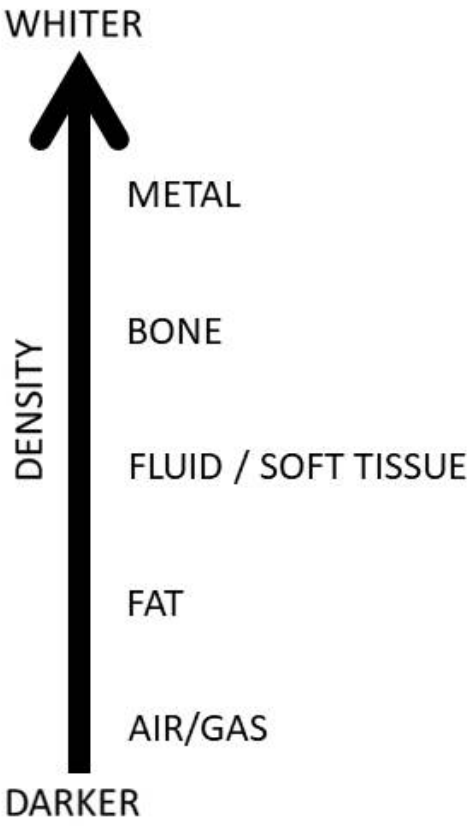
LP 1

- DOSE
- CENTRALIZATION
- PATIENT'S DATA (NAME, AGE, SEX, SMOKING, OCCUPATION)
- CLINICAL HISTORY IN BRIEF

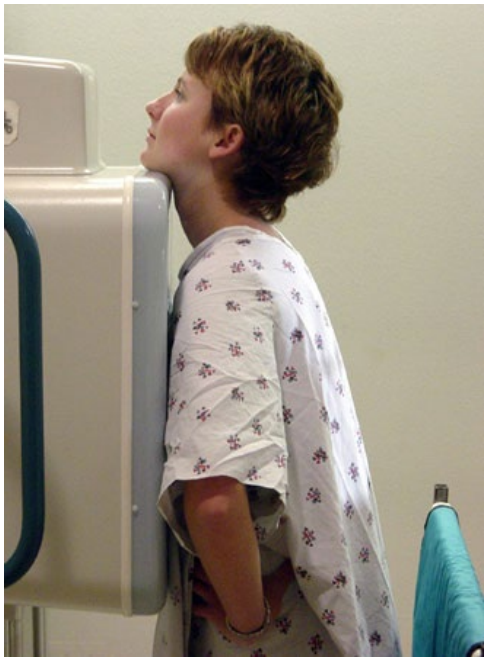
Conventional Radiography



