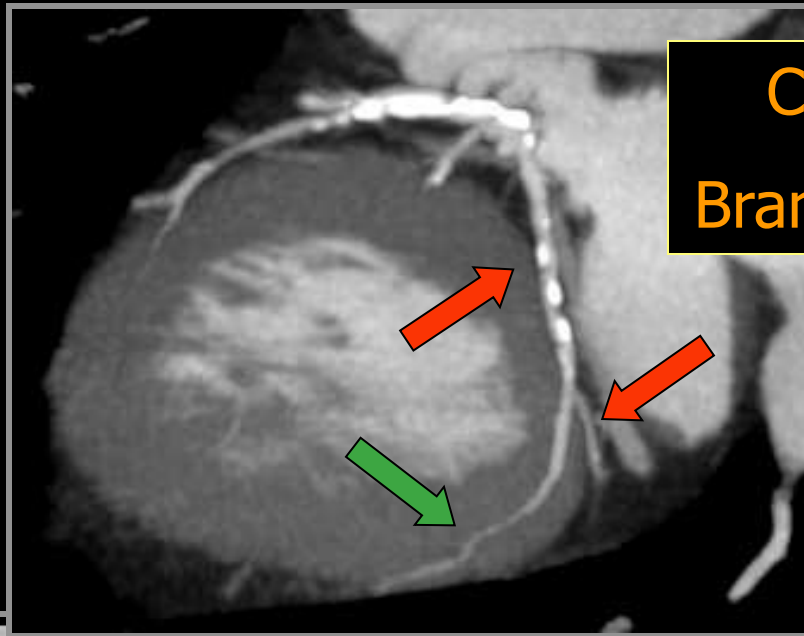


**Coronaire
gauche**

CORONAIRE GAUCHE

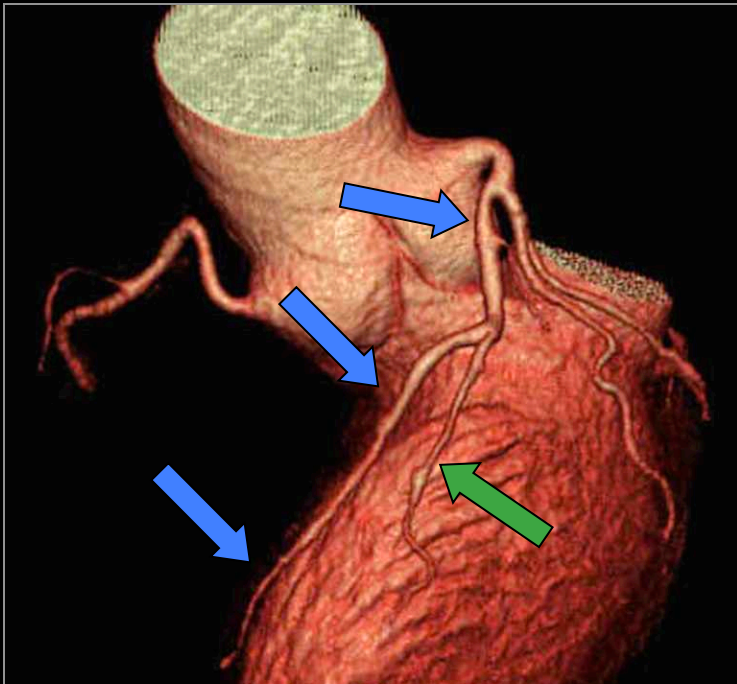
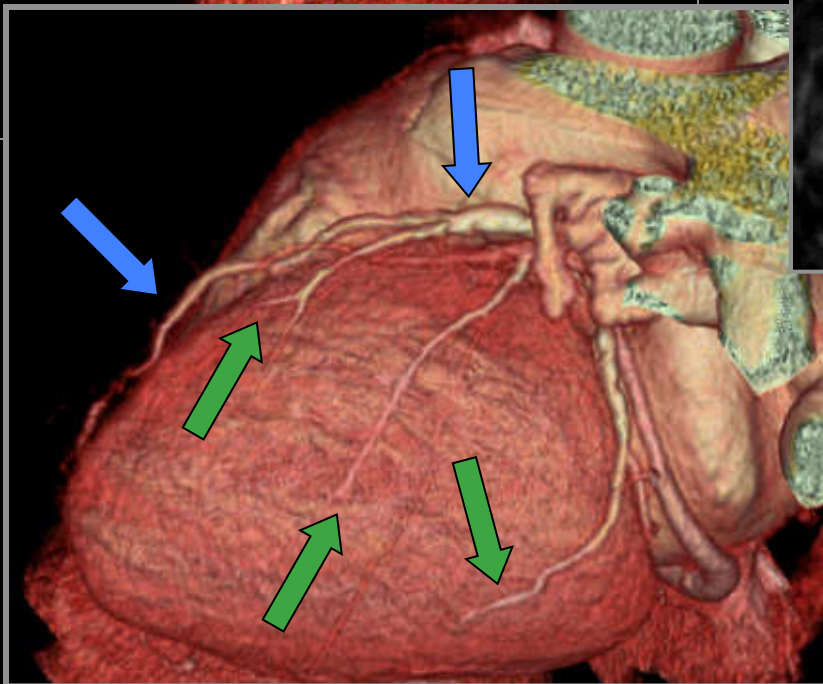
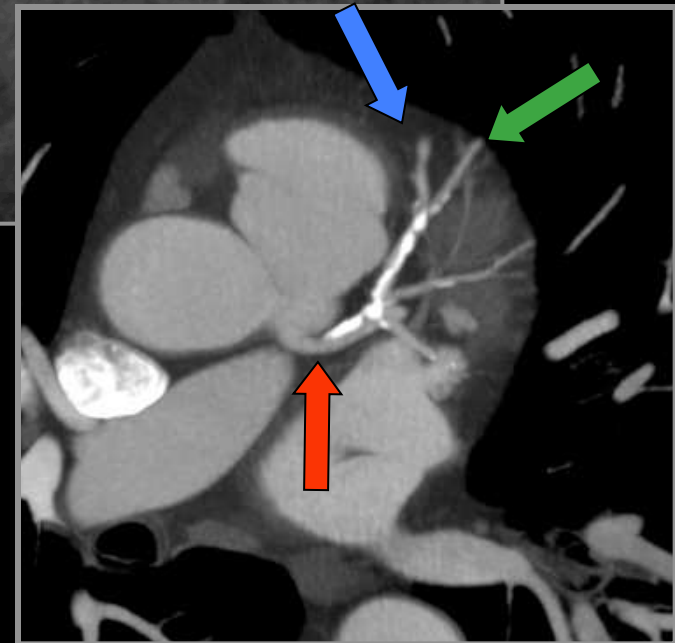
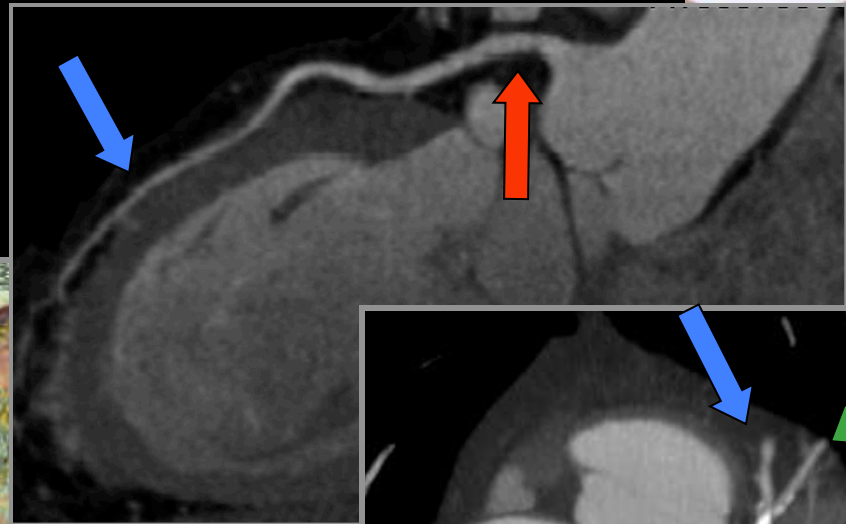
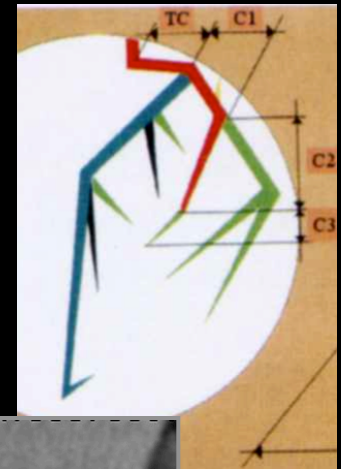


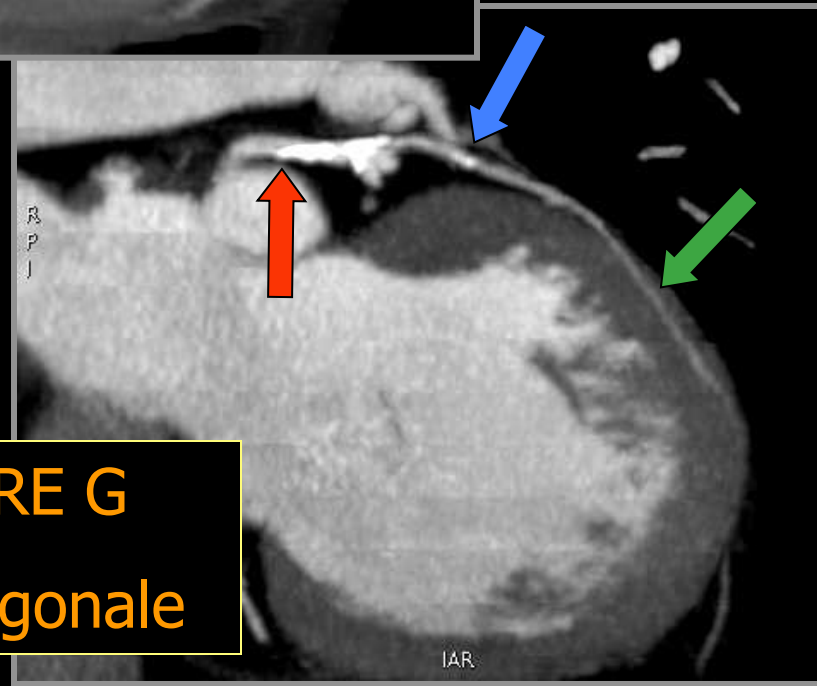
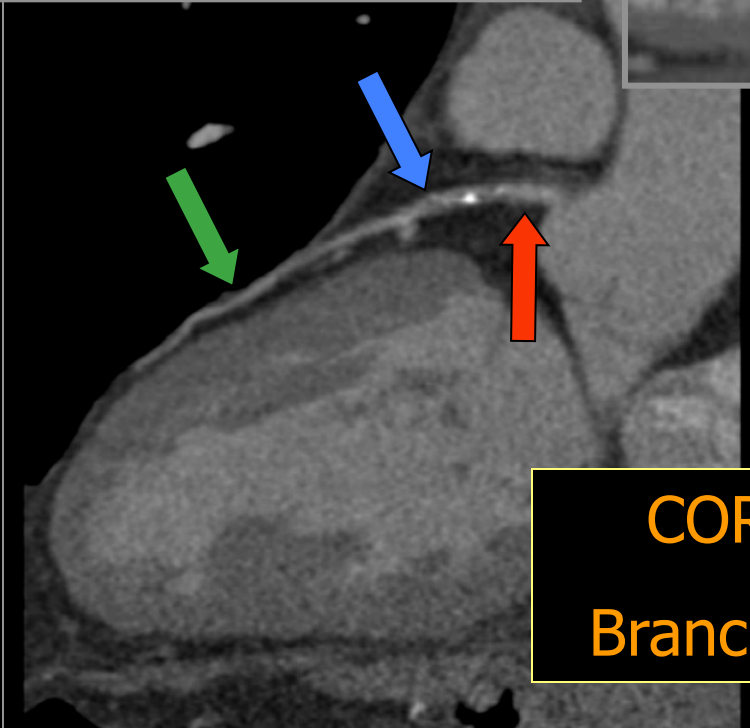
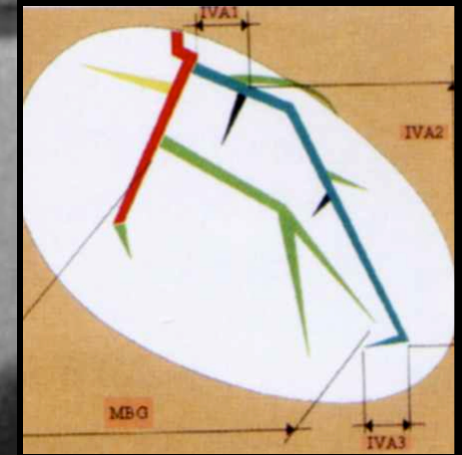
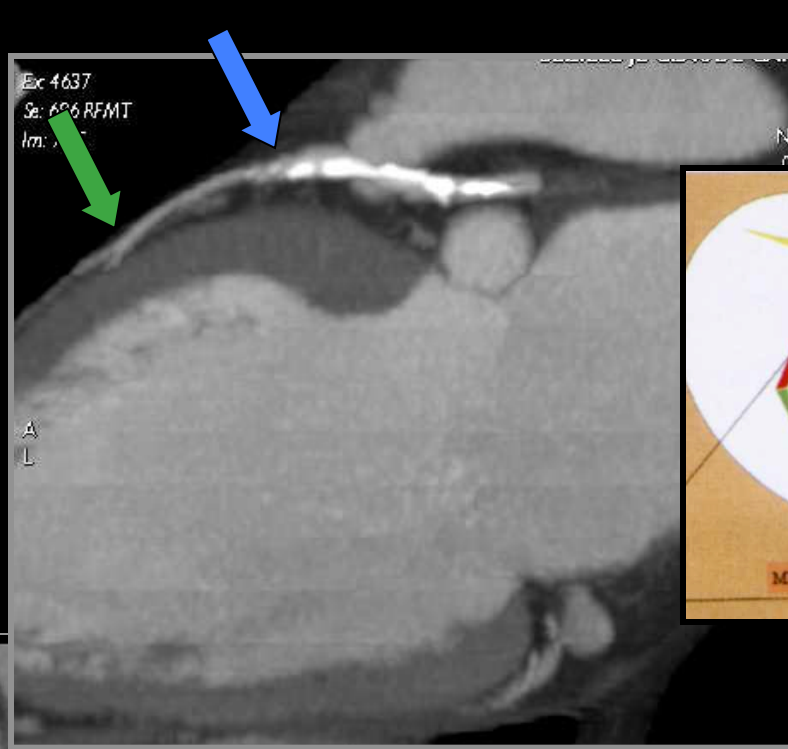
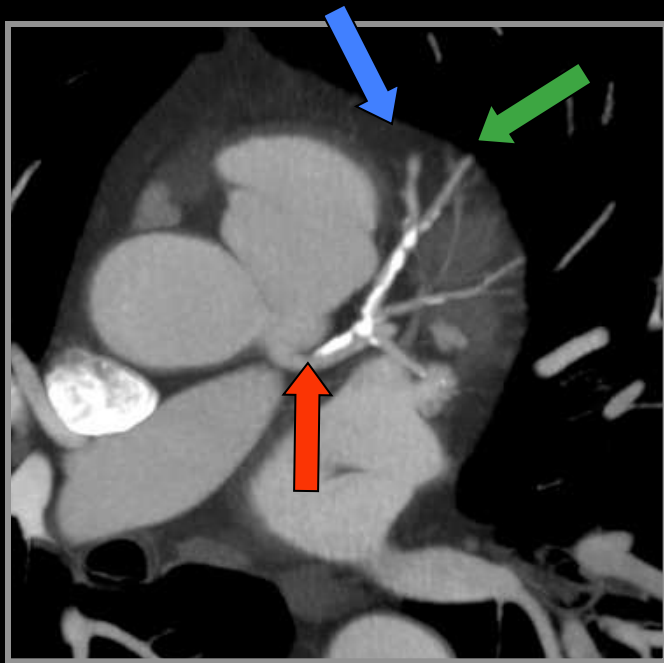
CORONAIRE G
Branche Circonflexe



CORONAIRE G

Branche
interventriculaire
antérieure



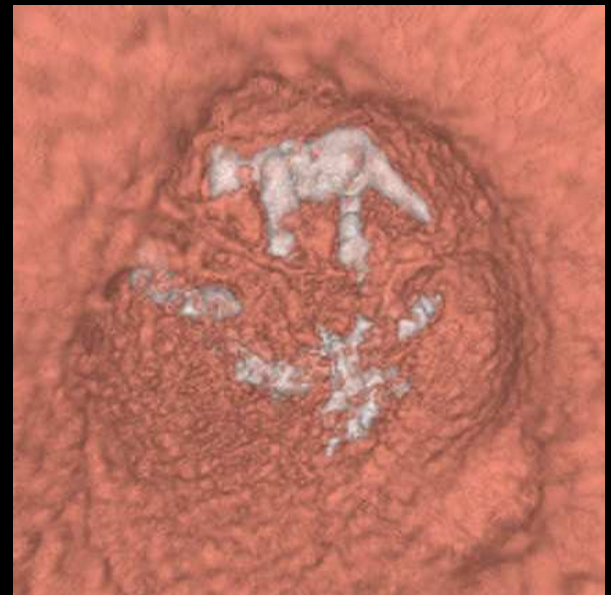
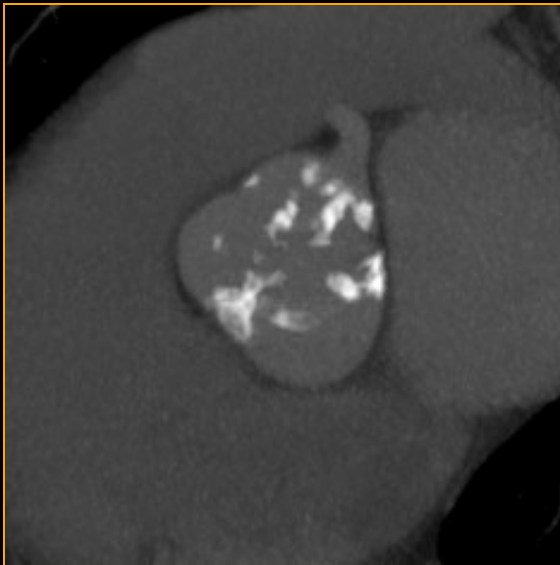
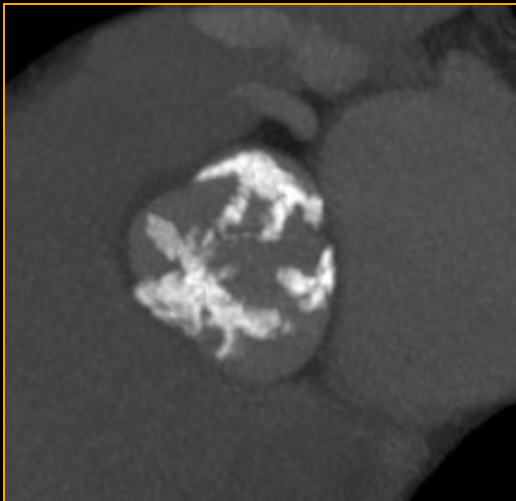
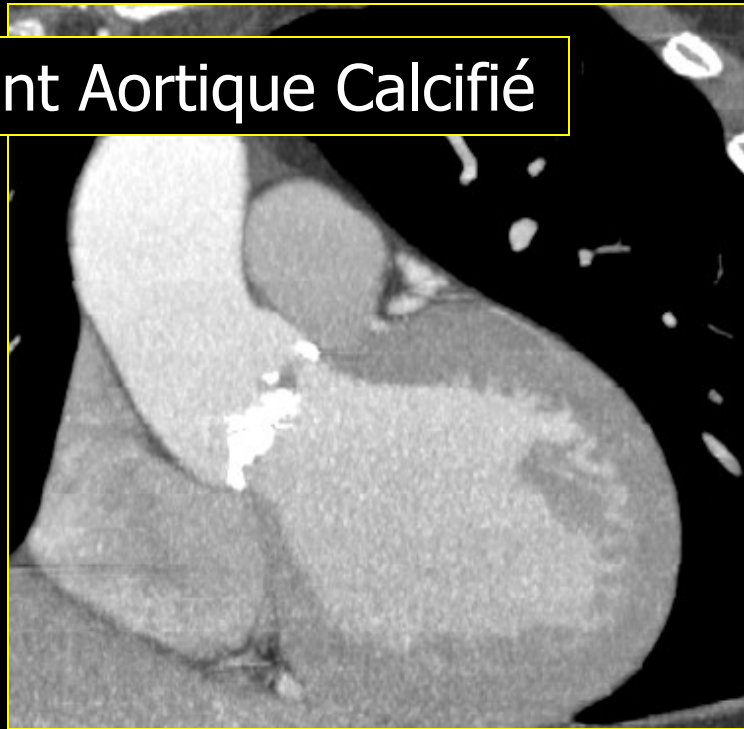


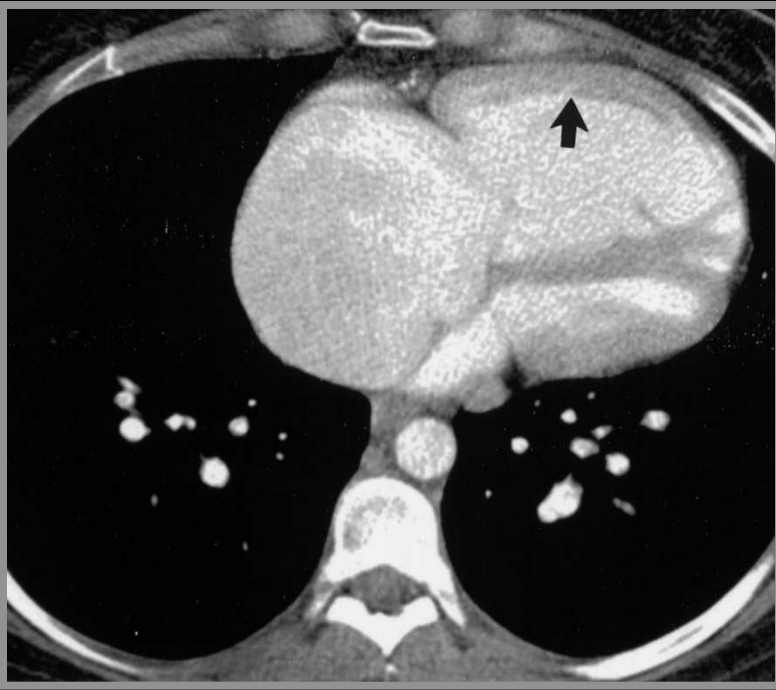
CORONAIRE G
Branche Diagonale



UN PEU DE PATHOLOGIE ET VARIATIONS ANATOMIQUES...