Chest radiograph

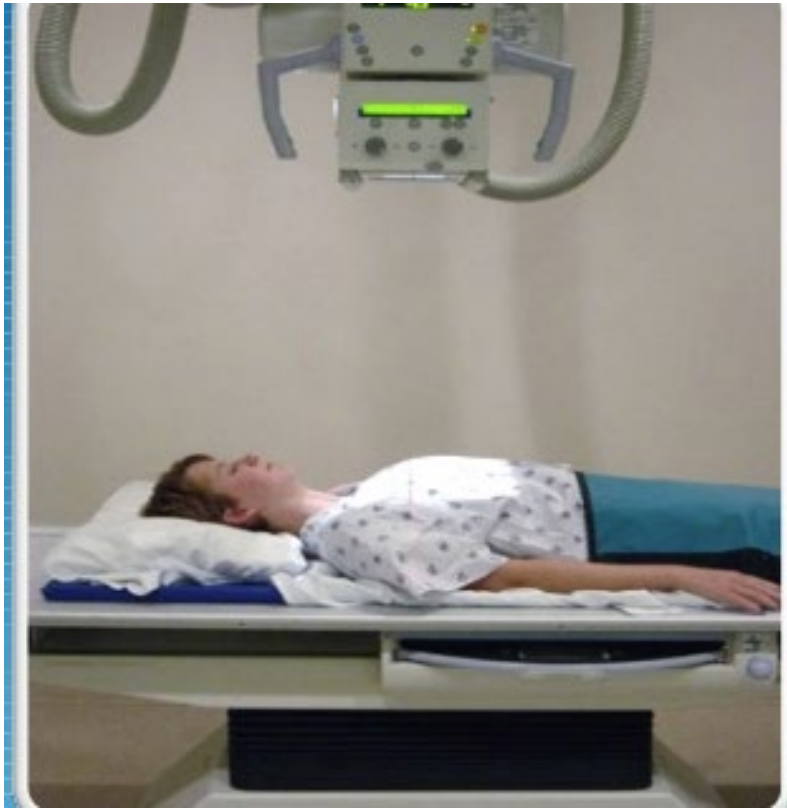
PA POSITION/ORIENTATION

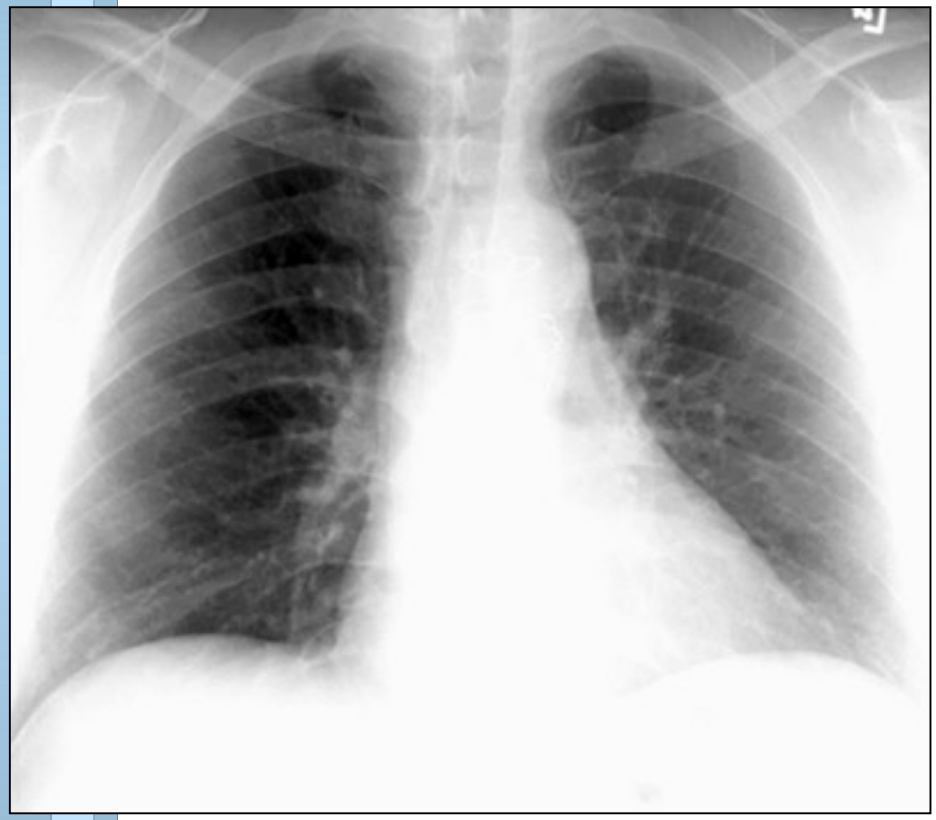
- Film label
- Aortic knuckle
- Waist of the heart
- Gas bubbles of the stomach