Rétrécissement Aortique Calcifié

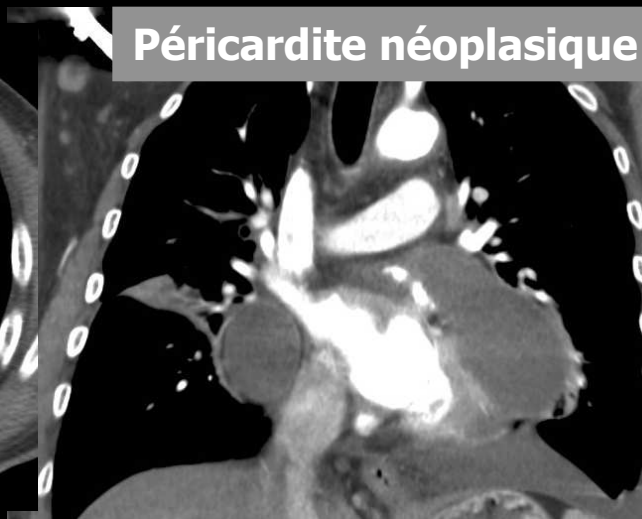
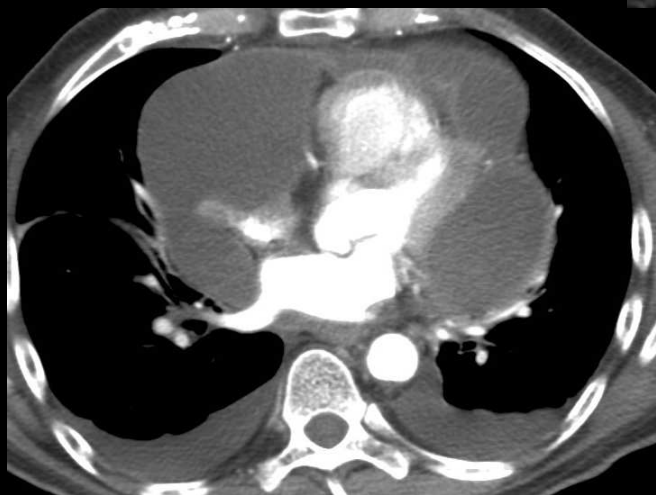




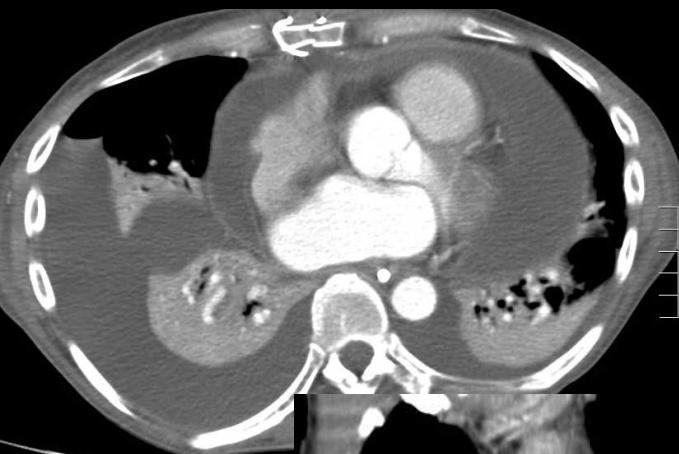
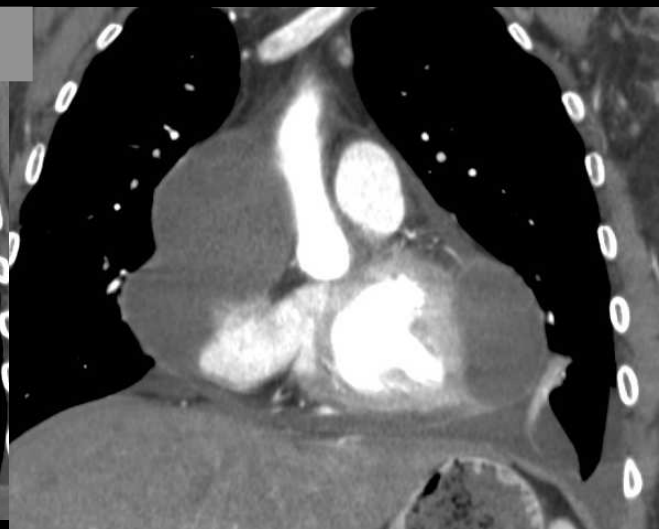
Oreillette droite
HTAP précapillaire

Oreillette gauche
Rétrécissement mitral

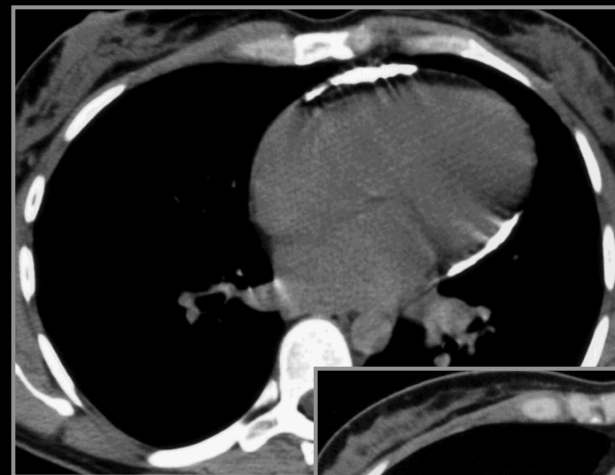
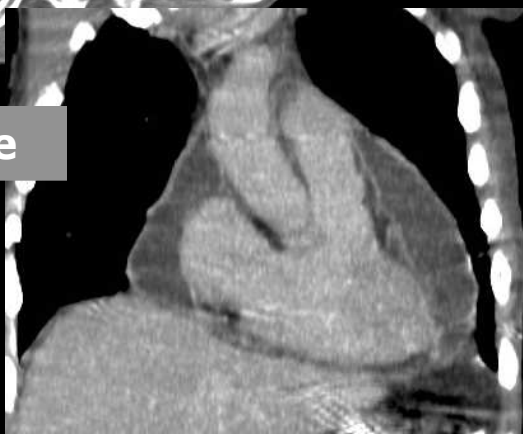




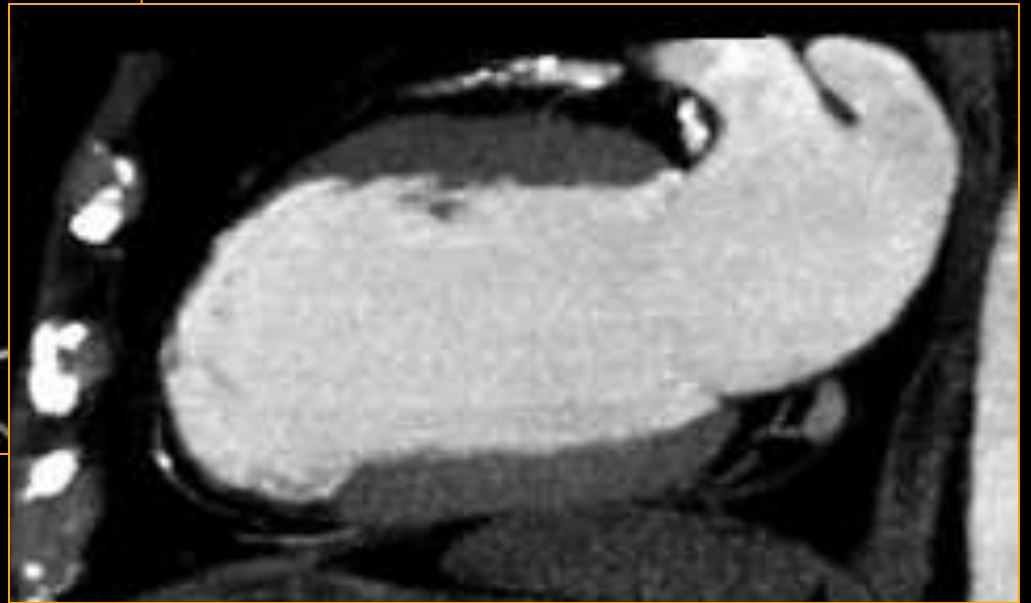
Péricardite néoplasique



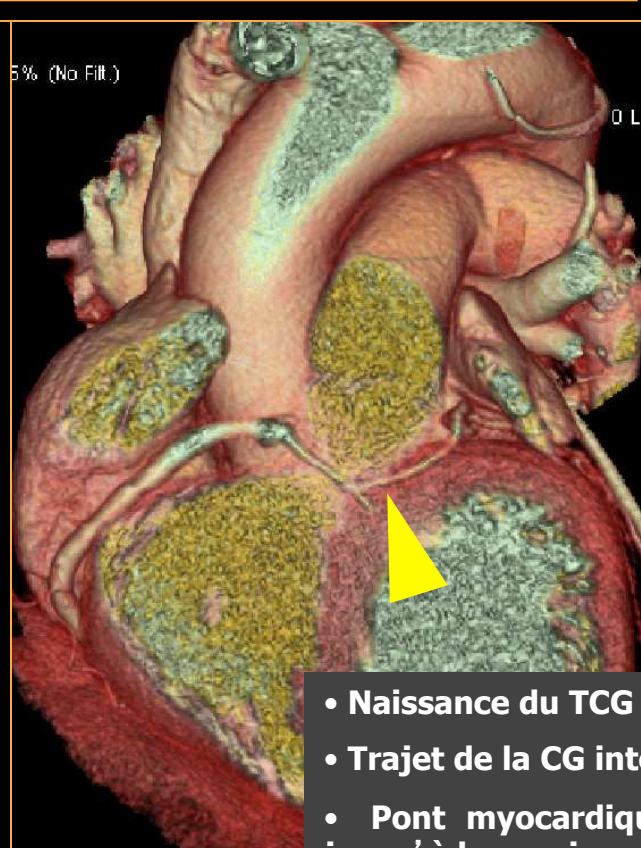
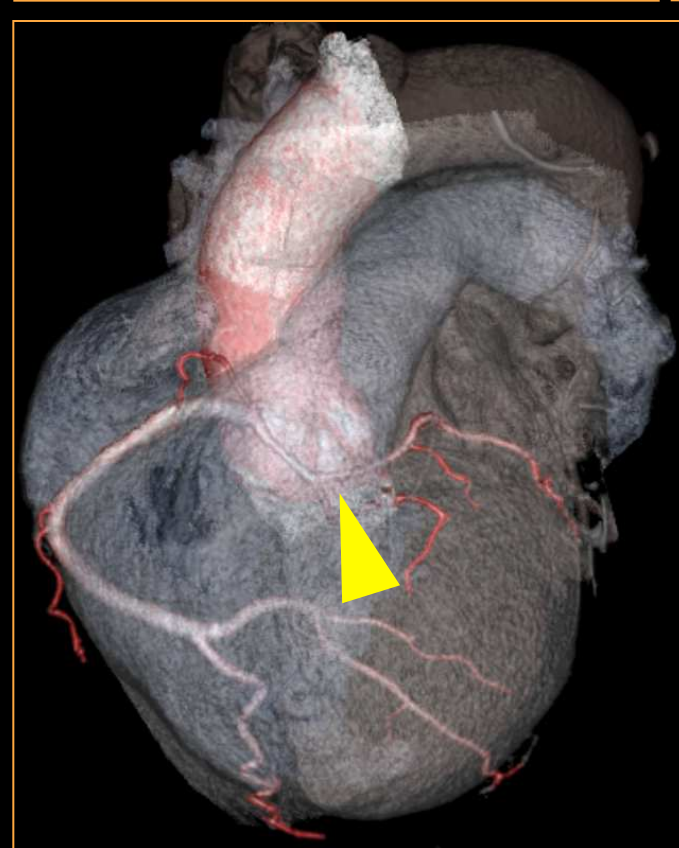
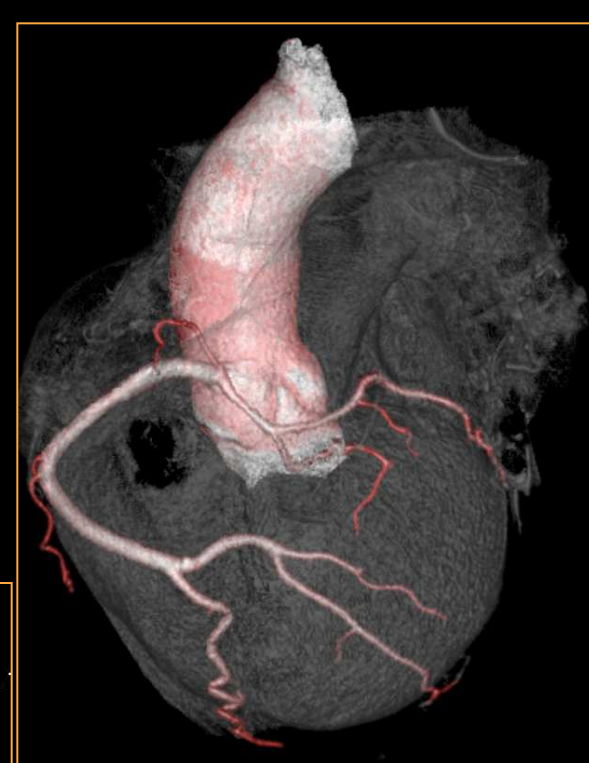
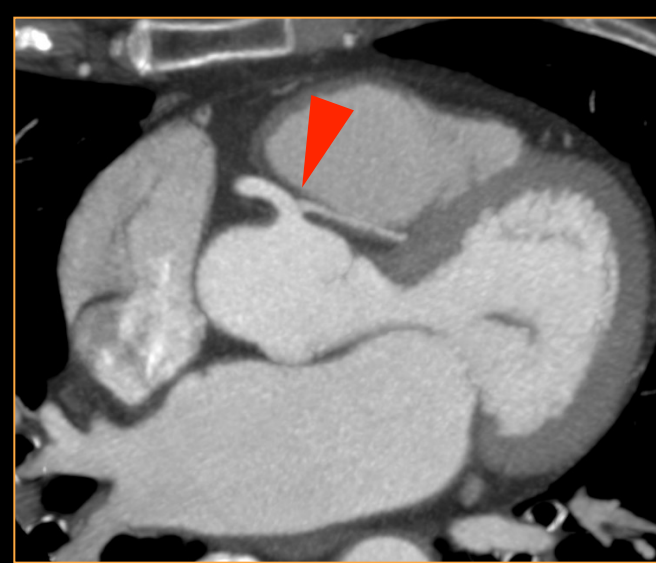
Péricardite



Péricardite constrictive



Anévrisme ventriculaire



- Naissance du TCG de CD1
- Trajet de la CG interartériel, dans la paroi de l'AP
- Pont myocardique profond de l'IVA prox et moy jusqu'à la paroi sous-endocardique du VD



2/ RADIOANATOMIE DU MEDIASTIN

- VAISSEAUX
- CŒUR
- **ŒSOPHAGE**
- CHAINES GANGLIONNAIRES

Définition

- Segment du tube digestif reliant l'hypopharynx à l'estomac
- Tube musculaire de 25 cm de longueur (de C6 à D11)
- 3 régions anatomiques : cervicale, thoracique et abdominale
- Passe en arrière de la trachée, traverse le médiastin postérieur dans toute sa hauteur, se déplace progressivement vers la gauche.
- Traverse le diaphragme à hauteur de T10 par le hiatus oesophagien ou il présente un rétrécissement

Anatomie

Œsophage **cervical** : de C6 à T1, 16 à 21 cm des AD

Œsophage **thoracique** : T1 à T10, 21 à 37 cm des AD

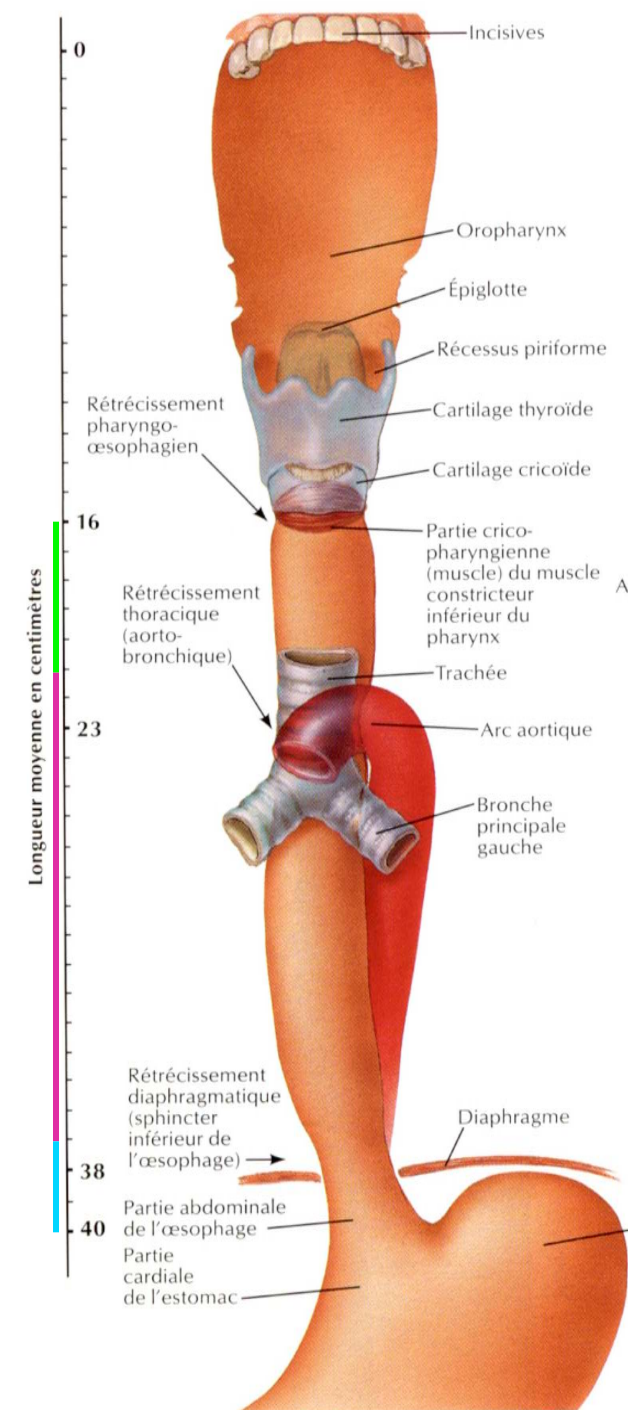
Œsophage **abdominal** : T10-11, 37 à 40 cm des AD

Œsophage intra-thoracique :

Tiers supérieur : de l'orifice supérieur du thorax à la bifurcation trachéale, à 24 cm approximativement des incisives supérieures

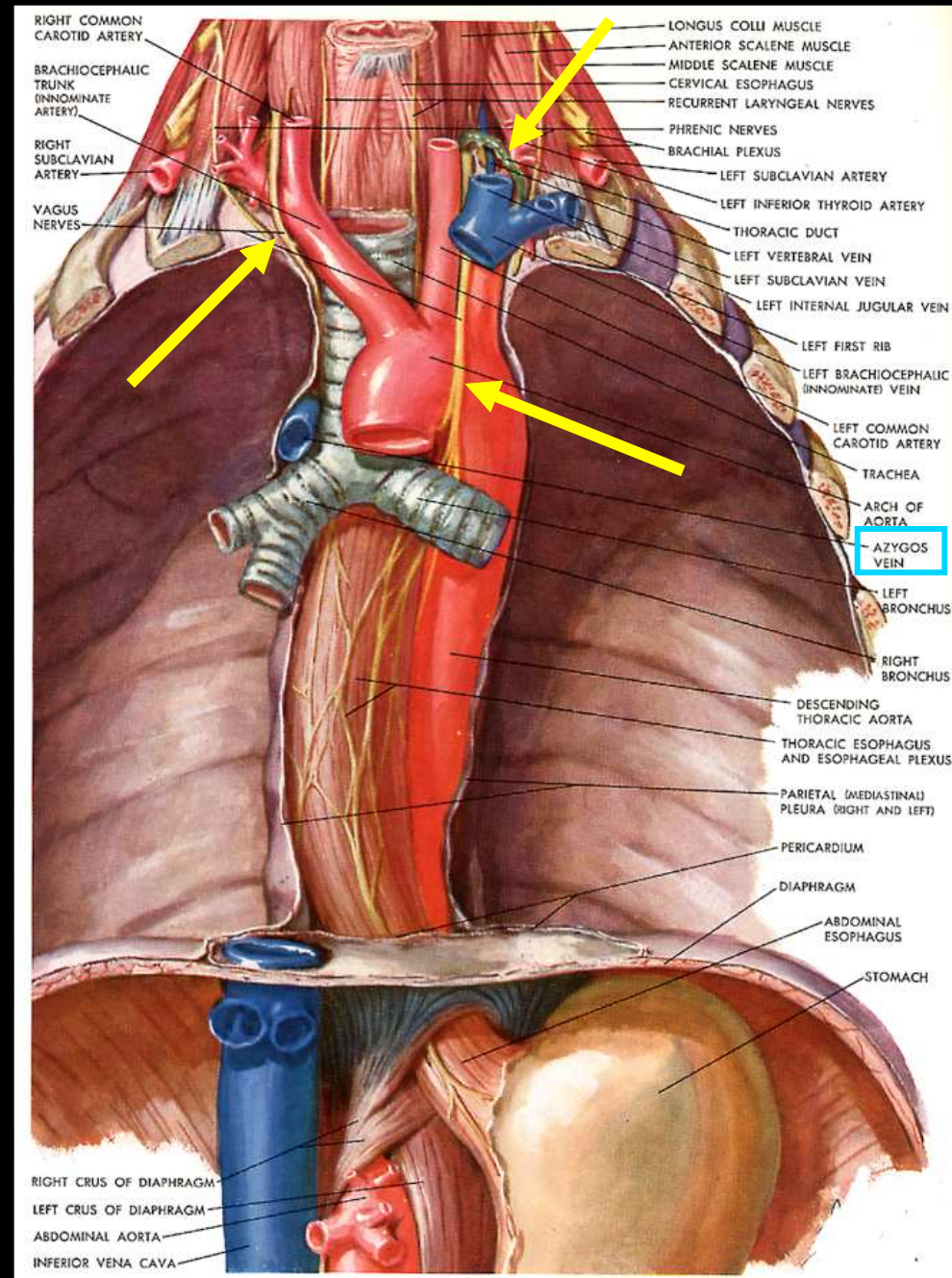
Tiers moyen : débutant à la hauteur de la bifurcation trachéale, de 24 à 32 cm approximativement des incisives supérieures

Tiers inférieur : (incluant l'oesophage abdominal), de 32 à 40 cm approximativement des incisives supérieures.



Rapports

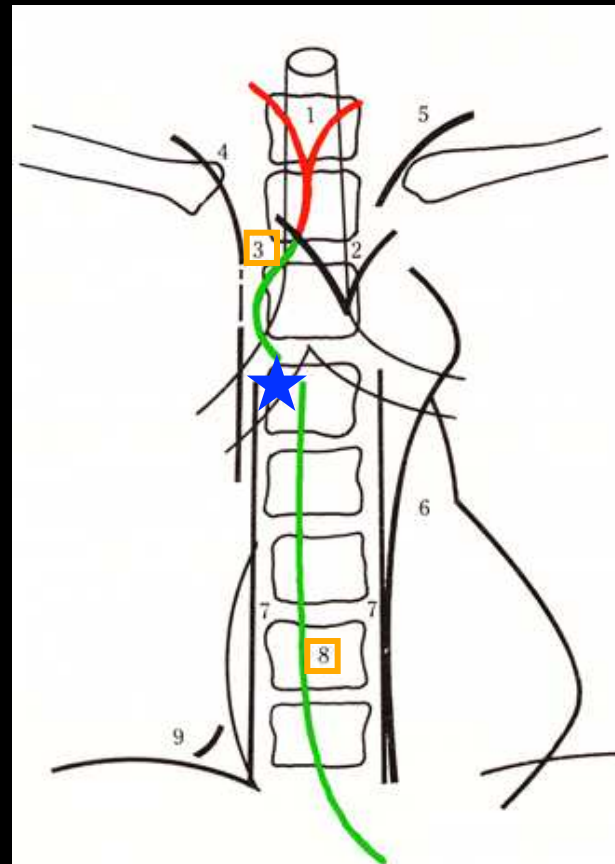
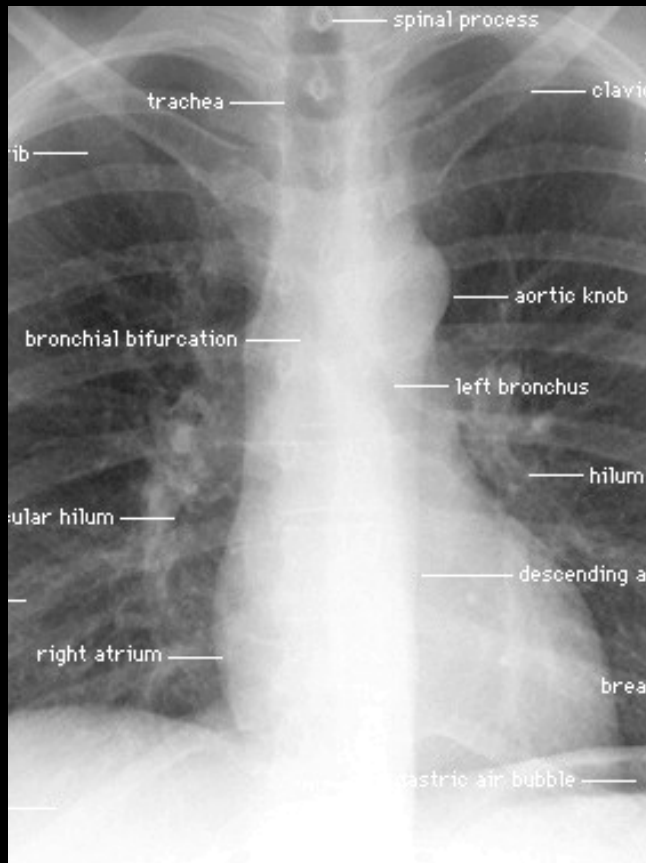
- **Trachée** : axe du médiastin postérieur, bifurque en T5, l'oesophage y adhère par les muscles de Luscha
- **Conduit thoracique** : monte en arrière plaqué contre l'aorte, en rapport avec l'oesophage sur une partie de son trajet.
- **Nerfs vagues** :
droit : passe en arrière de l'oesophage
gauche : en avant de l'oesophage
- **Chaîne orthosympathique latéro-vertébrale** et ses ganglions
-
- **Azygos, hémiazygos, hémiazygos accessoire**



Radio de thorax F/P

Ligne para-azygo-oesophagienne : au dessus de la bifurcation trachéale. Naît de l'interface du poumon droit avec l'œsophage en bas et la veine azygos en haut.