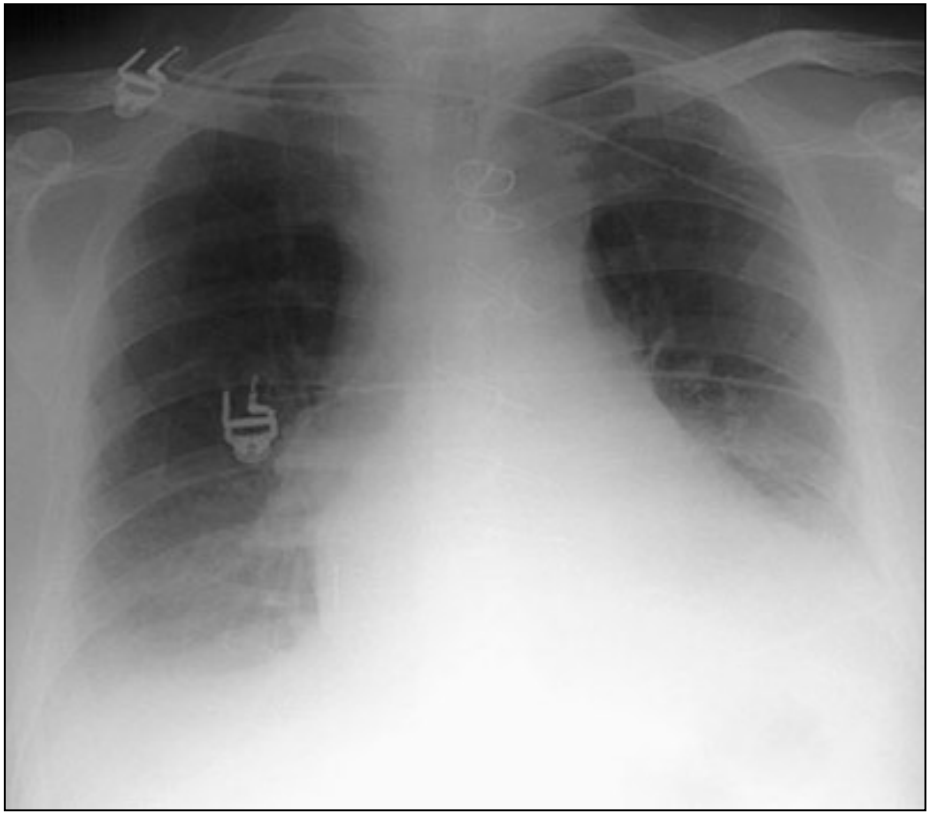
Scp=scapulae,
Cl=claviculae,
C1-C4a=anterior arch ribs C1-C4,
C2-C4p=posterior arch ribs
T=traheea
VCS=superior cava vein
APd=right pulmonary artery
APs=left pulmonary artery
AD=right atrium
BAo=aortic knuckle
VS=left ventricle
HDdr/HDstg=right/left hemidiaphragme