Ligne para-oesophagienne inf droite : en dessous de la bifurcation



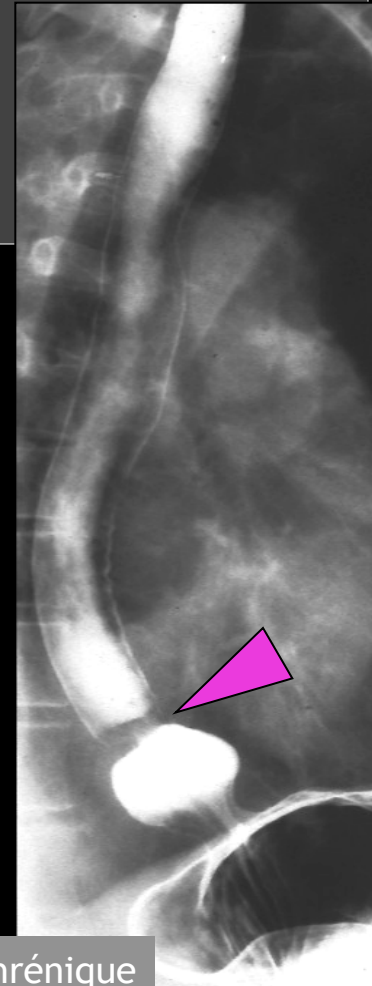
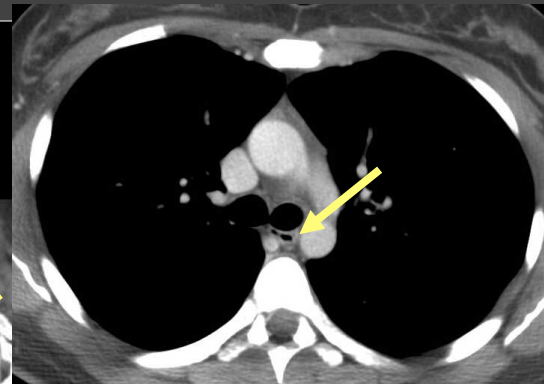
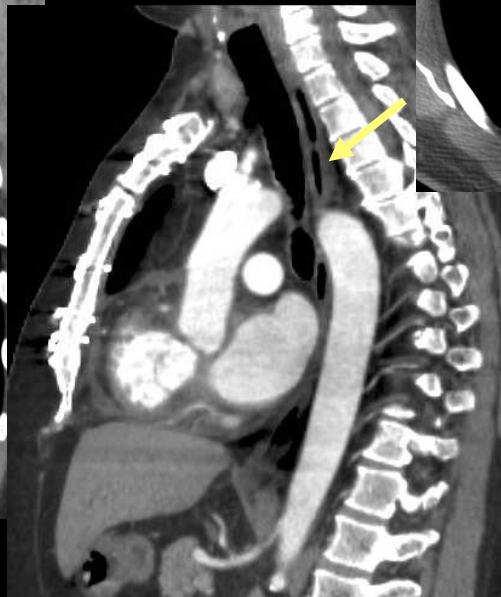
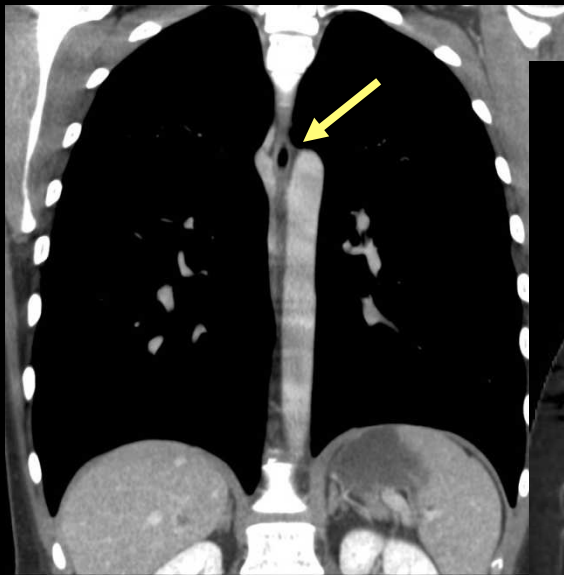
Transit oesophagien

- double contraste

- BaSO4 haute densité-viscosité faible
- air dégluti ou mieux **insufflé**

Scanner: pathologie tumorale ++

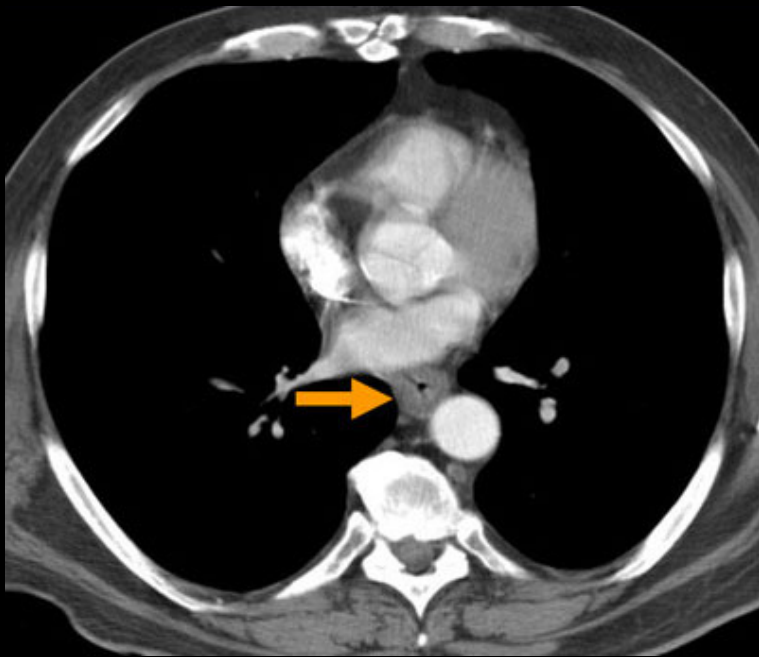
Avec ingestion d'hydrosolubles ++++



ampoule épiphénique



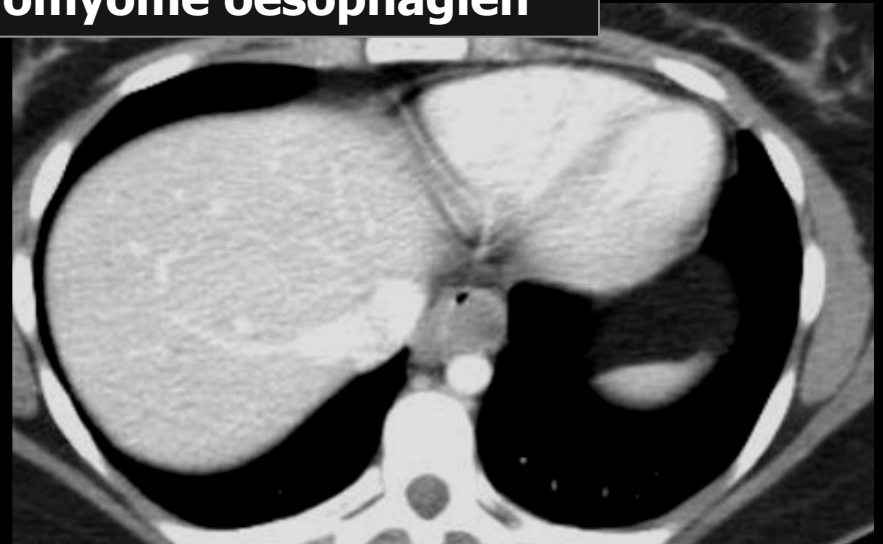
UN PEU DE PATHOLOGIE ET VARIATIONS ANATOMIQUES...

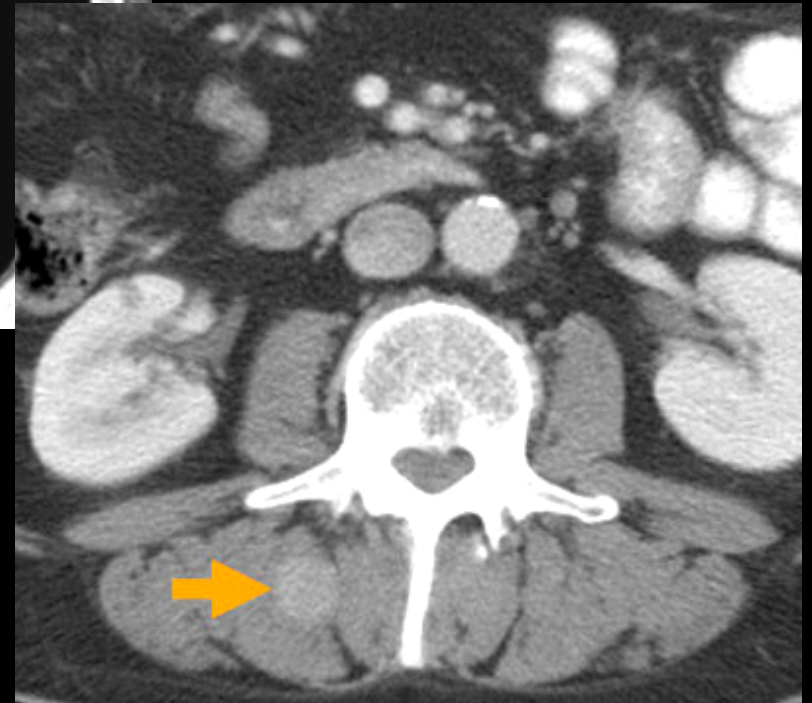
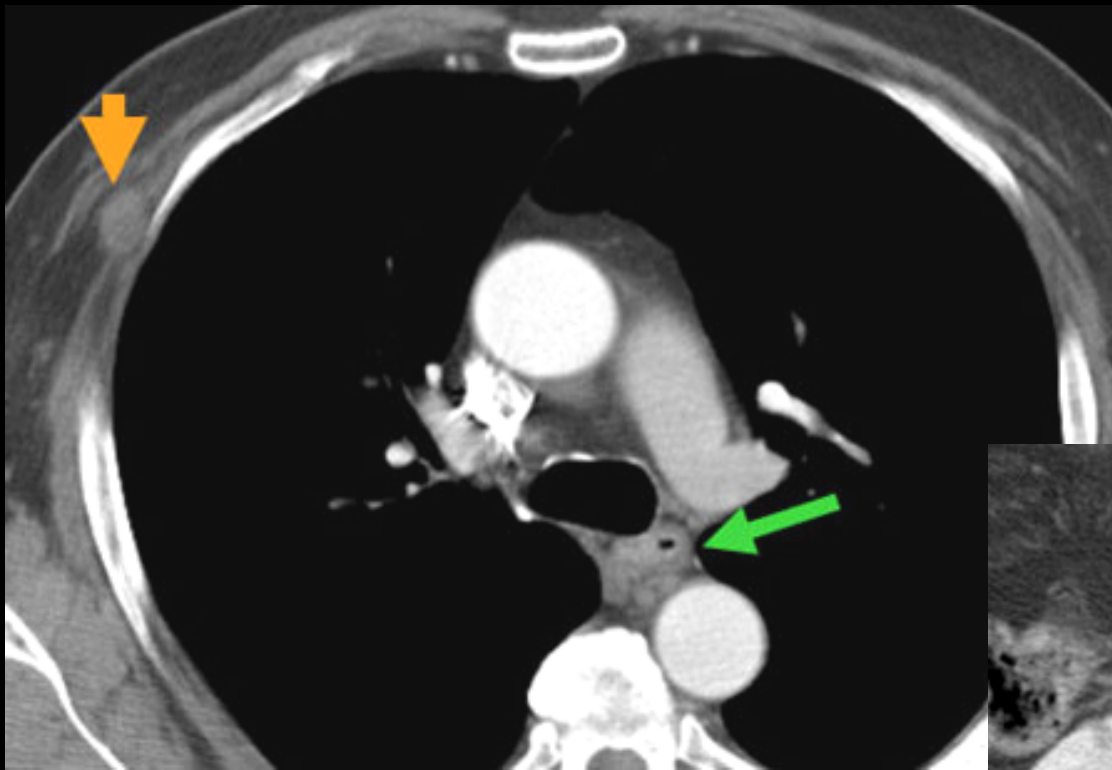


**carcinome épidermoïde
de l'oesophage**

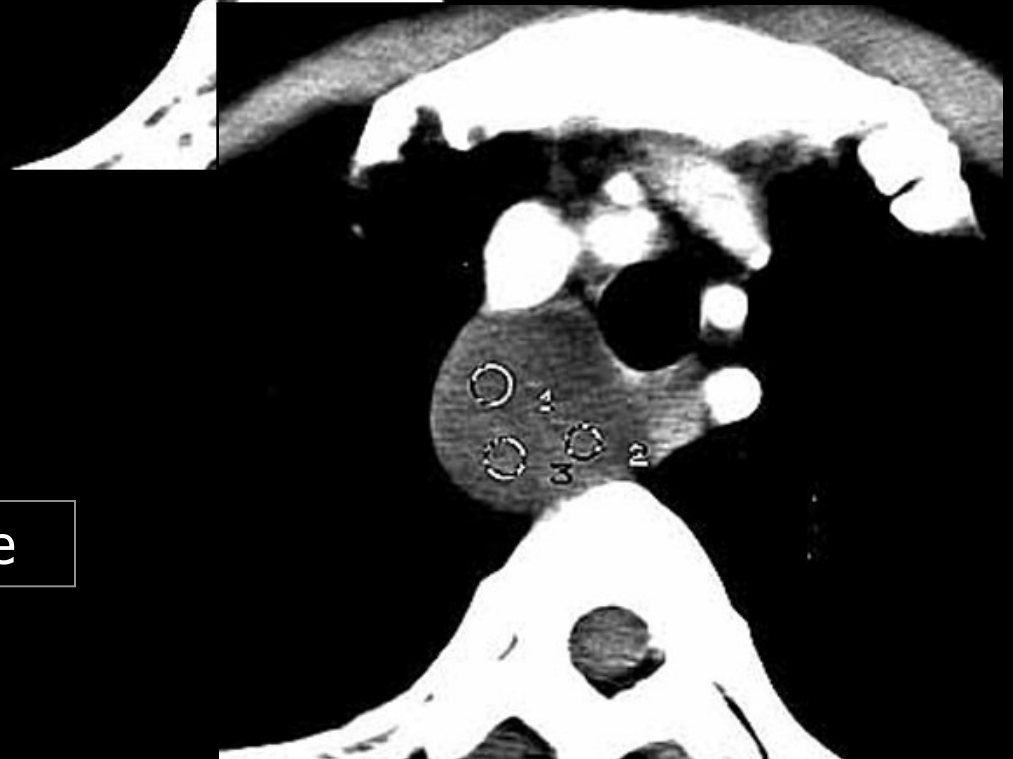
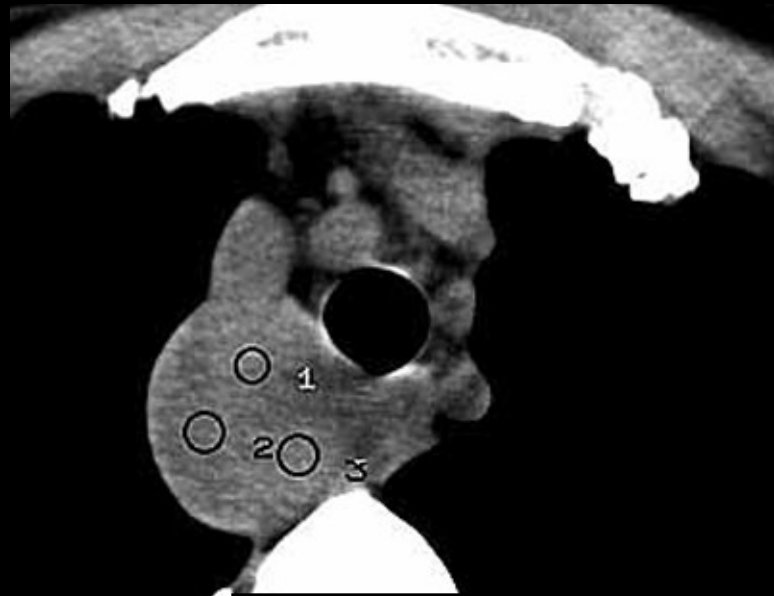


leiomyome oesophagien

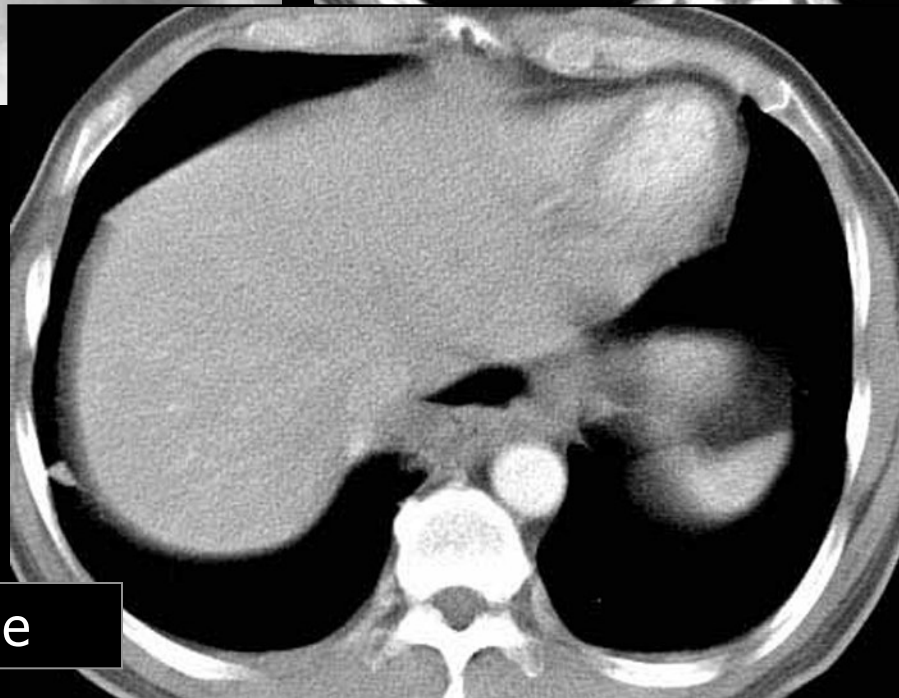
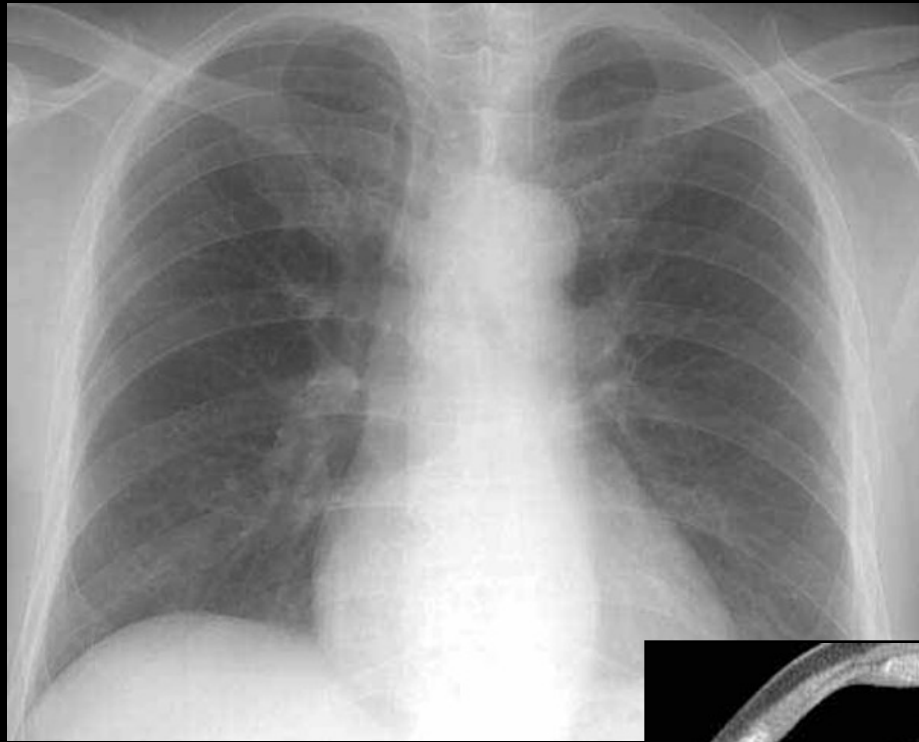




Carcinome épidermoïde
de l'œsophage
et métastases



Duplication oesophagienne



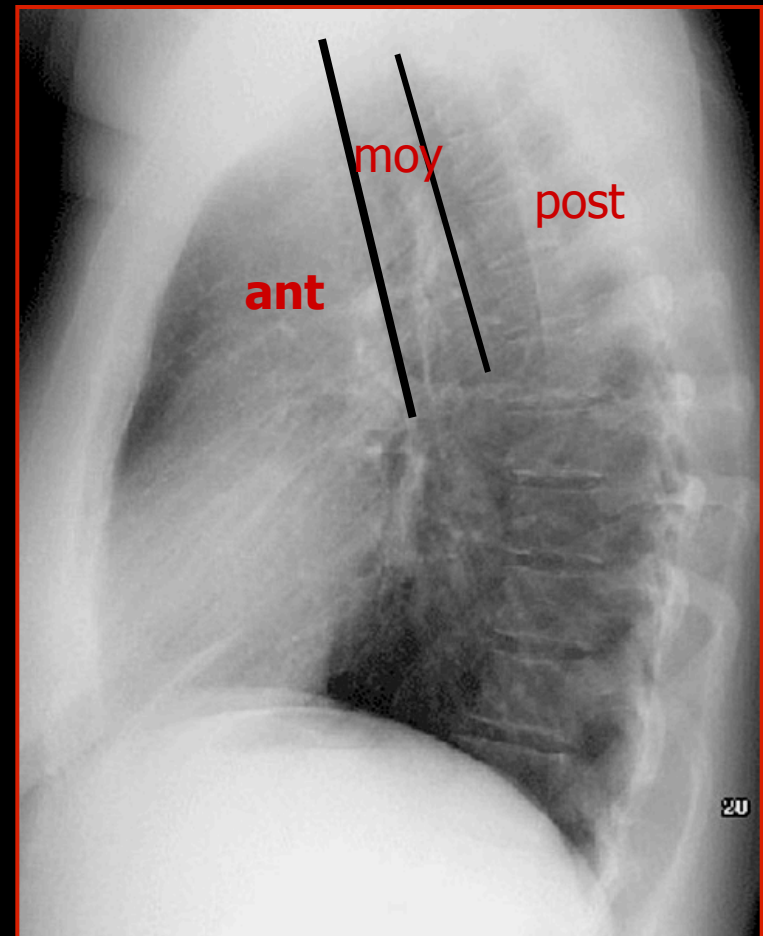
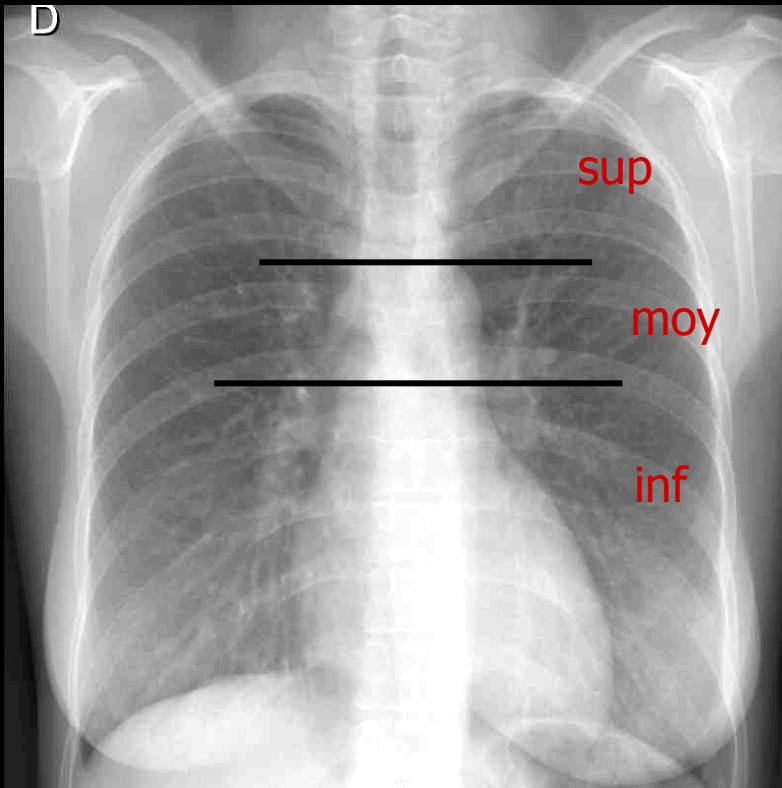
Diverticule épiphrénique

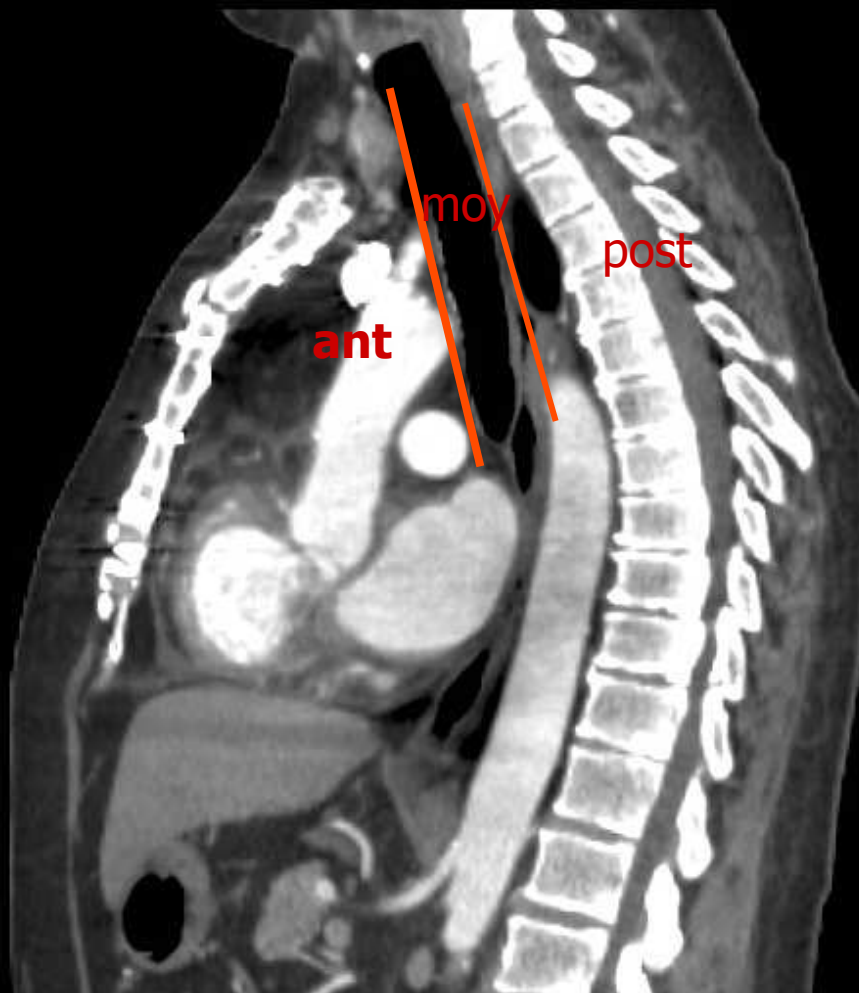
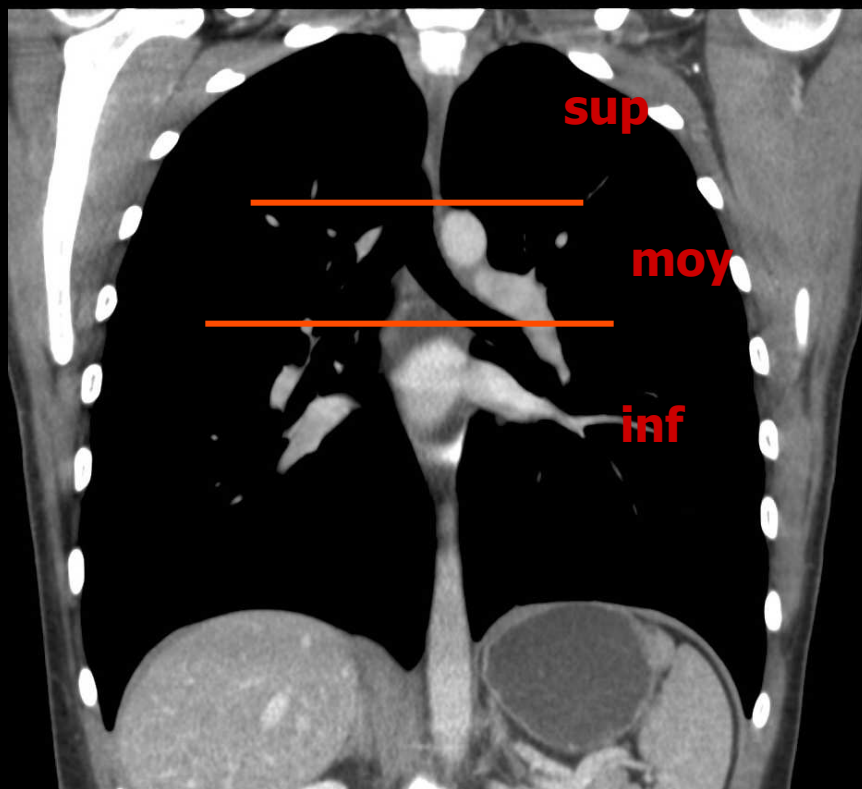
A decorative graphic consisting of two teal squares. The top square is smaller and has a dashed white border. The bottom square is larger and is solid teal.

2/ RADIOANATOMIE DU MEDIASTIN

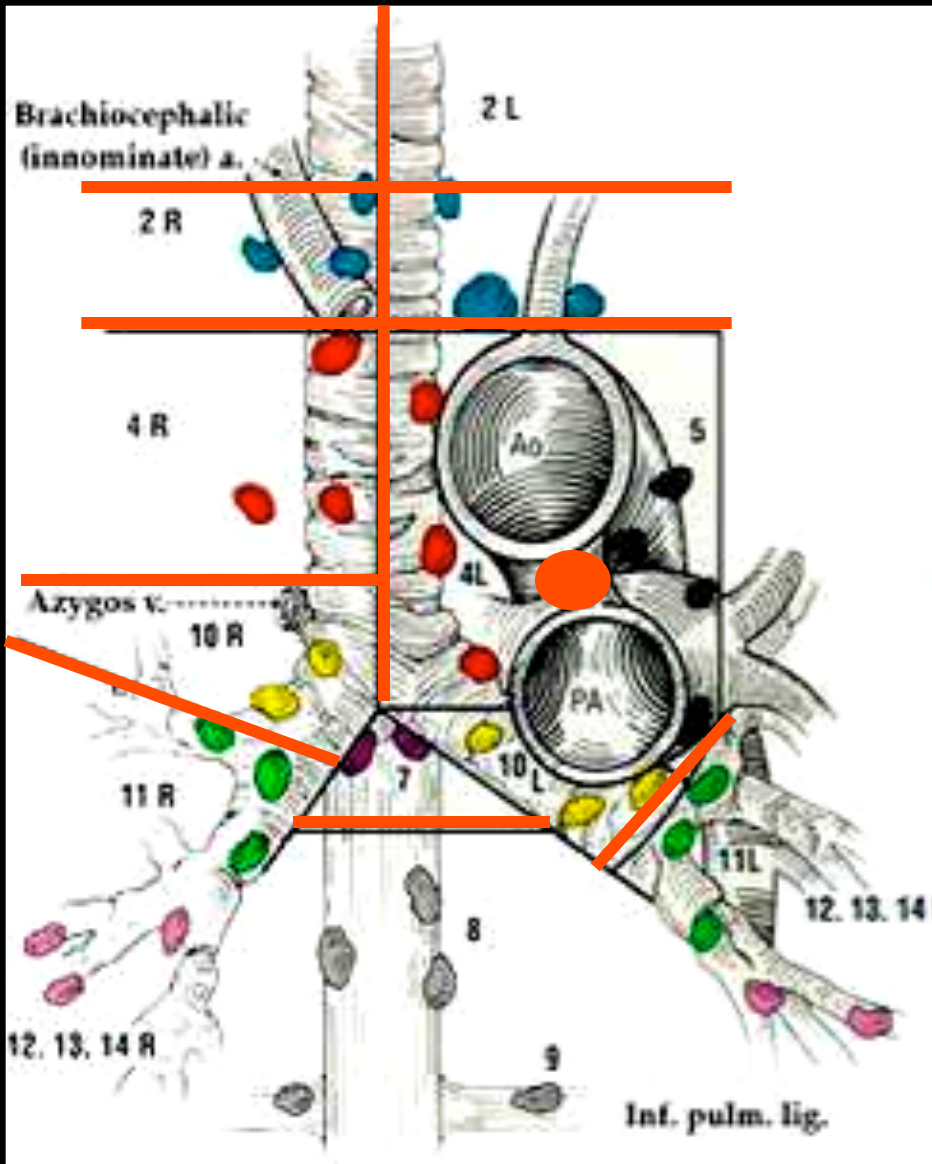
- **VAISSEAUX**
- **CŒUR**
- **ŒSOPHAGE**
- **CHAINES GANGLIONNAIRES**

Les régions du médiastin





Les loges ganglionnaires du médiastin



Repères anatomiques

1/Trachée face antérieure ligne de haut en bas carène

2/TVBC croise milieu face ant trachée

3/Tangente horizontale au bord sup aorte

4/ ligament artériel face ant aorte à origine AP

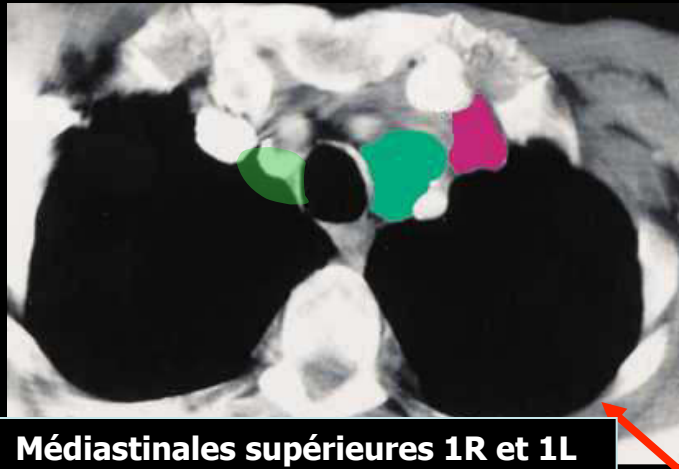
5/bronche souche droite et bronche lobaire supérieure droite

6/bronche souche gauche et bronche lobaire sup

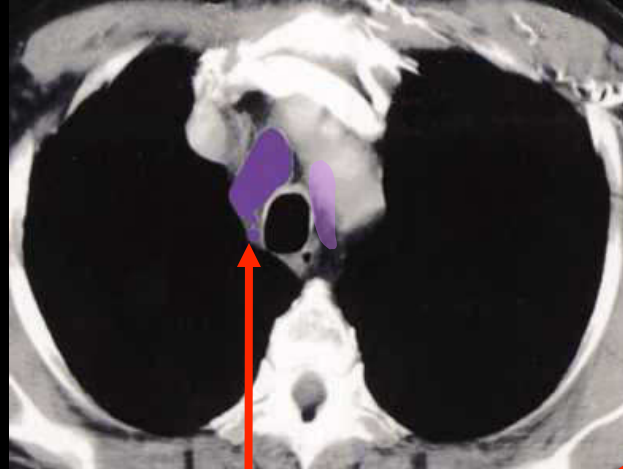
7/région sous carinaire

8/crosse de la veine azygos

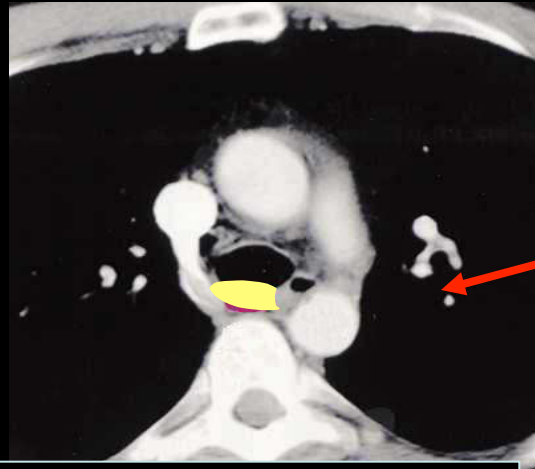
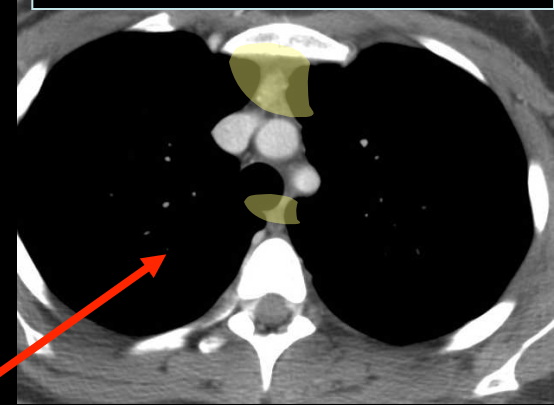
Paratrachéales supérieures 2R et 2L



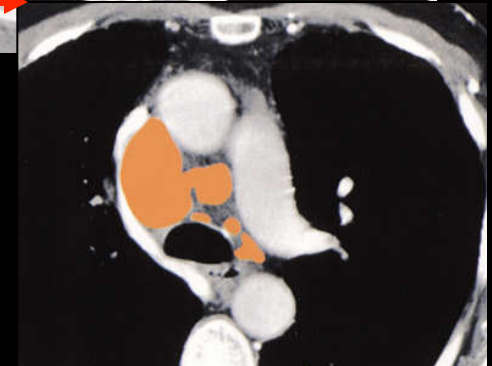
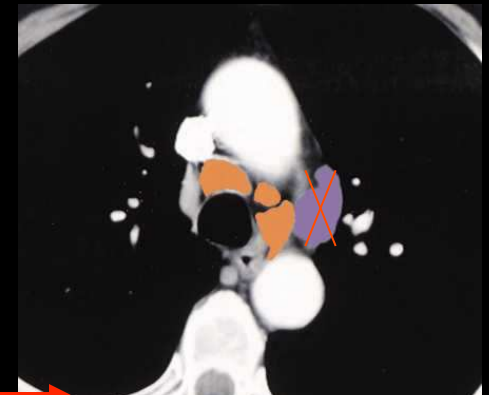
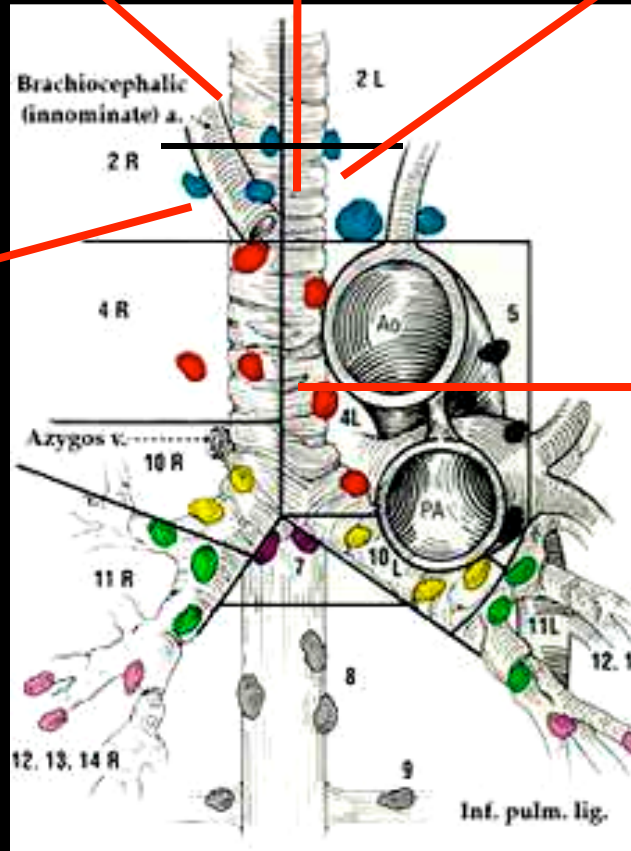
Médiastinales supérieures 1R et 1L



**Prévasculaire 3A
rétrotrachéale 3R**



rétrotrachéale 3R

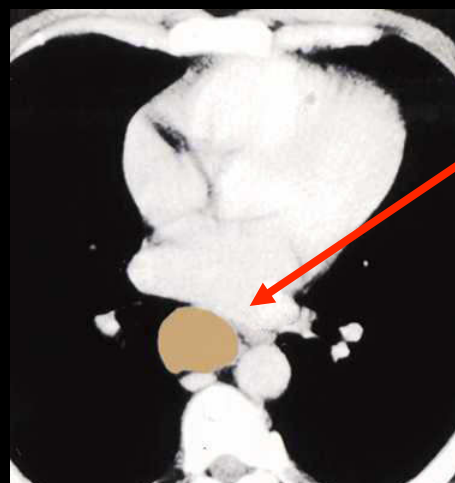
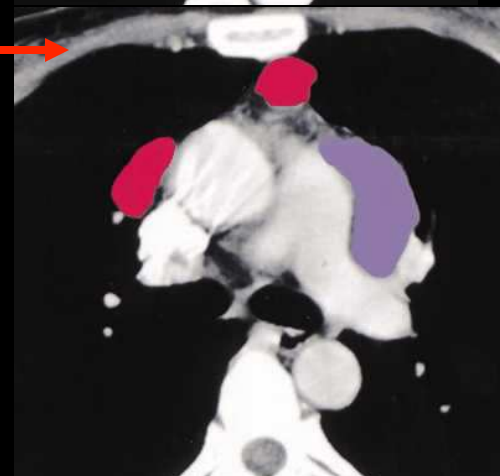


**Paratrachéales inférieures
droite et gauche 4R et 4 L**

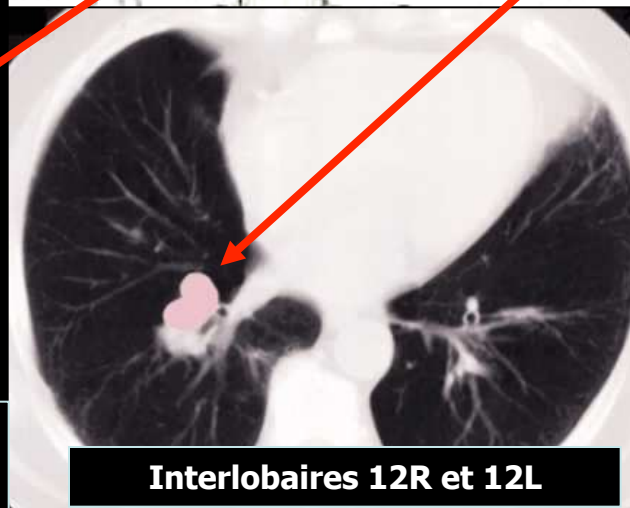
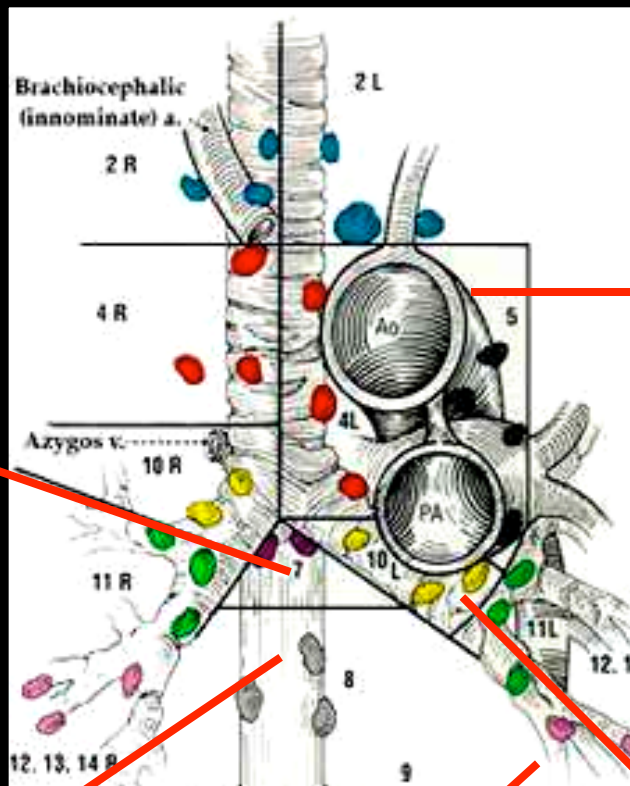
Sous carinaires 7



Fenêtre aorto pulmonaire 5



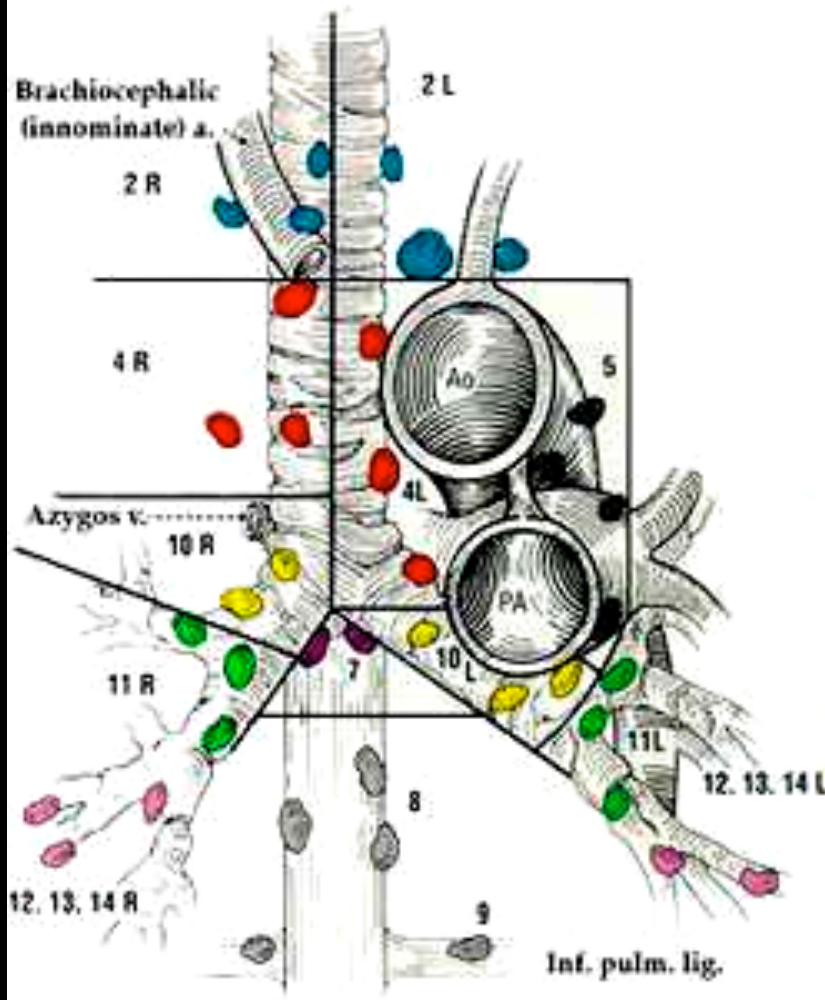
**Para oesophagienne 8
Œsophage sous carinaire**



Interlobaires 12R et 12L



Hilaires 10R et 10L

N1ganglions **homolatéraux** péribronchiques**N2**ganglions **homolatéraux médiastinaux** et/ou sous-carinaires

Regional Nodal Stations For Lung Cancer Staging

N₁ NODES

SUPERIOR MEDIASTINAL NODES

LOCATION

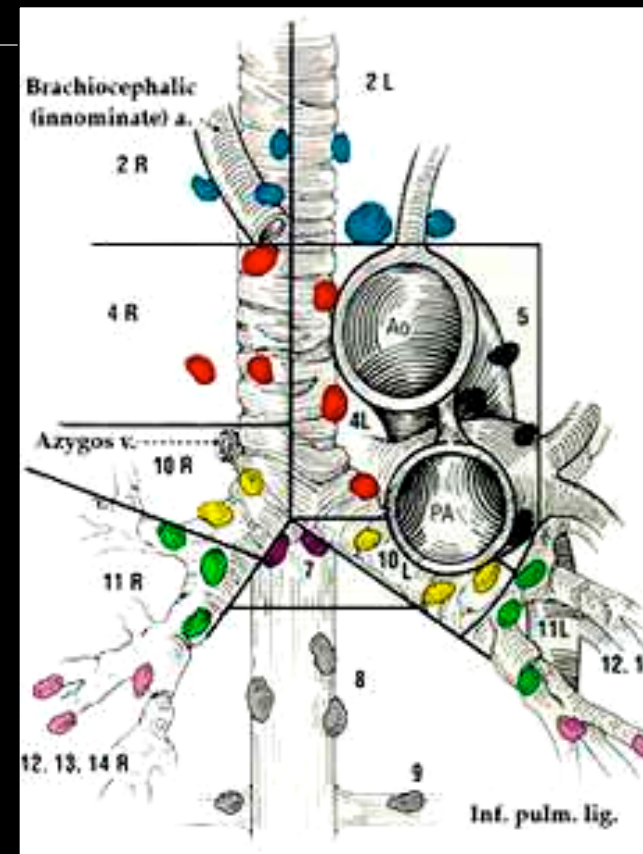
- | | | |
|-------|-------------------------------------|--|
| ● 2R | Right upper paratracheal nodes | Between intersection of caudal margin of innominate a. with trachea and the apex of the lung (supra-innominate nodes). |
| ● 2L | Upper left paratracheal nodes | Between top of aortic arch and apex of the lung (supra-aortic nodes). |
| ● 4R | Right lower paratracheal nodes | Between intersection of caudal margin of innominate a. with trachea and cephalic border of azygos v. |
| ● 4L | Left lower paratracheal nodes | Between top of aortic arch and carina (medial to ligamentum arteriosum) |
| ● 10R | Right tracheo-bronchial angle nodes | From cephalic border of azygos v. to origin of RUL bronchus. |
| ● 10L | Left tracheo-bronchial angle nodes | Between carina and LUL (medial to ligamentum arteriosum). |