AP POSITION/ORIENTATION



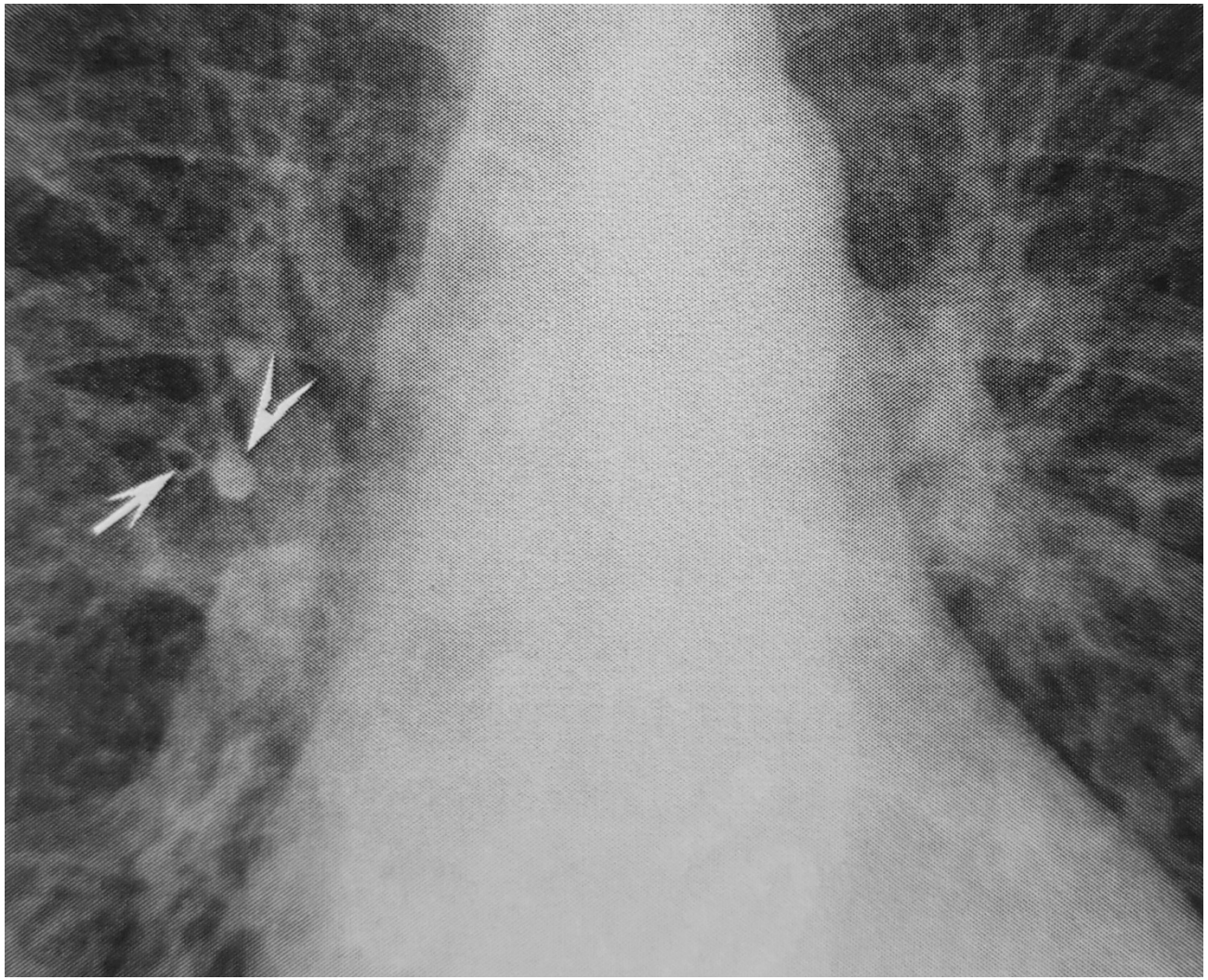


PA



AP

“BROKEN GLASSES”



GENERAL CRITERIA

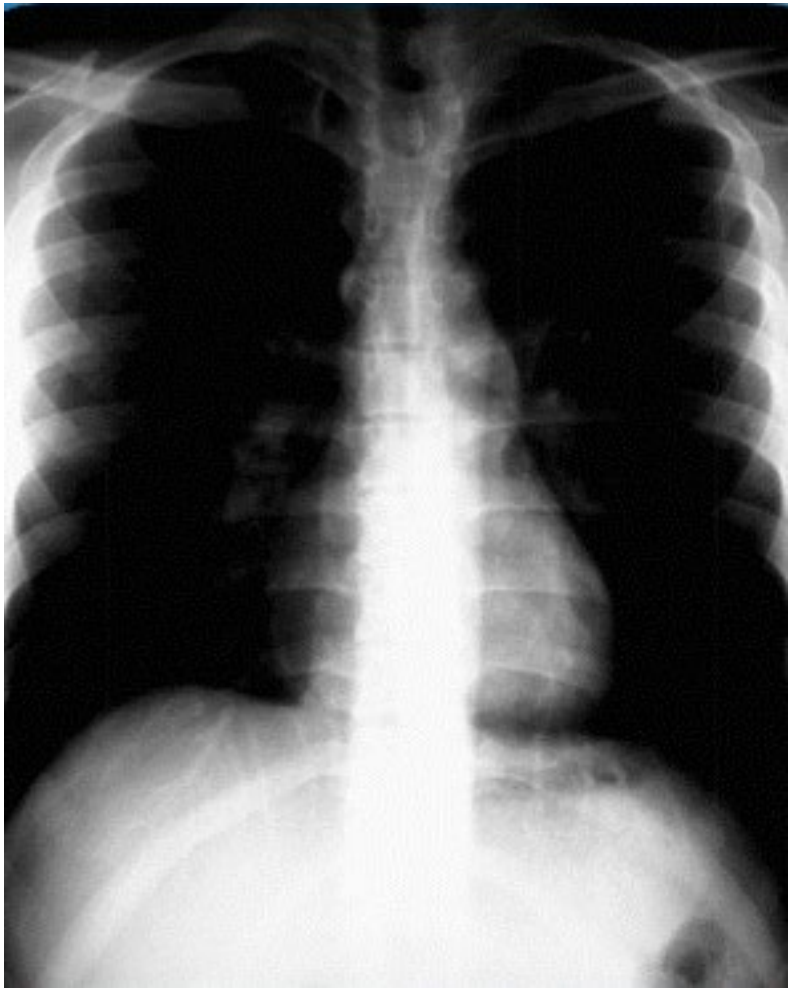
Bit-by-bit checklist

- Trachea
- Mediastinum
- Heart
- Cardio-phrenic angles
- Diaphragm
- Costo-phrenic angles
- Lungs
- Bony cage
- Lateral film, if present
- Other findings