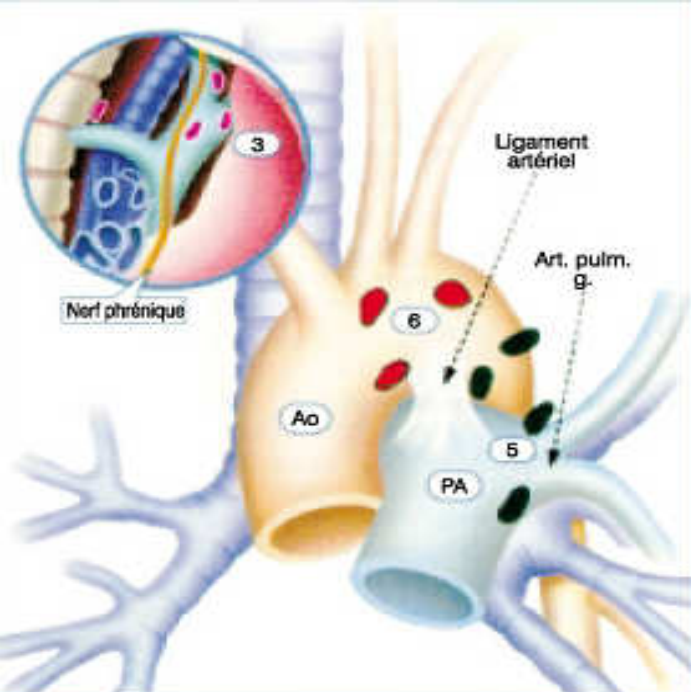
N 3

ganglions **controlatéraux** médiastinaux et/ou sous-carinaires

ganglions scalènes ou sus claviculaires

Contre-indiquent la chirurgie ; rôle respectifs du PET CT +++ et de la médiastinobiopsie pour le diagnostic d'envahissement des ganglions contro-latéraux





Ganglions médiastinaux supérieurs

- 1 Médiastinaux les plus hauts
- 2 Paratrachéaux supérieurs
- 3 Prévasculaire et rétrotrachéaux
- 4 Paratrachéaux inférieurs (y compris ganglions de l'azygos)

N₂ = 1 seul chiffre, homolatéraux

N₃ = 1 seul chiffre, controlatéraux ou sus-claviculaire

Ganglions aortiques

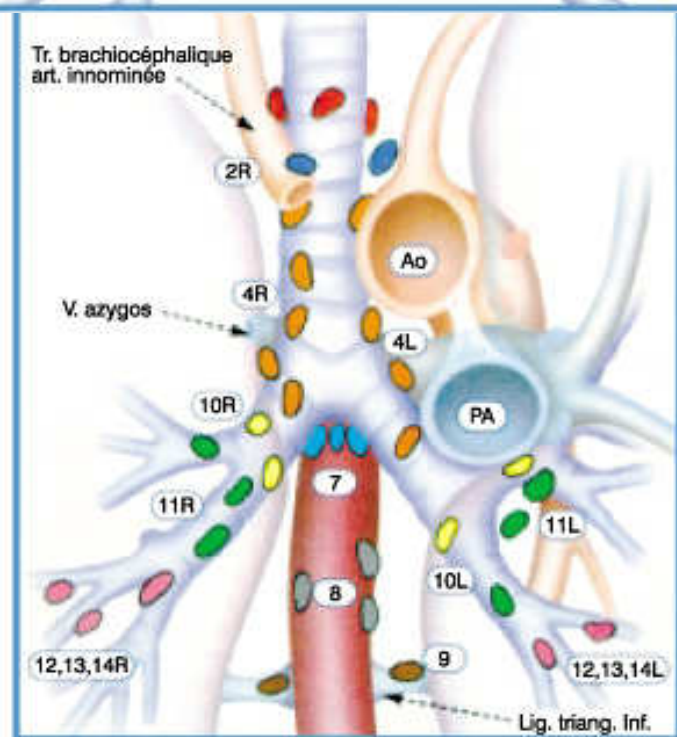
- 5 Sous-aortiques (communication interaorto-pulmonaire)
- 6 Para-aortiques (de l'aorte descendante ou diaphragmatique)

Ganglions médiastineaux inférieurs

- 7 Sus-carénares
- 8 Paraoesophagiens (sous la carène)
- 9 Du ligament triangulaire

Ganglions N₁

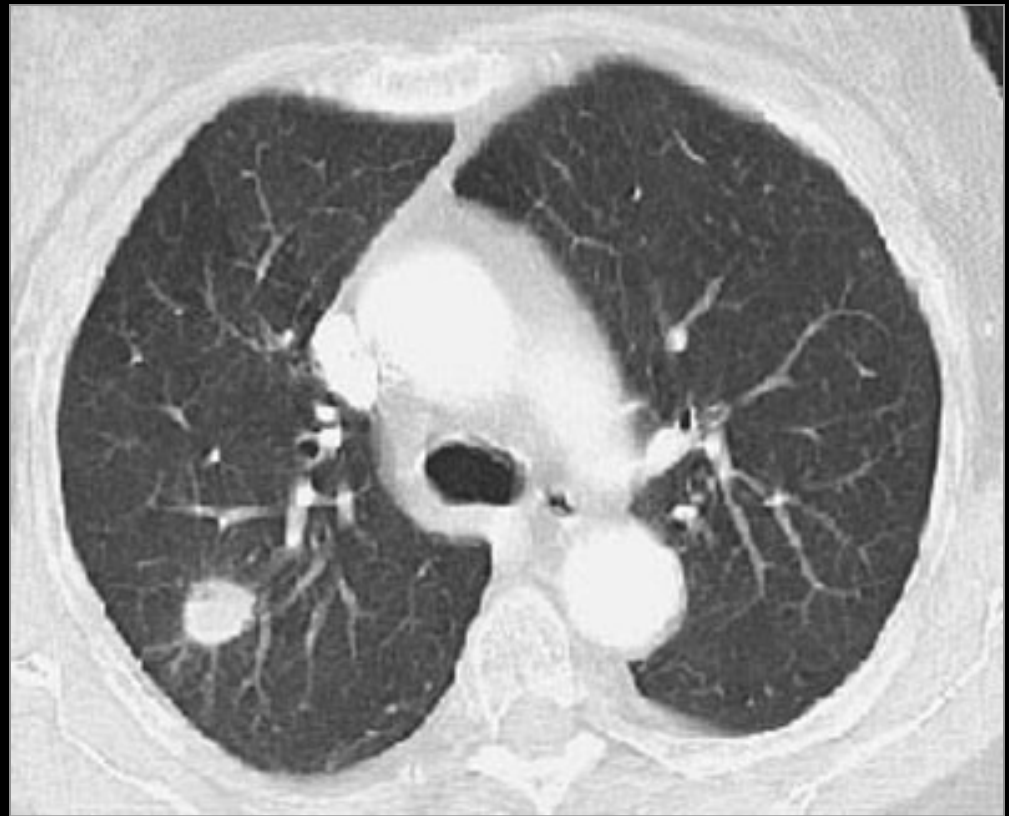
- 10 Hilaires
- 11 Interlobaires
- 12 Lobaires
- 13 Segmentaires
- 14 Sous-segmentaires



Classification TNM des CNPC

T1

Tumeur $\leq$ ou $=$ à 3 cm dans sa plus grande dimension, entourée par du poumon ou de la plèvre viscérale, sans invasion proximale à une bronche lobaire



Quand $\leq$ 3 cm : NODULE

Classification TNM

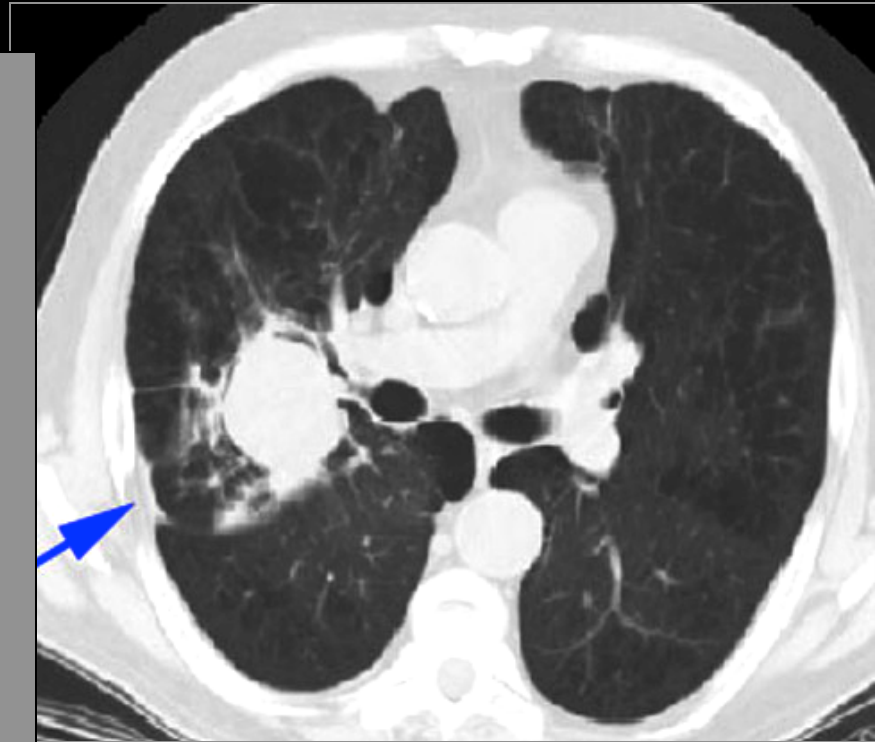
T2

Tumeur présentant une des caractéristiques suivantes de taille ou d'extension :

> 3 cm dans sa plus grande dimension,
envahit la bronche souche, > ou = à 2 cm en distal de la carène,

envahit la plèvre viscérale,

associée à une atélectasie ou une pneumopathie obstructive étendue, à la région hilare mais ne concernant pas le poumon complet.



Classification TNM

T3

Tumeur, quelle que soit sa taille :

qui envahit directement des structures suivantes : la paroi thoracique (tumeurs apicales incluses), le diaphragme, la plèvre médiastinale, le péricarde pariétal,

ou située à moins de 2 cm de la carène mais sans l'envahir,

ou associée à une atélectasie ou une pneumopathie obstructive d'un poumon.



Classification TNM

T4

- Tumeur, quelle que soit sa taille :
- qui envahit une des structures suivantes : le médiastin, les gros vaisseaux, la trachée, l'œsophage, un corps vertébral, la carène,
- ou associée à un épanchement pleural ou péricardique malin, ou à un ou plusieurs nodules dans le même lobe.



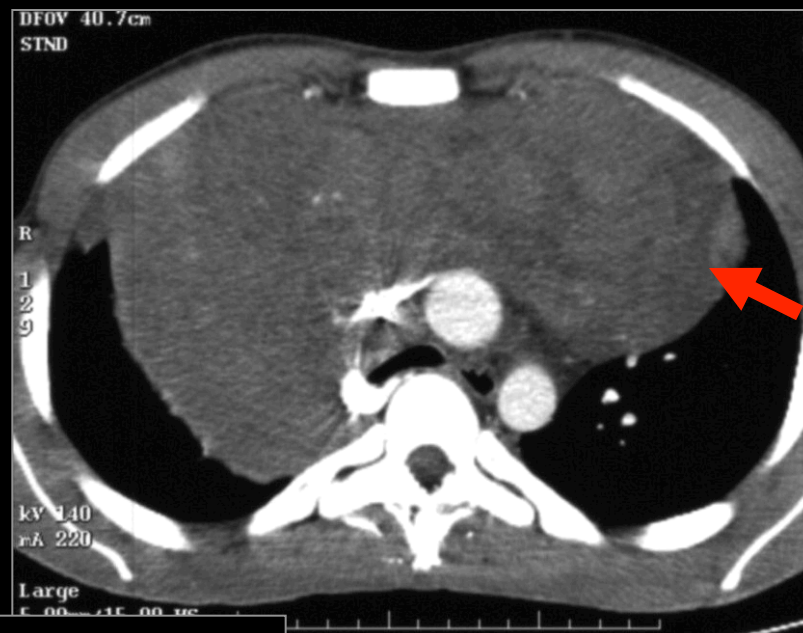


UN PEU DE PATHOLOGIE ET VARIATIONS ANATOMIQUES...

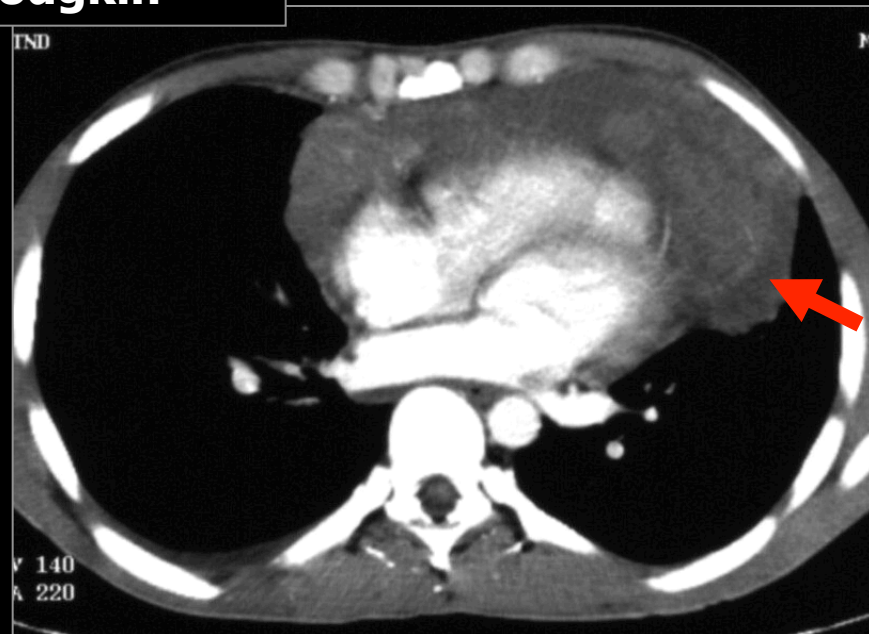
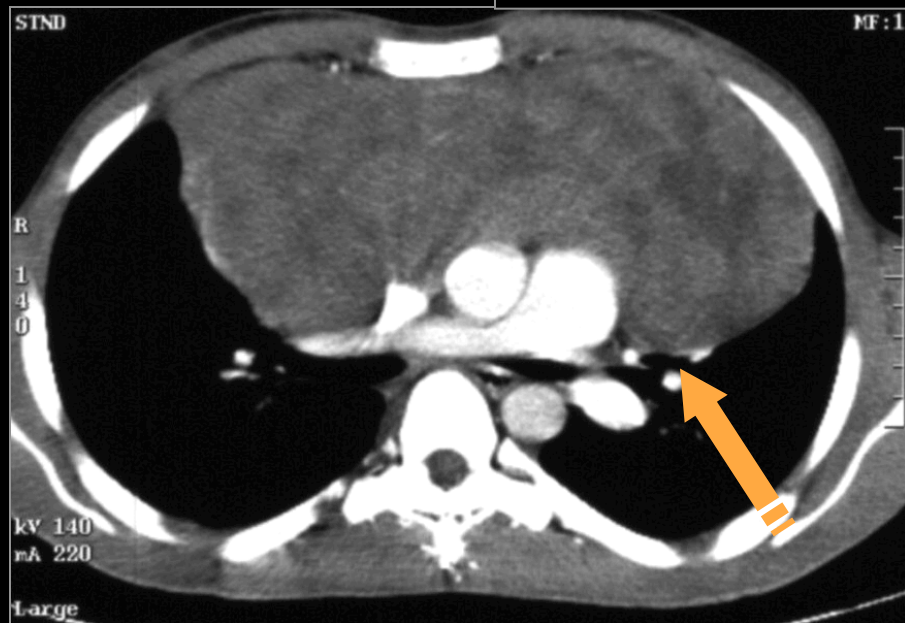


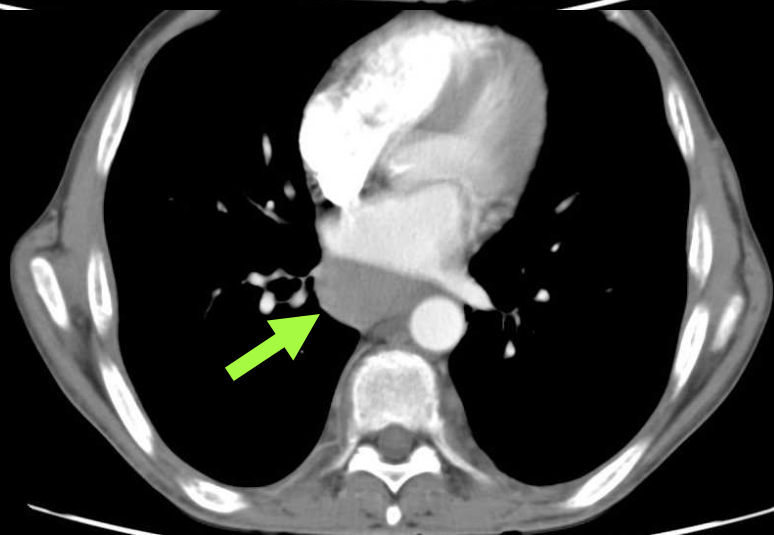
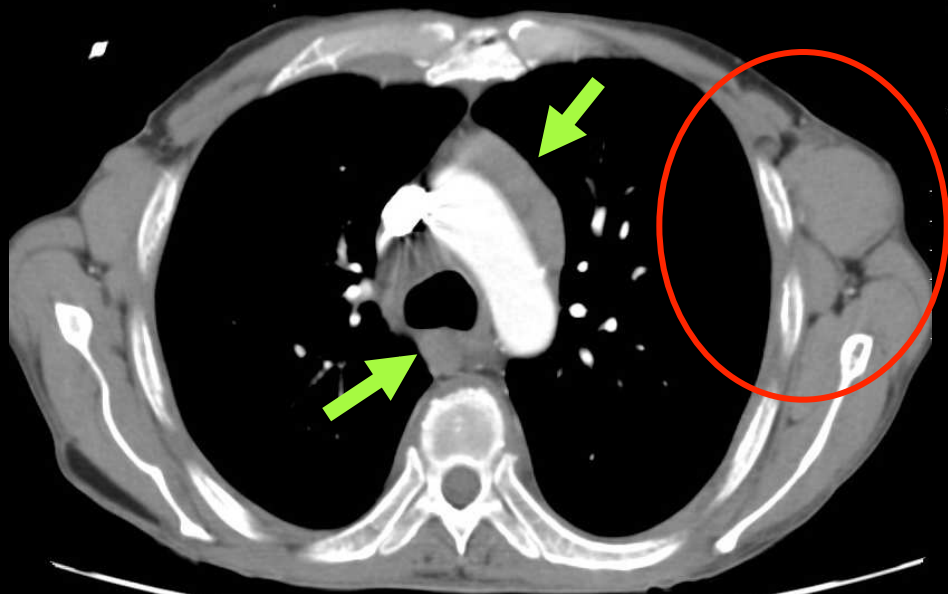
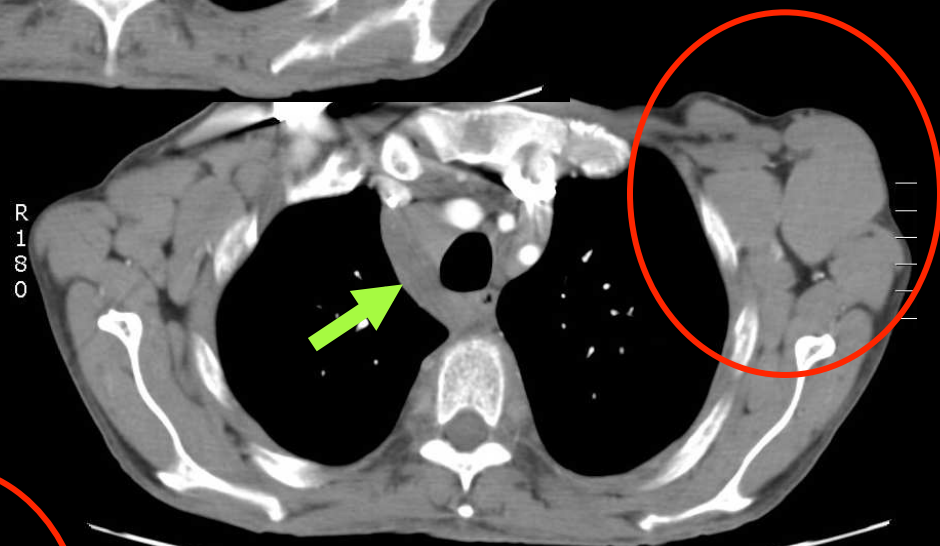
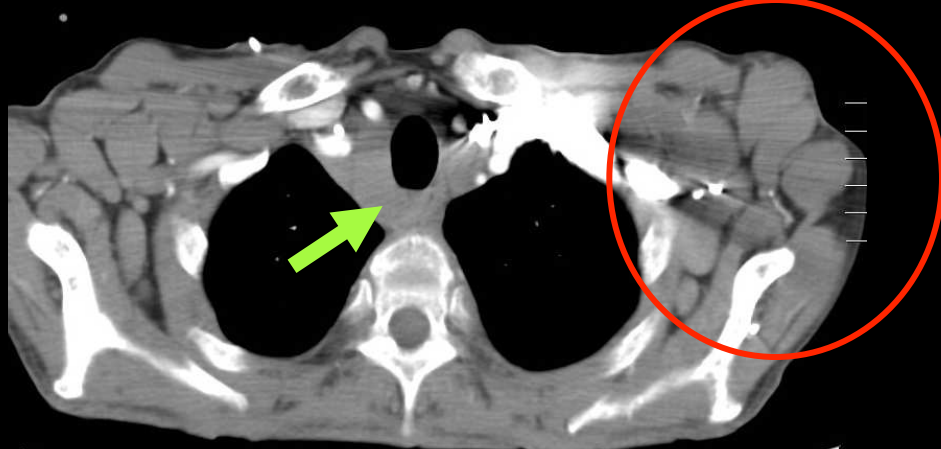
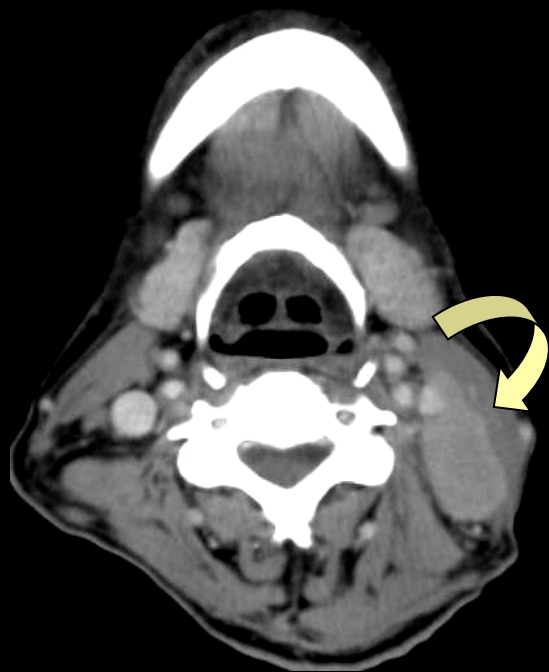
Thymus

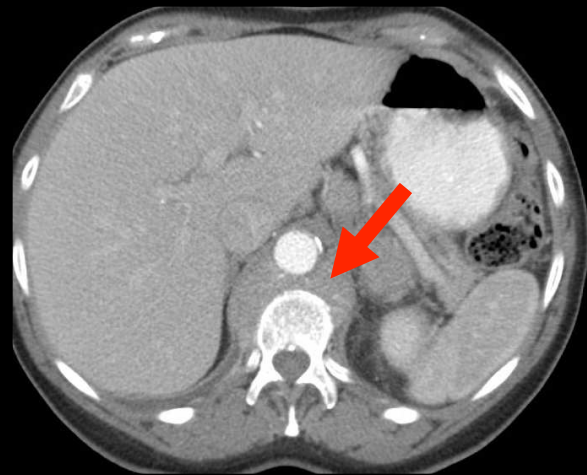
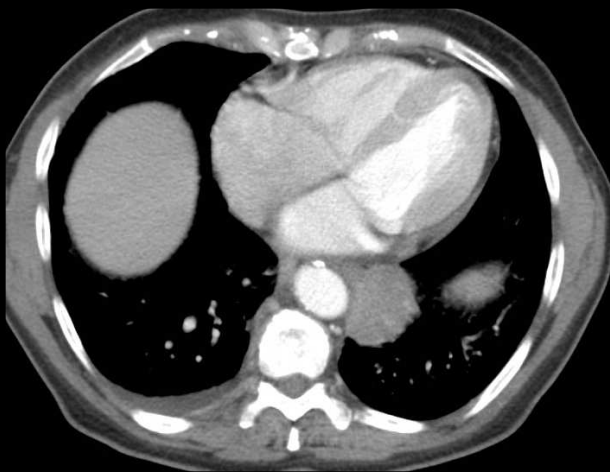
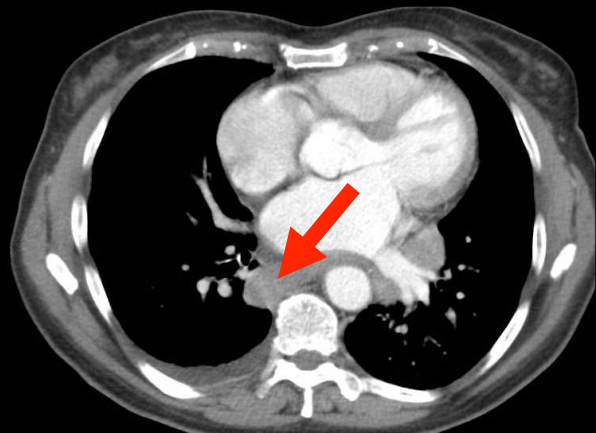
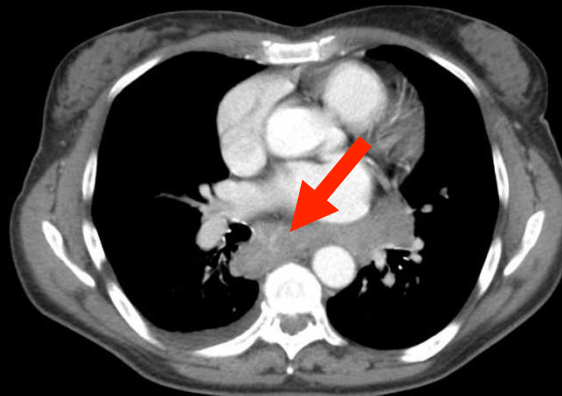
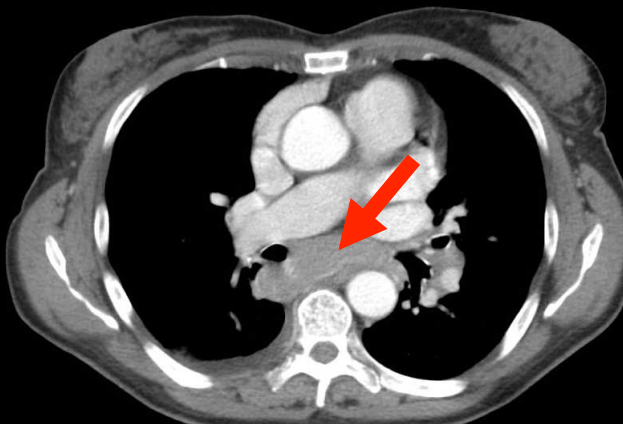
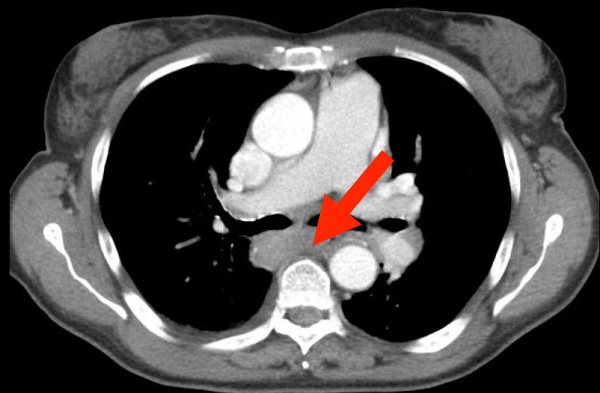
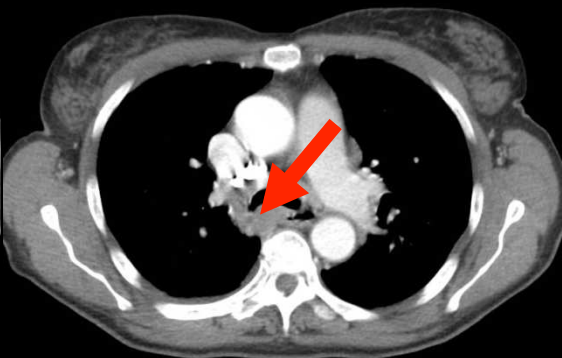
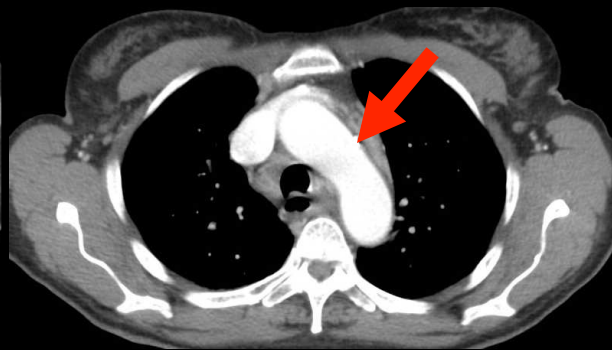
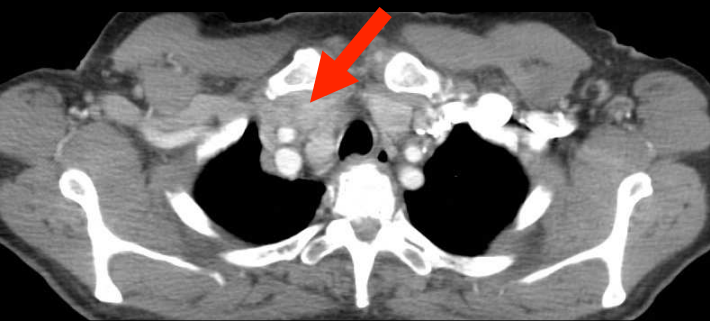


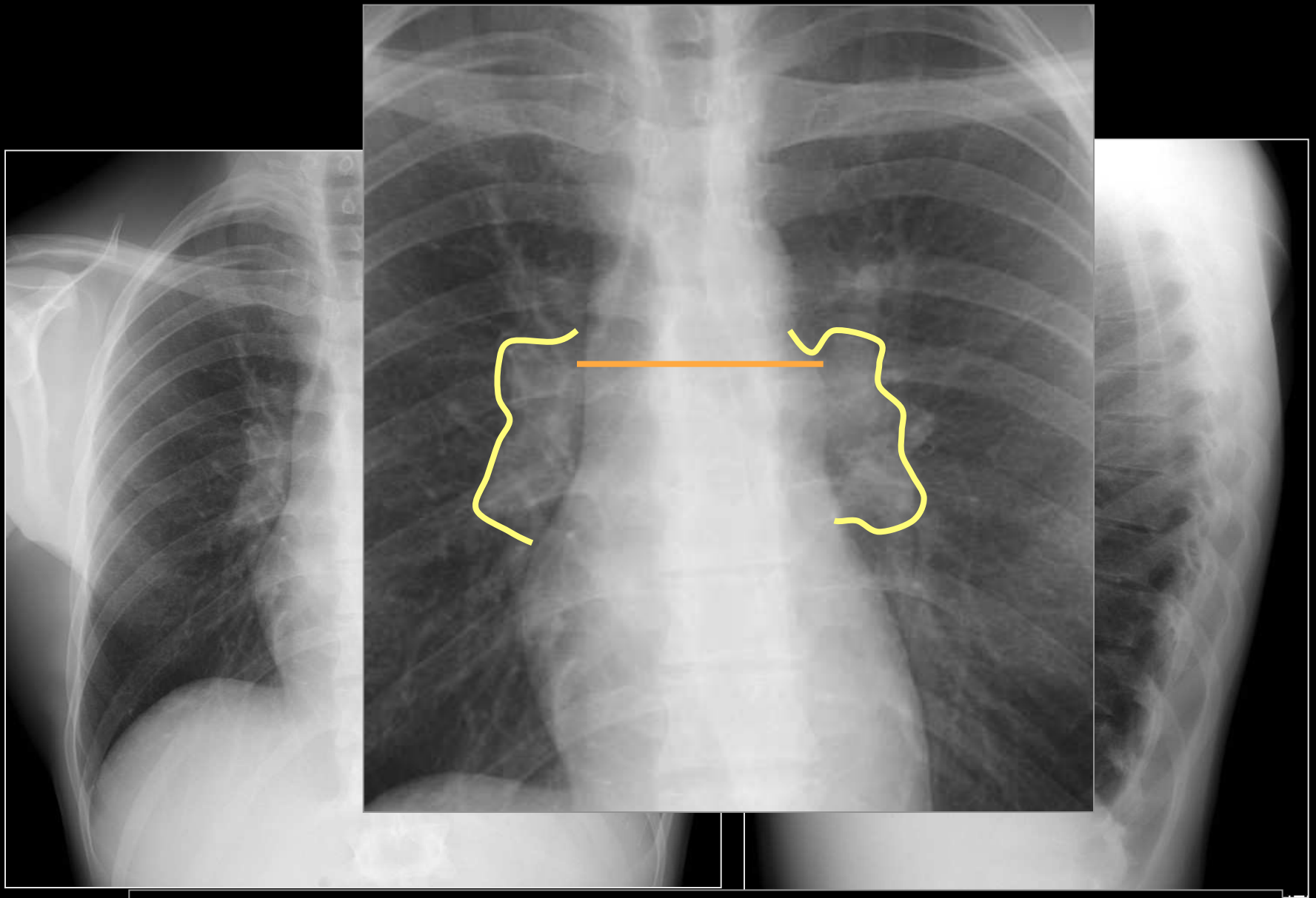


Maladie de Hodgkin

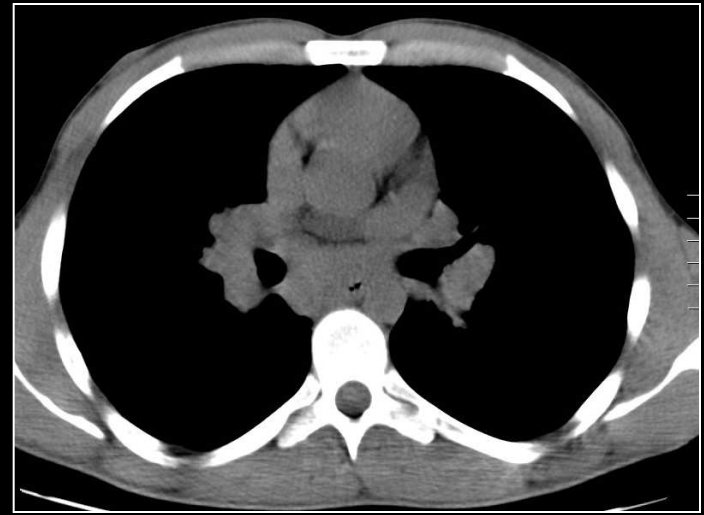
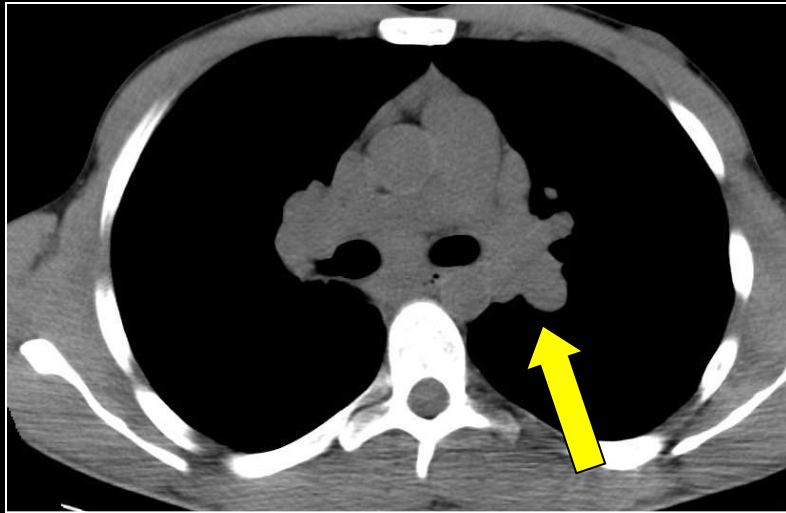




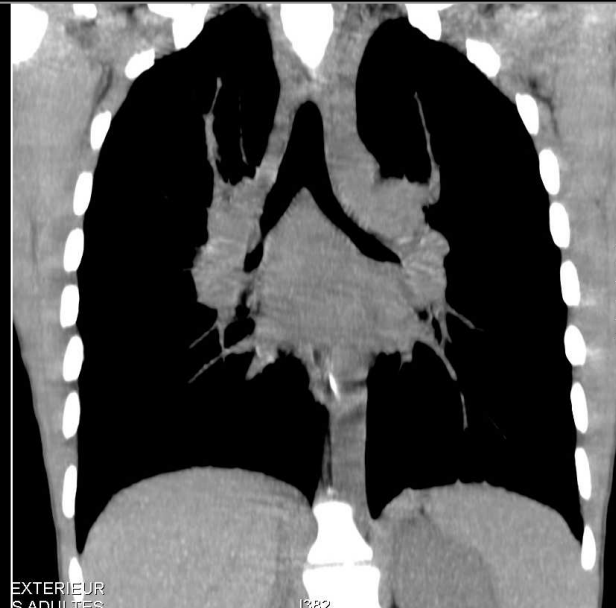
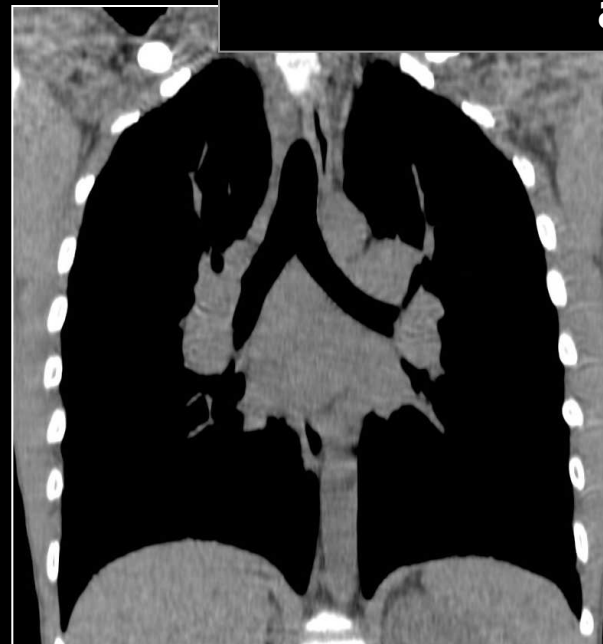




**ADENOPATHIES ET GANGLIONS MEDIASTINAUX à
prédominance inter bronchique**

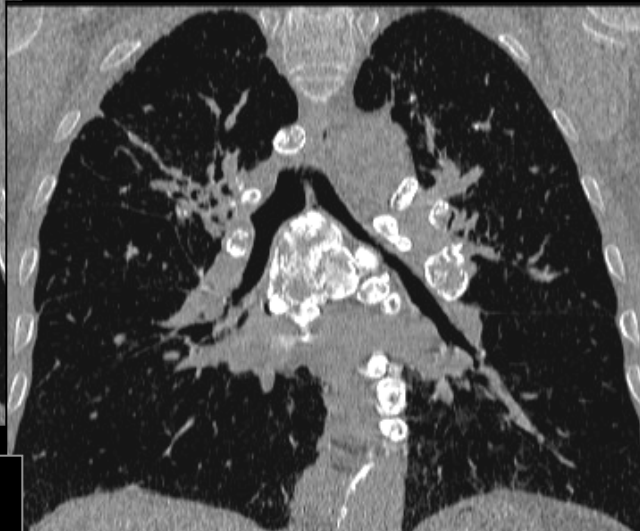
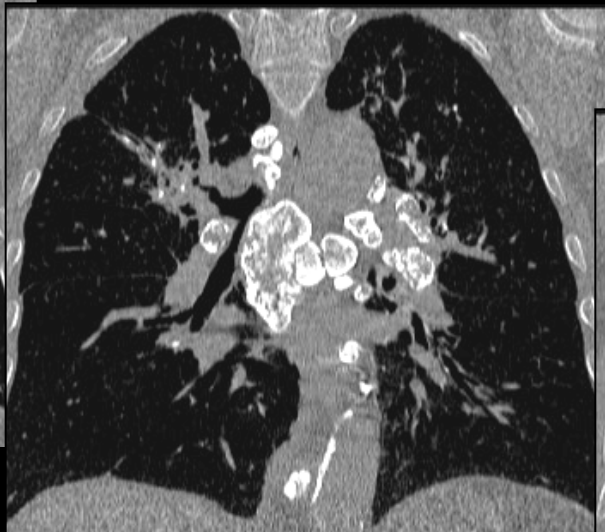
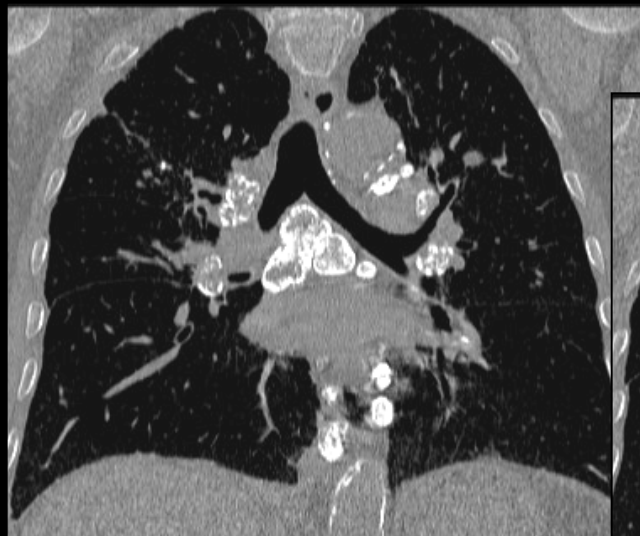


ADENOPATHIES ET GANGLIONS MEDIASTINAUX à prédominance inter bronchique



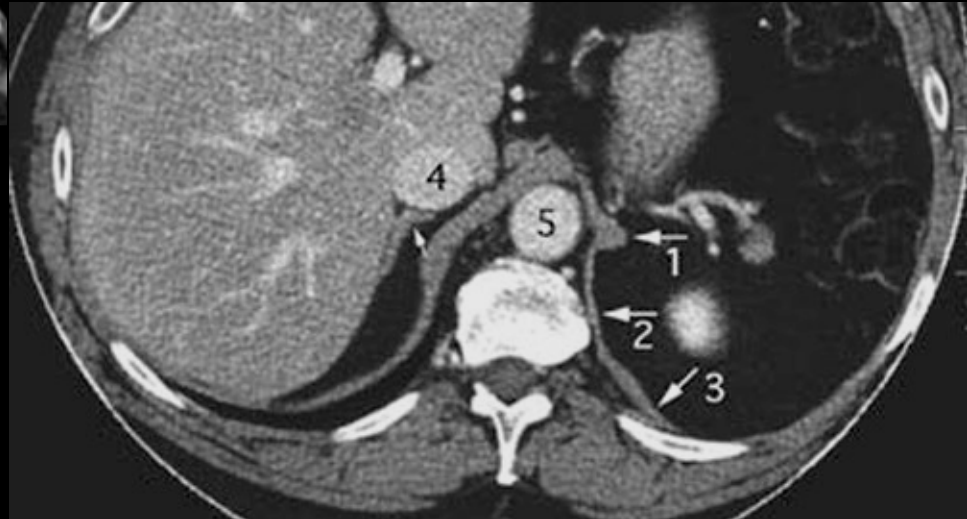
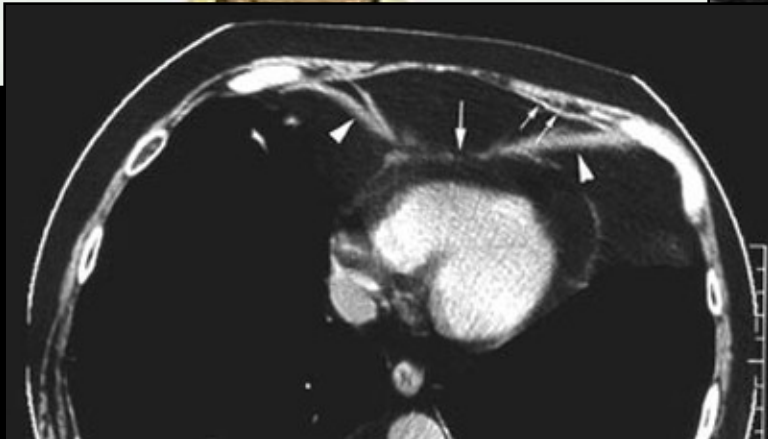
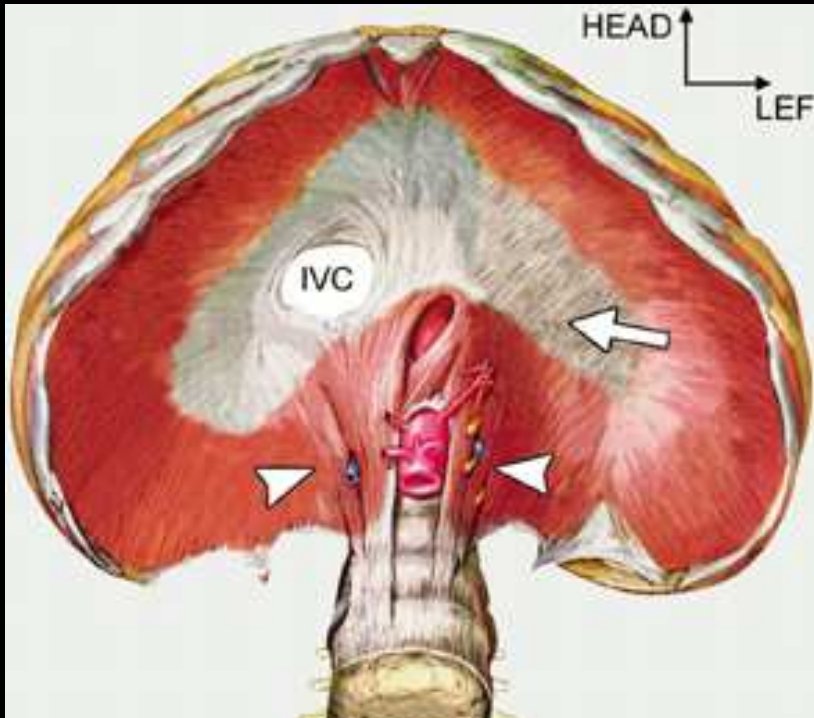


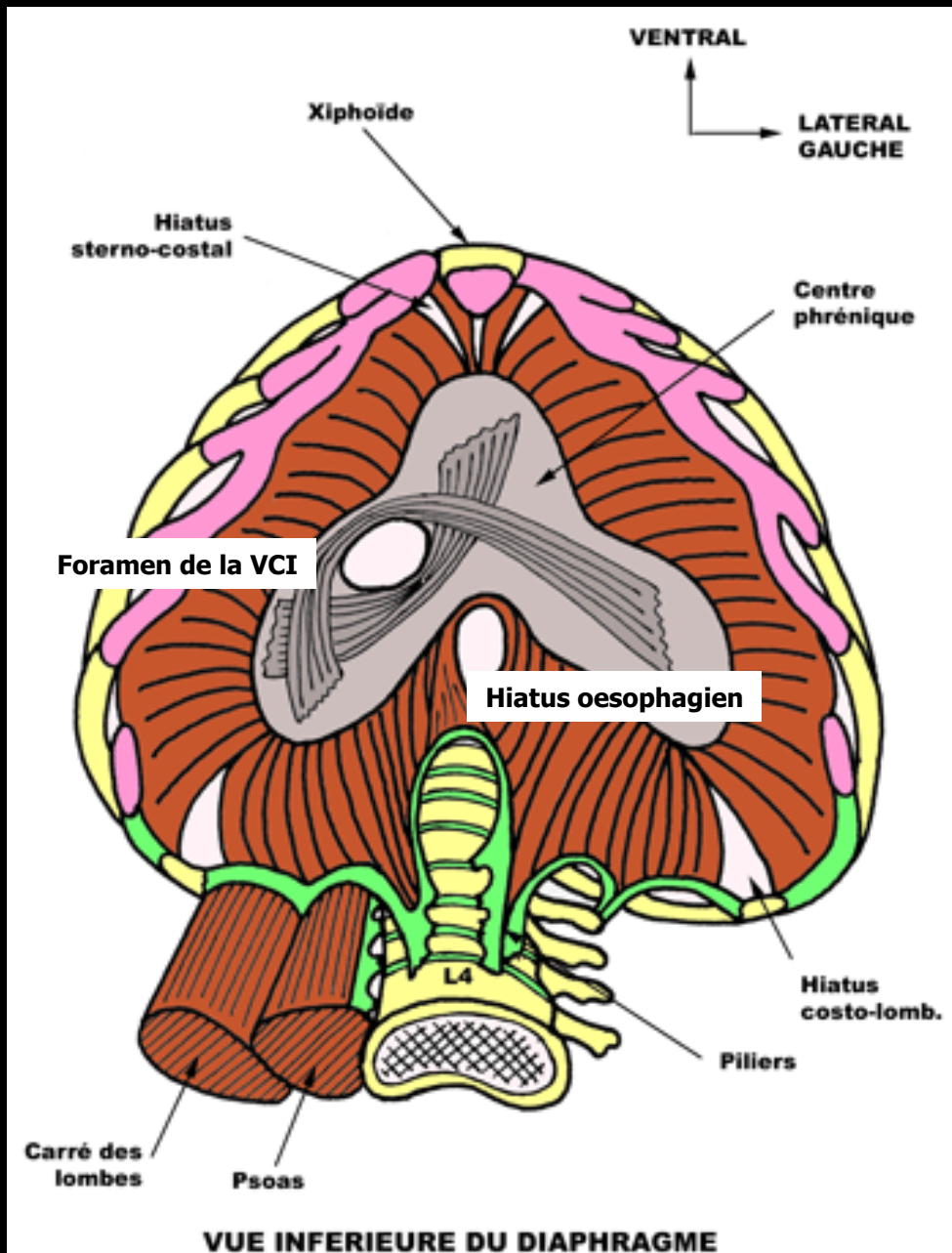
Élargissement hilare droit et médiastin



ADP calcifiées et masses biapicales : silicose

DIAPHRAGM





Orifices :

• T12 :