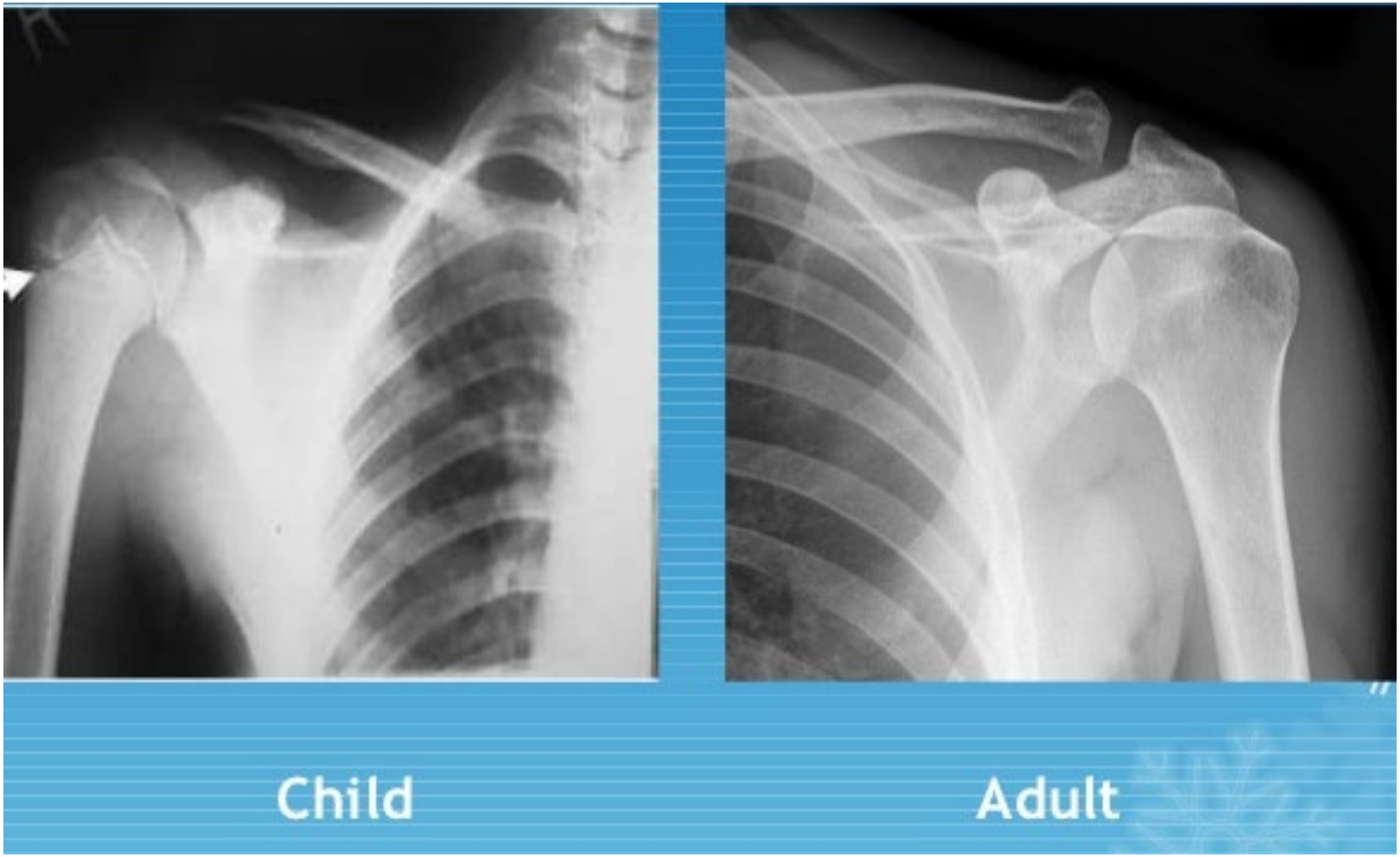
GENERAL CRITERIA

- **Penetration** - through trachea transparency - only see the first three, four thoracic vertebrae - the dorsal spine is not seen due to mediastinal opacity
- An adequate **contrast** between lung fields radiolucency and mediastinal opacity
- **Centralization** - Sterno-clavicular joints (radiolucent joint spaces) must be equal and symmetrical and mediastinal opacity must be located on the midline
- The **scapulae** must not overlap the lung fields
- Lung fields must be contained entirely on the x-ray (including tops, bases, regions or costo-diaphragmatic sinuses);