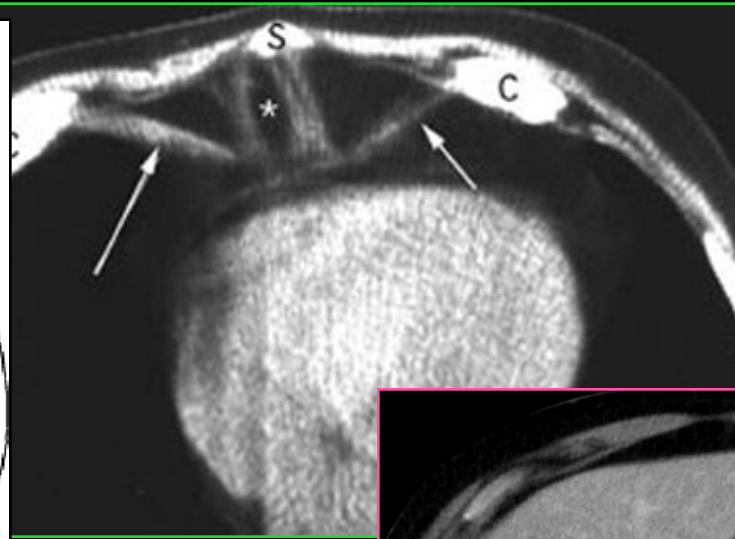
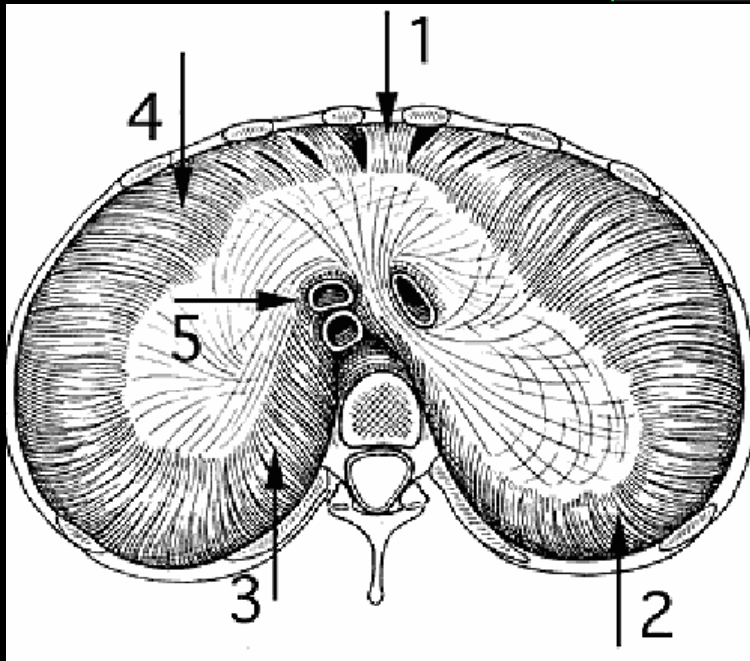
- AO
- Canal thoracique

• T10 :

- œsophage
- Nerfs X

• T9 :

- VCI
- N. phrénique D



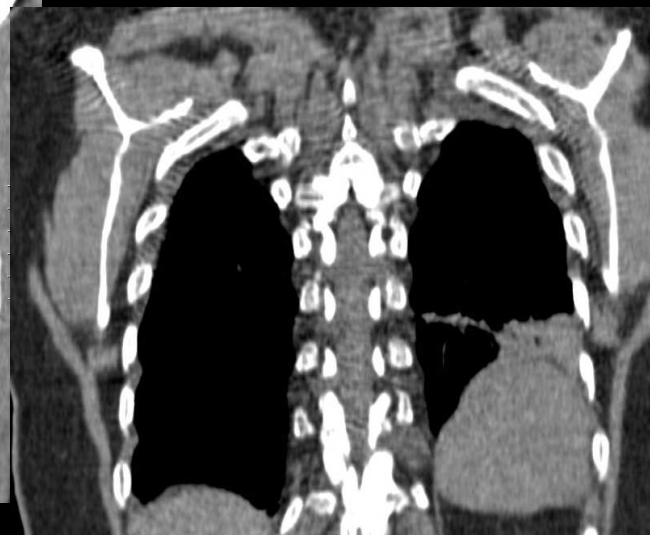
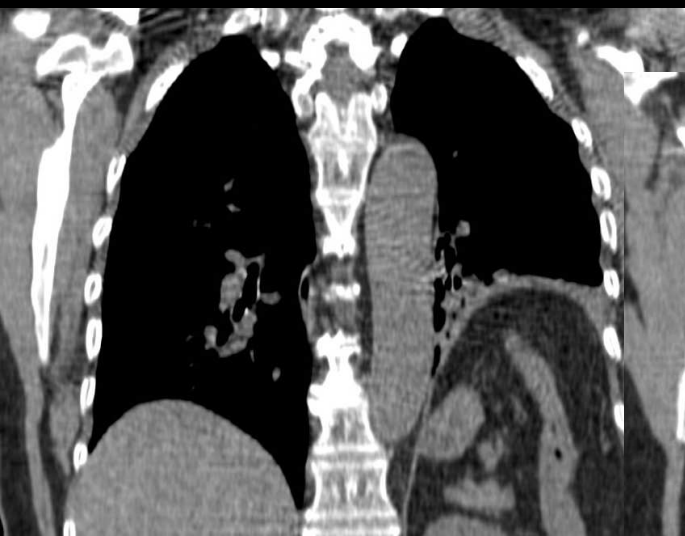
Points de faiblesse :

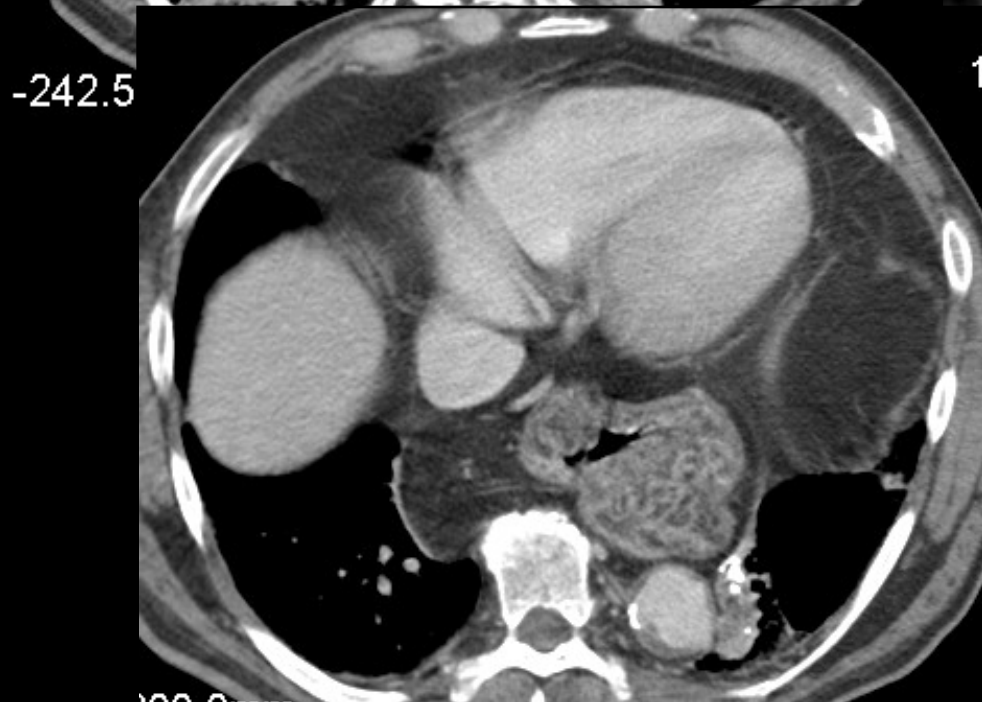
- Hiatus postérieur : Bochdalek
- Hiatus rétro-costo-xyphoïdiens
 - lat : Morgani
 - médian : fente de Larrey
- Hiatus oesophagien





Paralysie phrénique

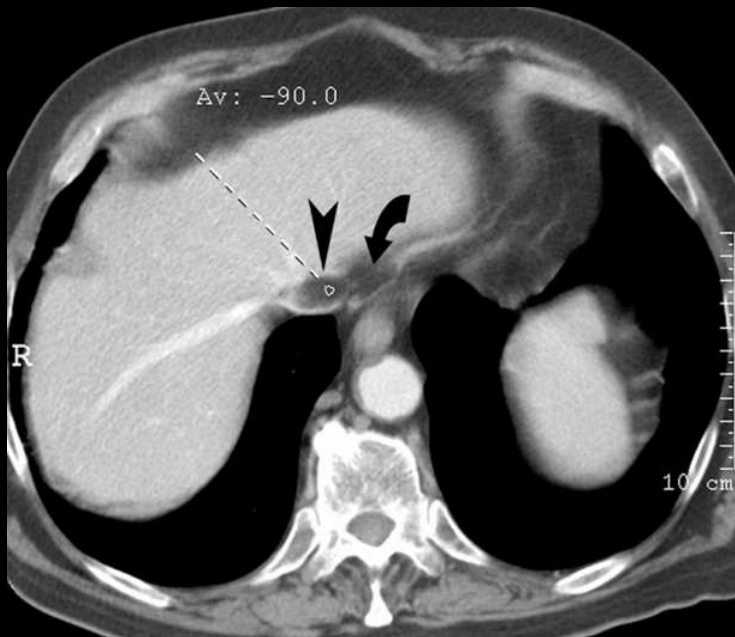
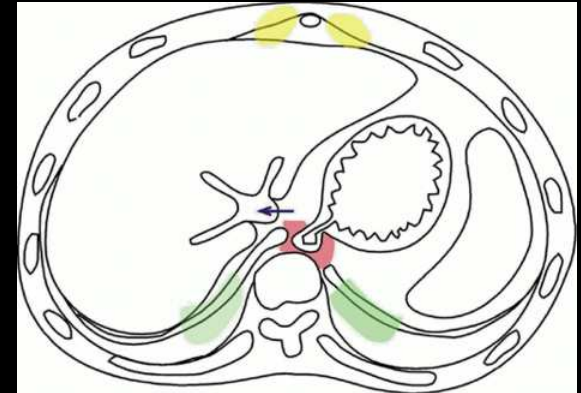




HH par glissement

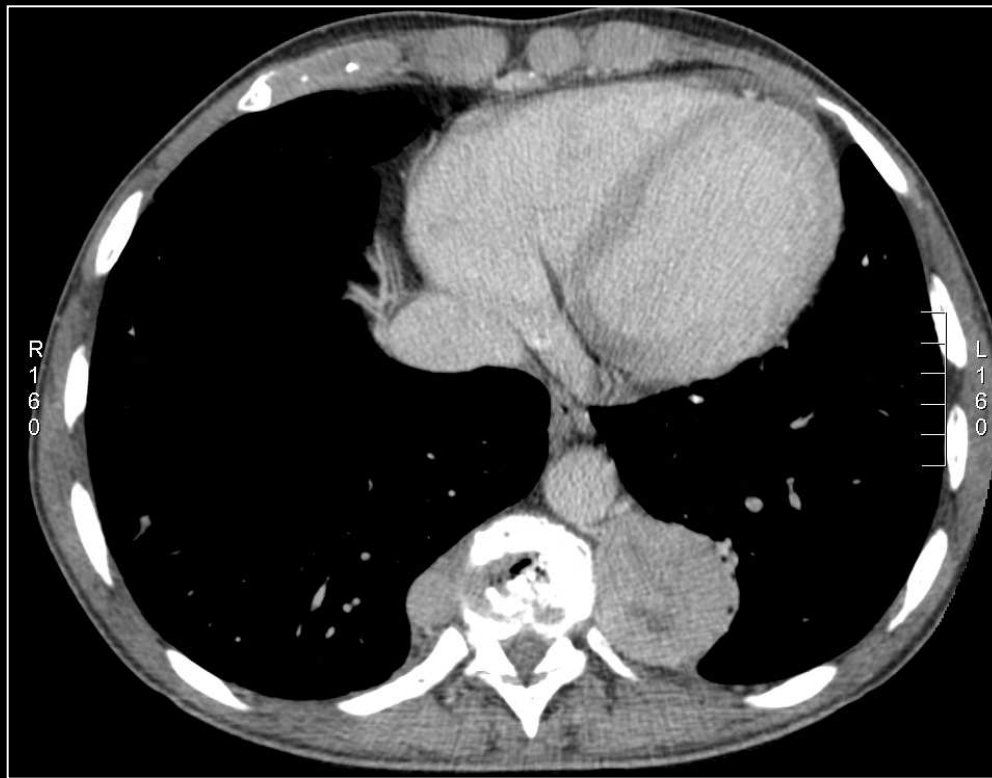
PSEUDO-LIPOME INTRA-CAVE

- confluence v sus-hép/VCI
- en continuité avec graisse péri-oesophagienne
- Iliaire angulation et rétrécissement portion médiale de la VCI
- image variable selon la respiration



A retenir

- Lésions du médiastin antérieur :
 - Thyroïde
 - Thymus
 - Lymphome
 - Tumeur germinale
- Lésions du médiastin antéro-inférieur :
 - Kyste pleuro-péricardique
 - hernie de la fente de Larrey
 - Lipome, hémangiome, lymphangiome
- Lésions du médiastin moyen :
 - Adénopathies
 - Kyste bronchogénique
 - Œsophage
 - Vasculaire
- Lésions du médiastin postérieur :
 - Hématopoïèse extramédullaire
 - Tumeurs neurogènes
 - Kyste bronchogénique
 - Abscès juxta-osseux (BK, etc)



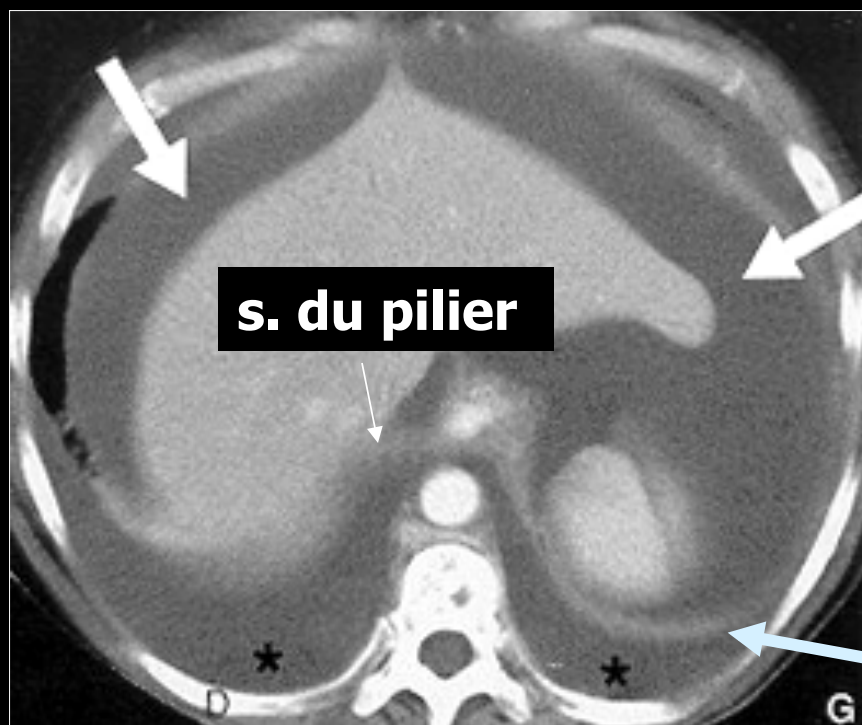
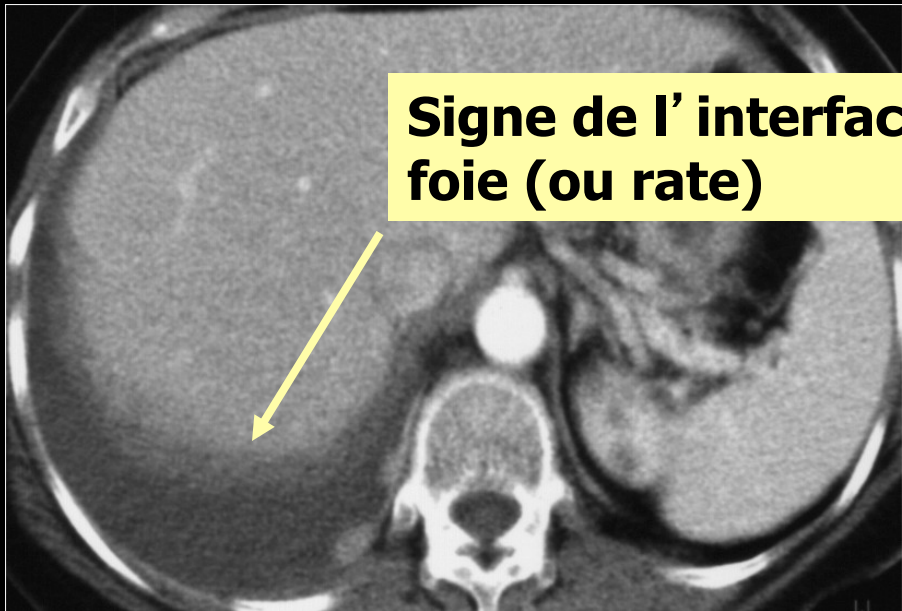
**Hématopoïèse
extramédullaire**



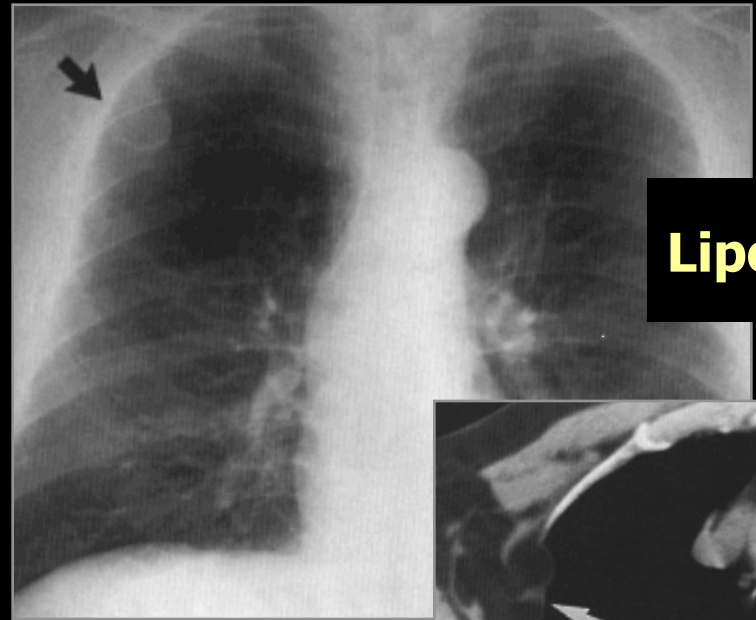
3/ PAROI THORACIQUE

- 
- **PLEVRE**
 - CÔTES

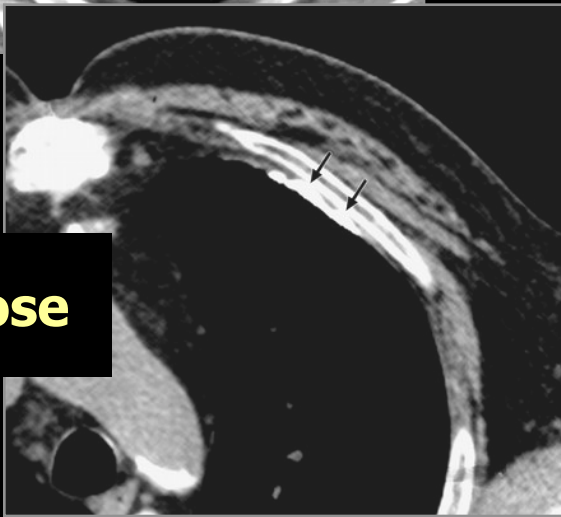
**Signe de l'interface
foie (ou rate)**



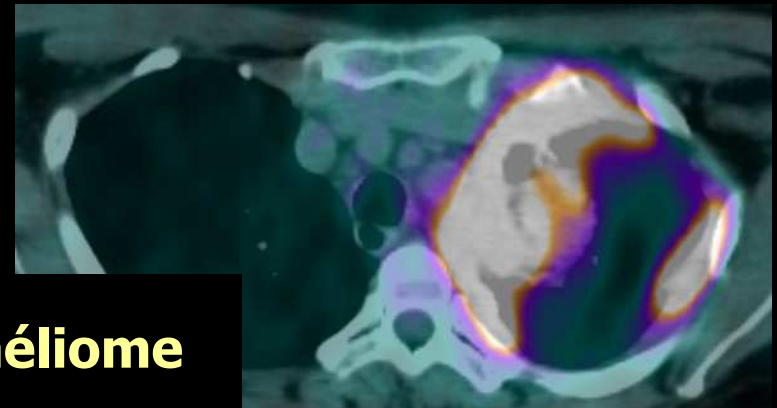
**s. du
diaphragme**



Lipome



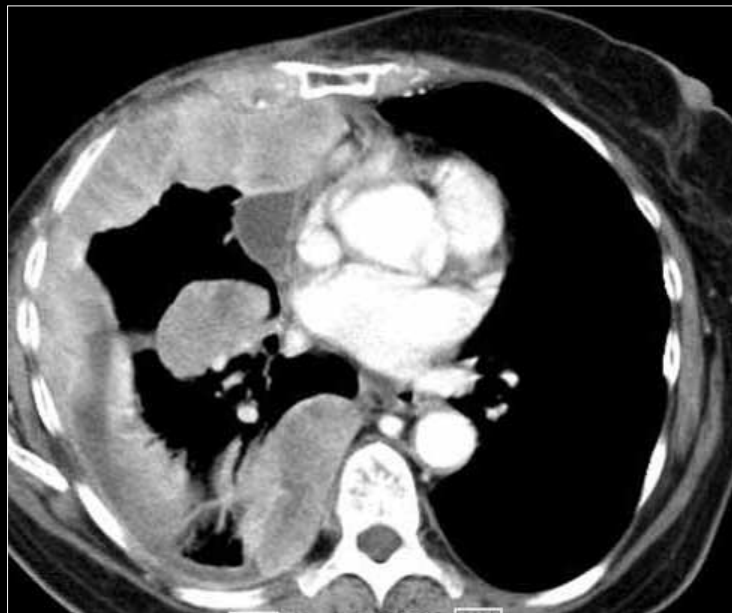
Asbestose



Mésothéliome



Métastases K sein

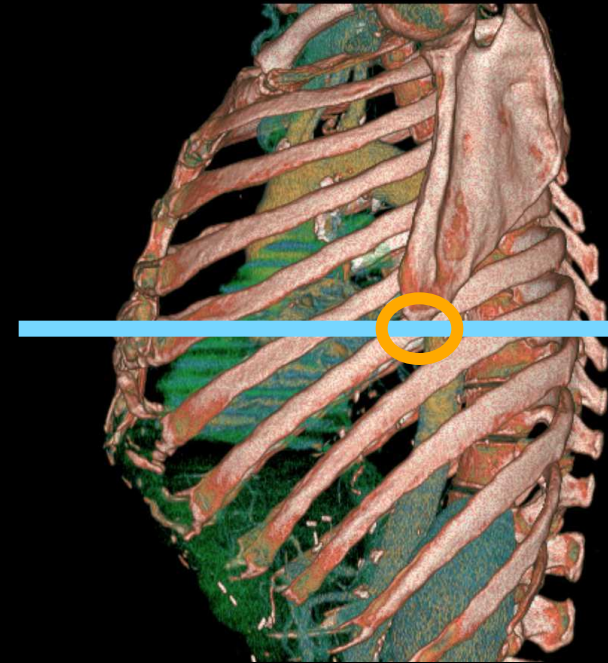
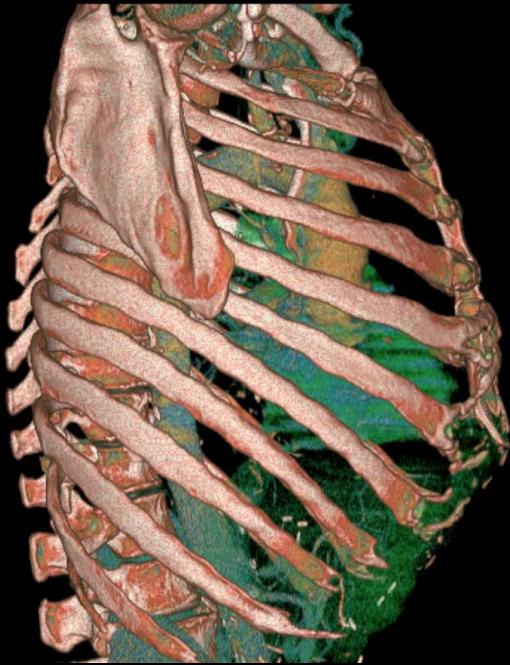


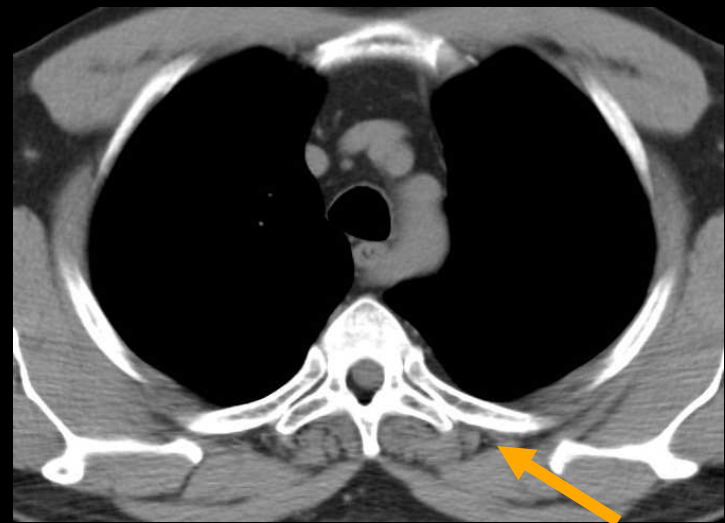
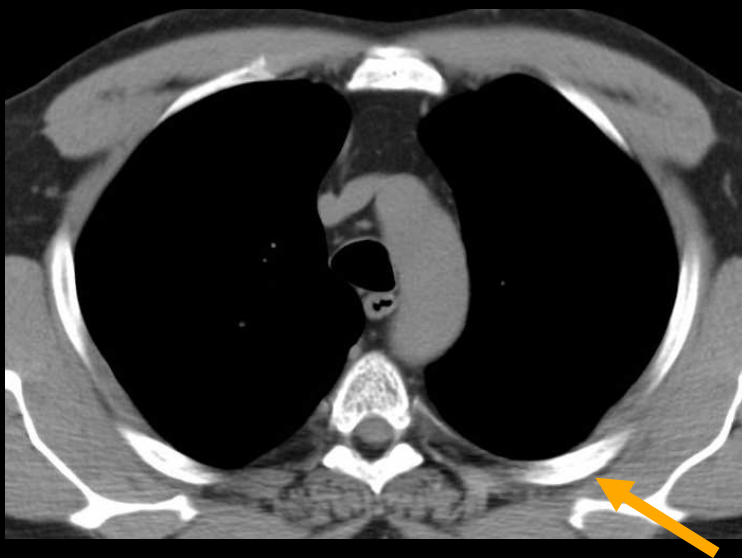
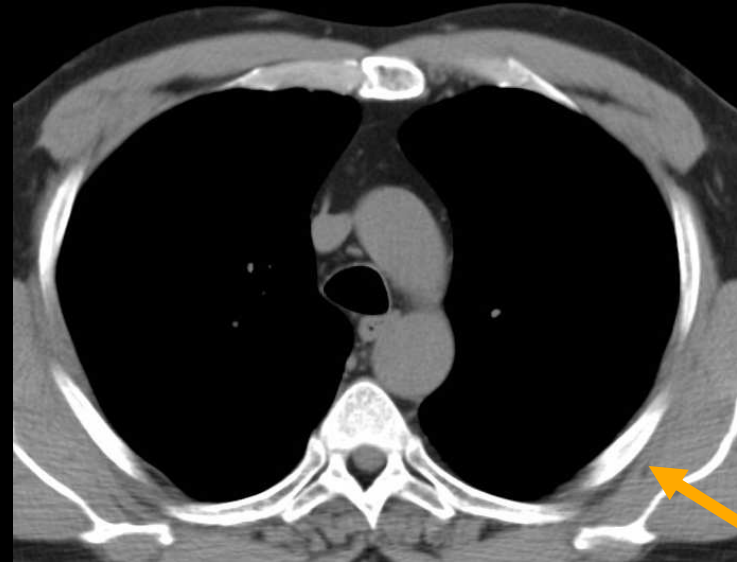
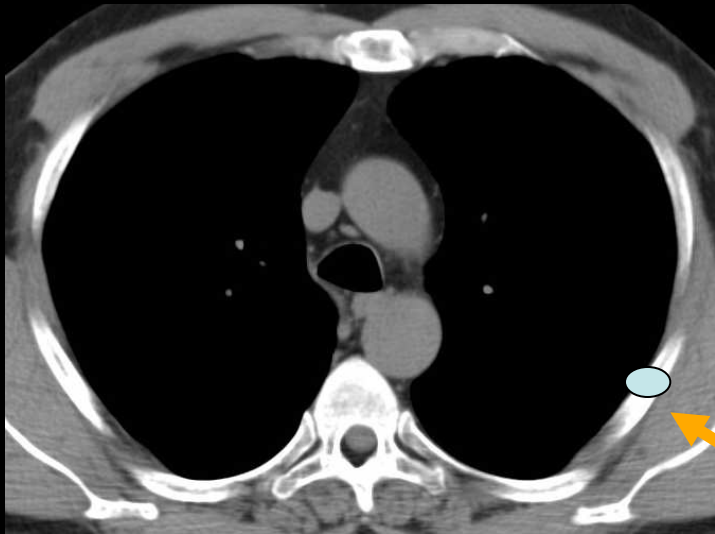


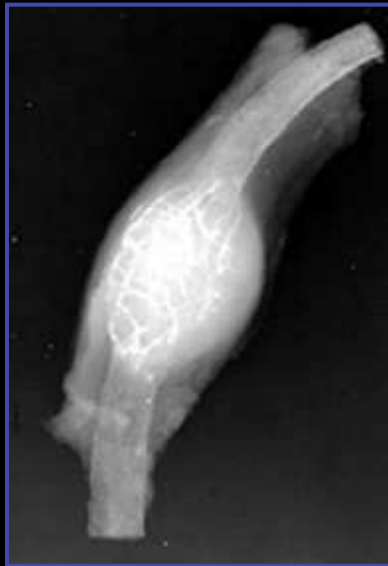
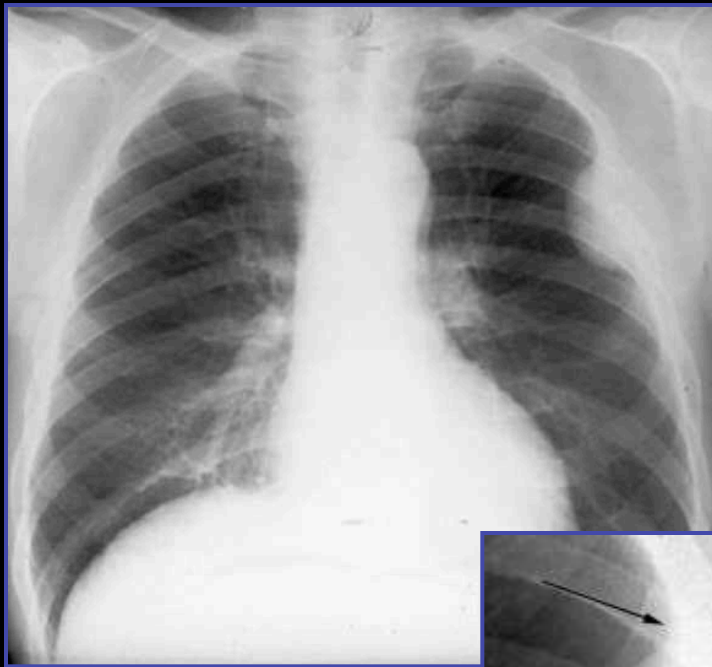
3/ PAROI THORACIQUE

- PLEVRE
- CÔTES

Les côtes



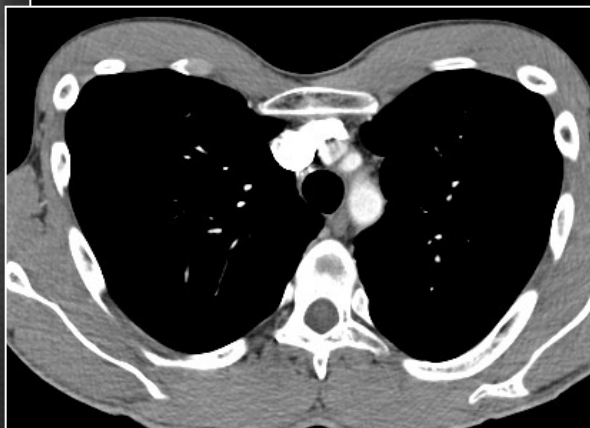
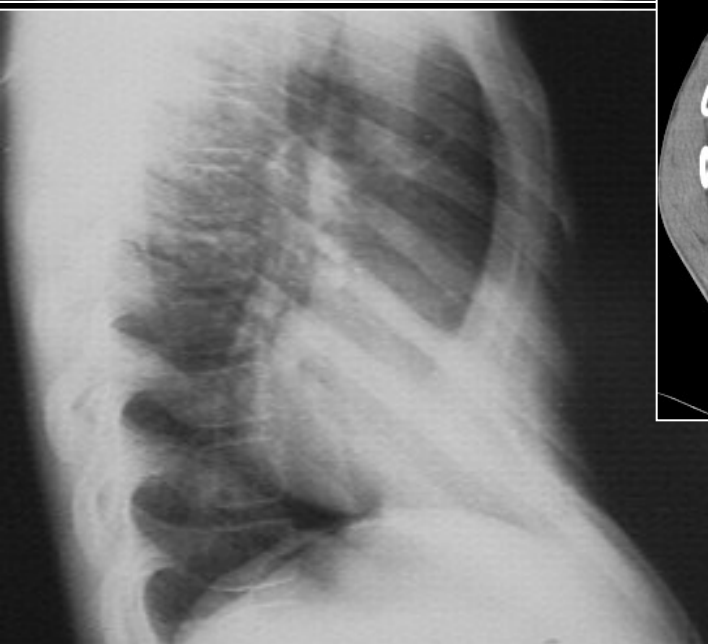
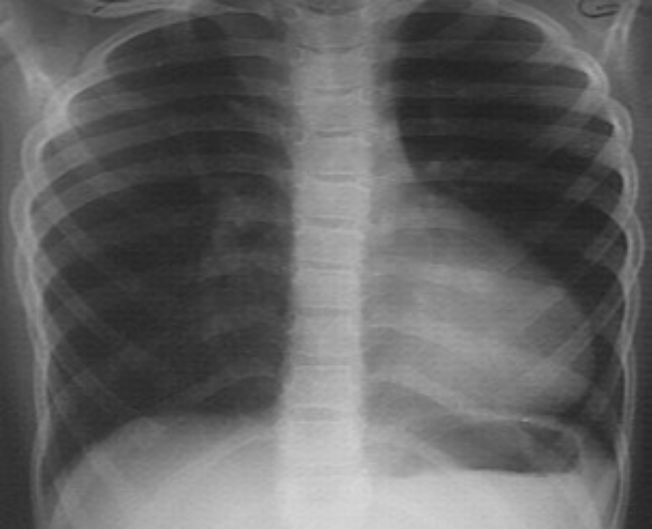




Plasmocytome

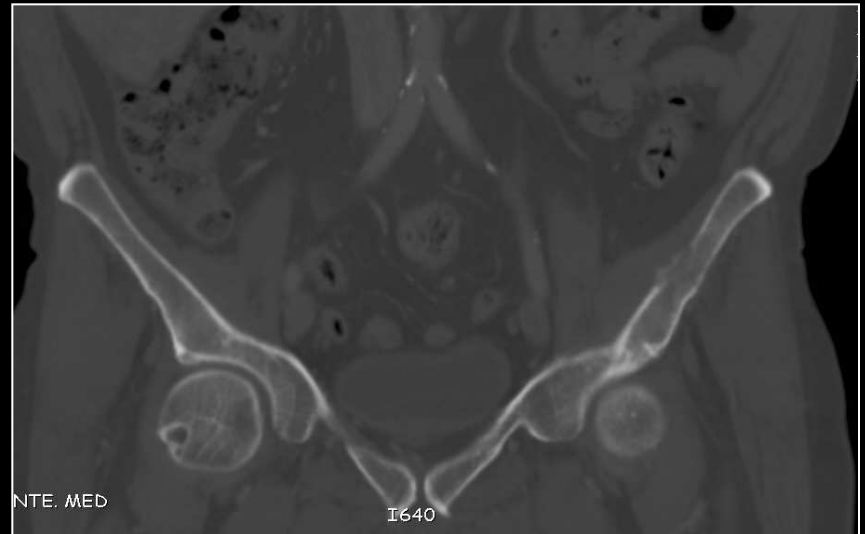
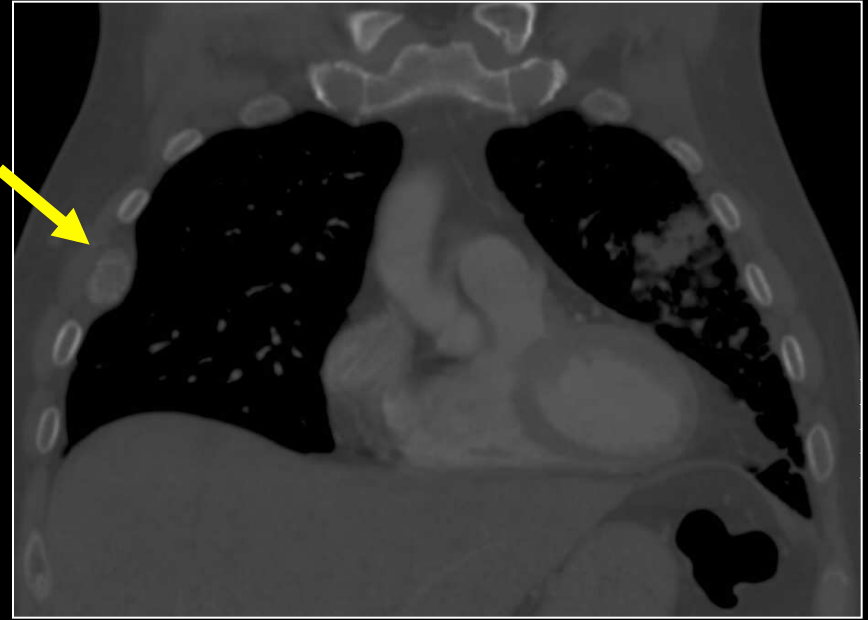
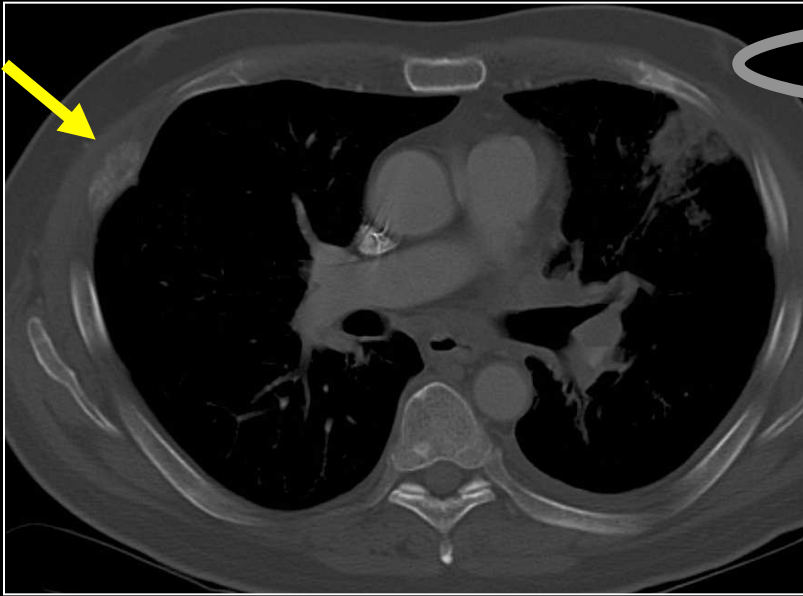


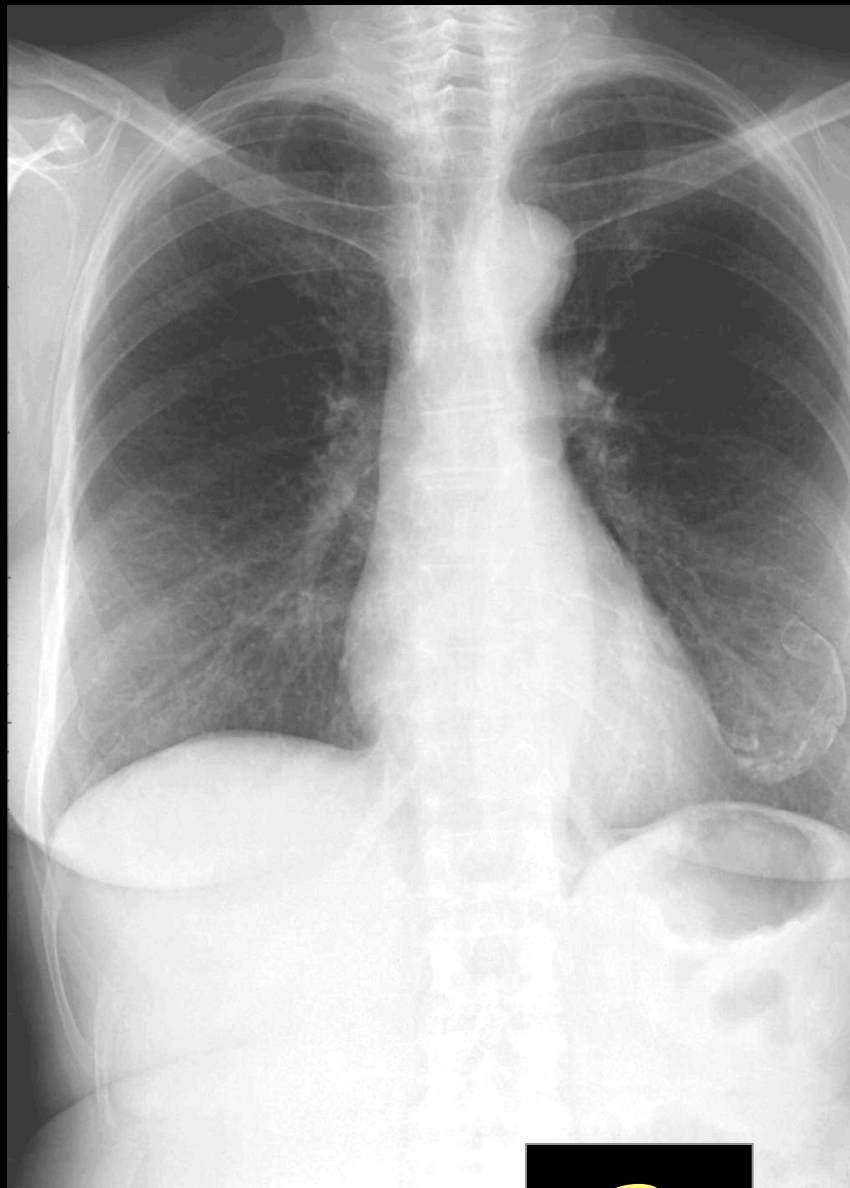
Métastase



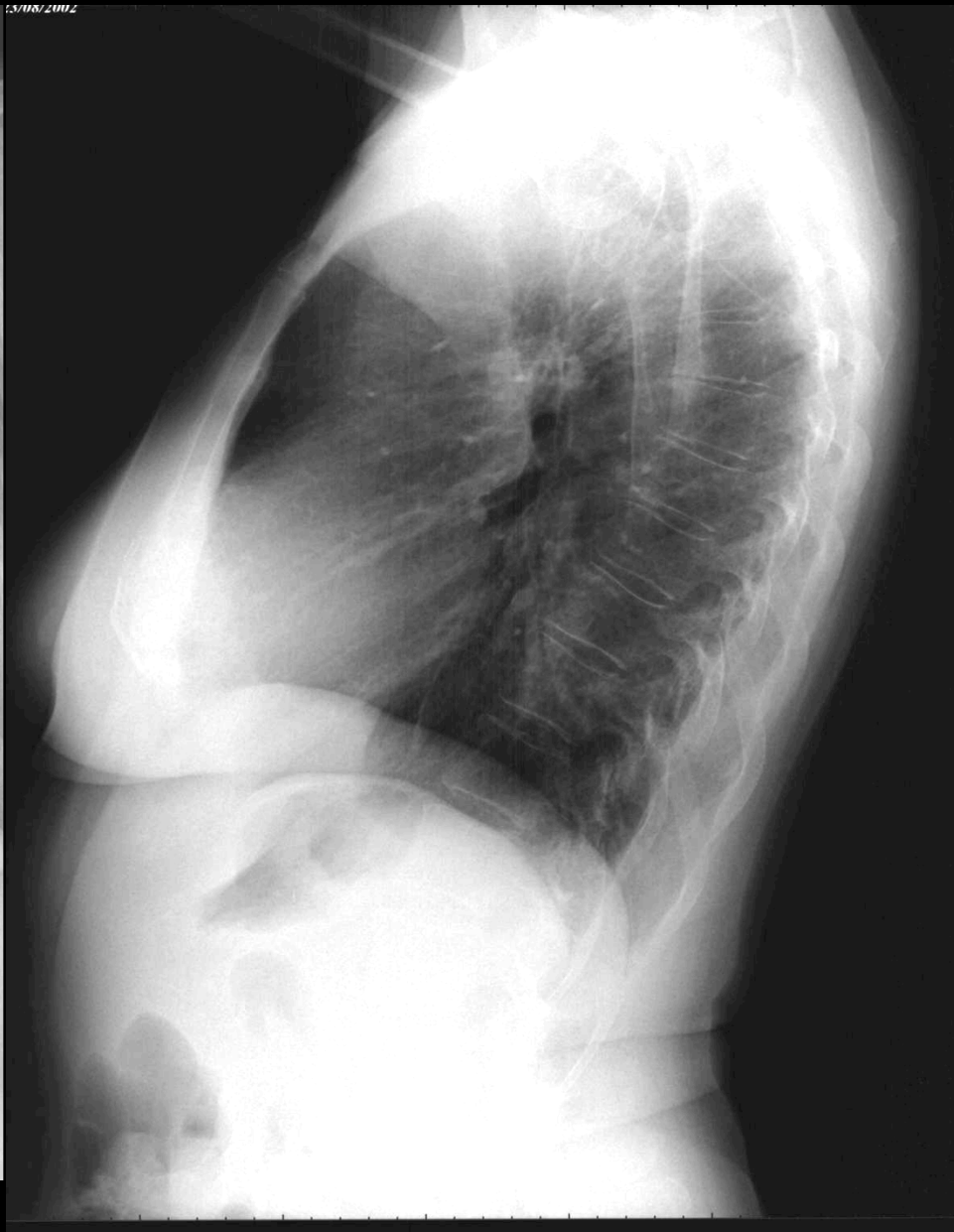
Pectus excavatum

Métastase de carcinome bronchique

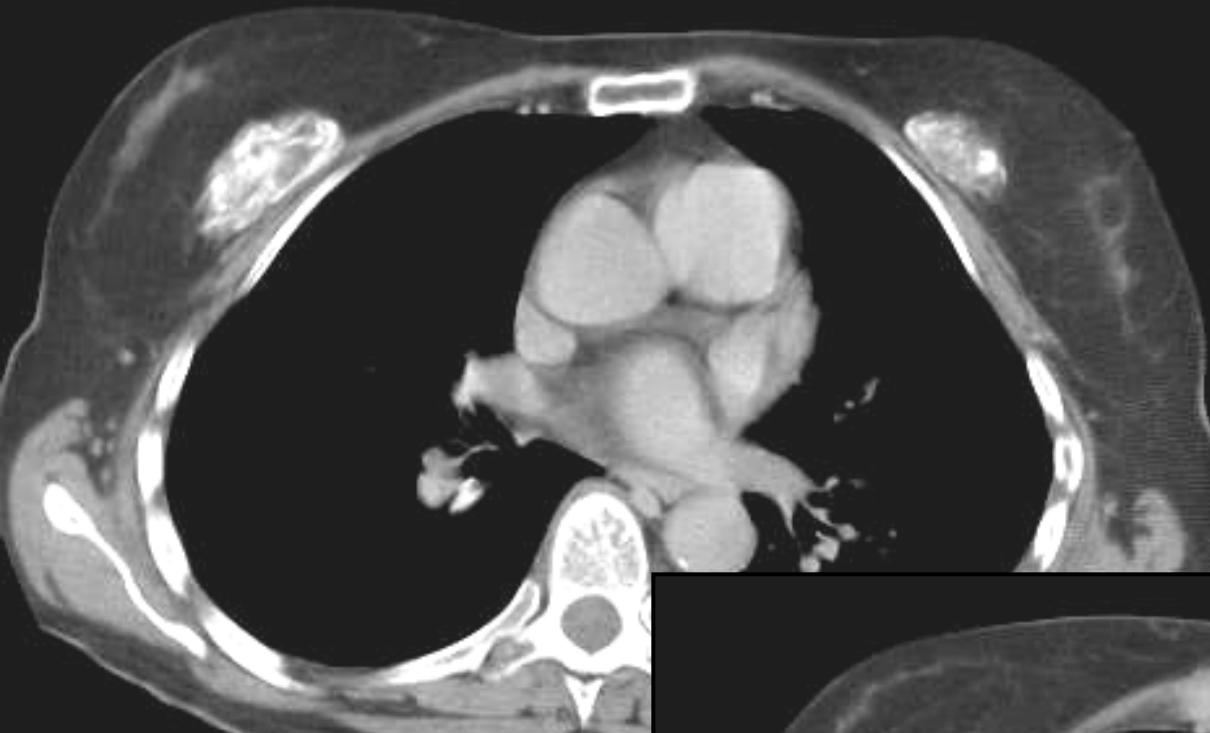




15/08/2002



?



Ancienne PROTHESES MAMMAIRES !!!