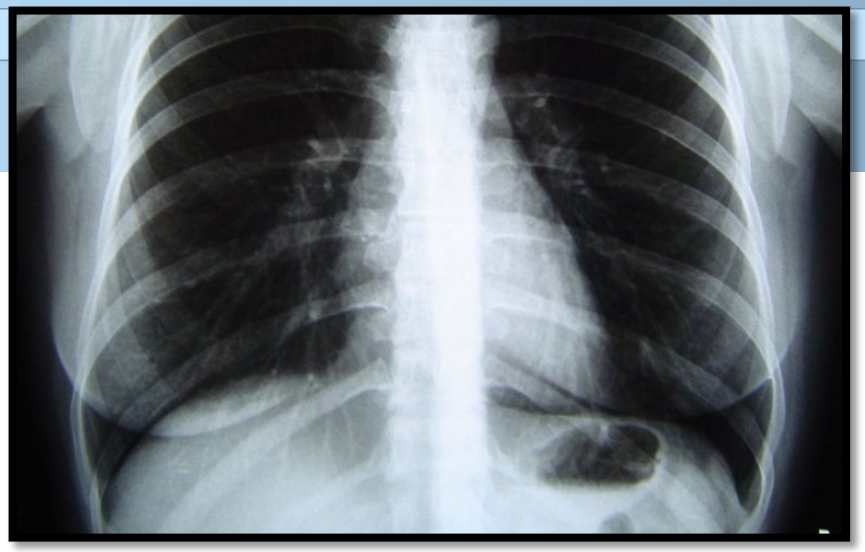
PENETRATION

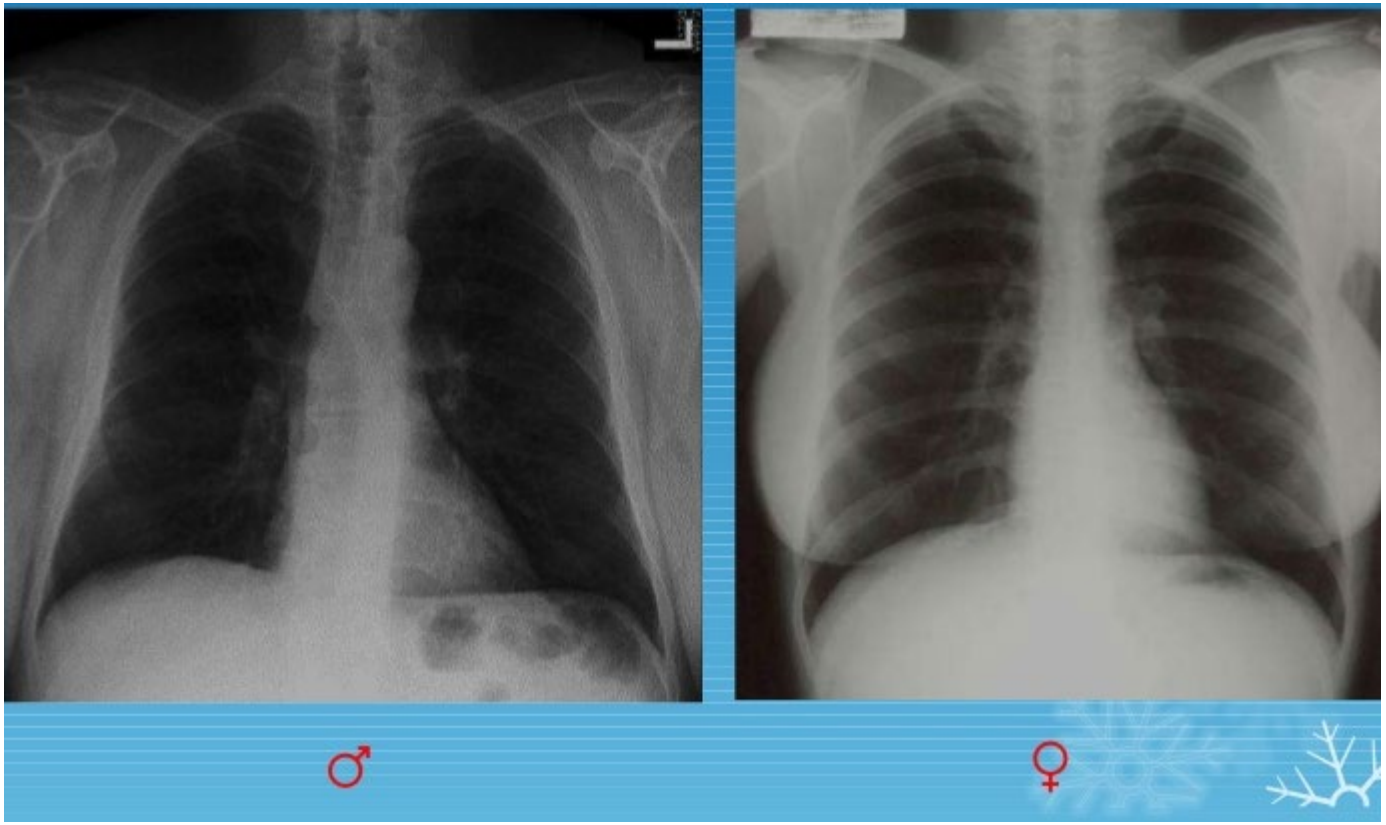


CHILD OR ADULT?

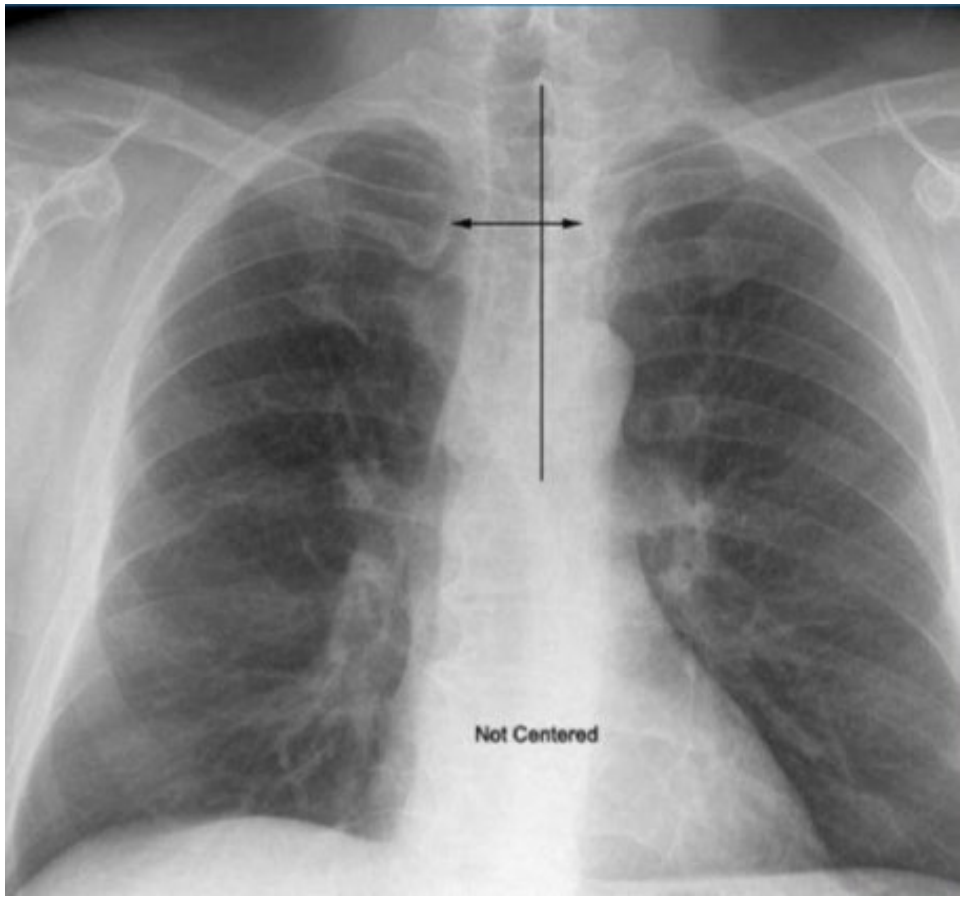


MALE OR FEMALE?

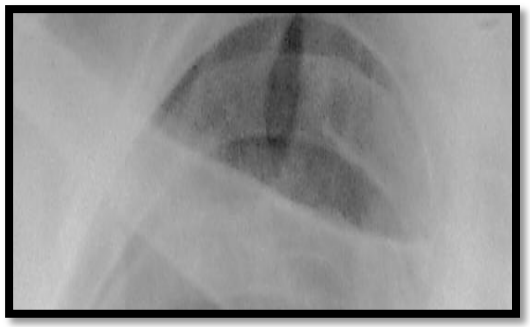


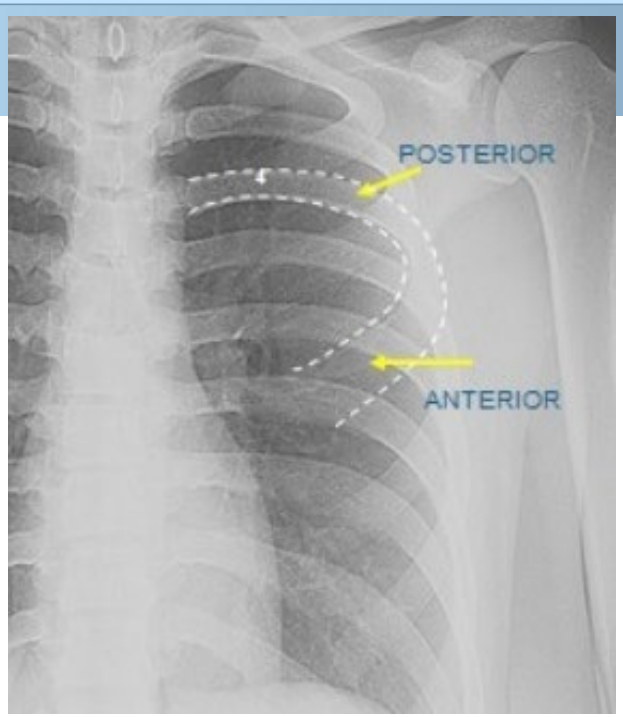


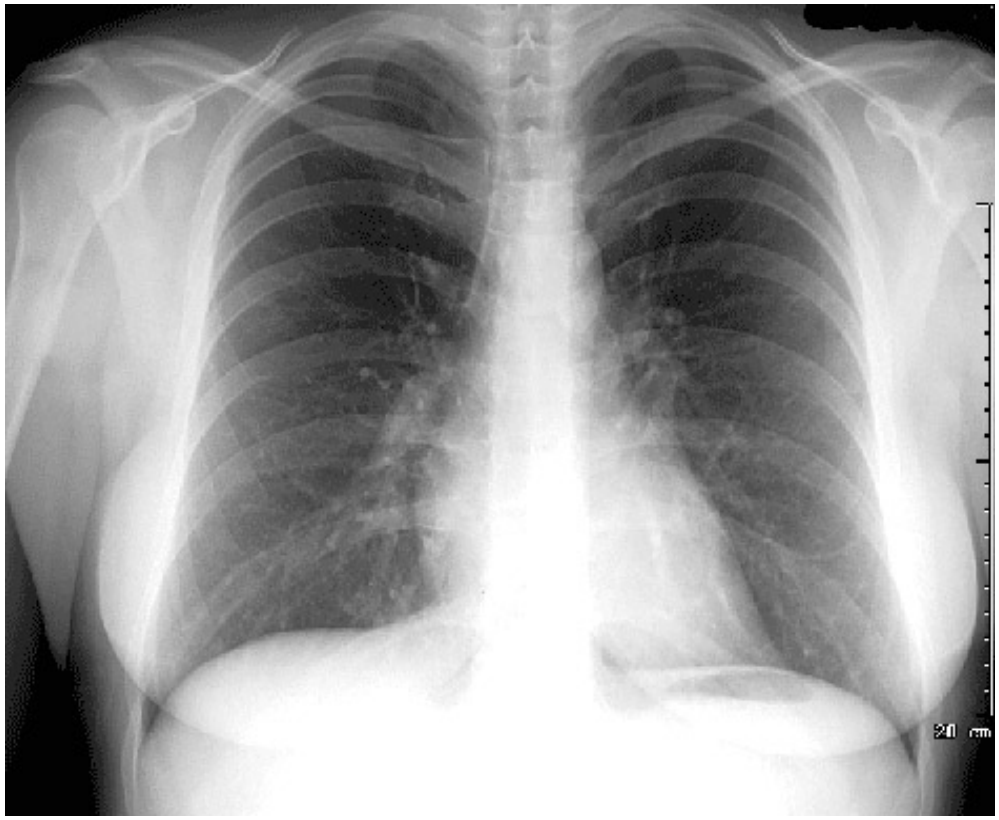
CENTRALIZED OR ROTATED?

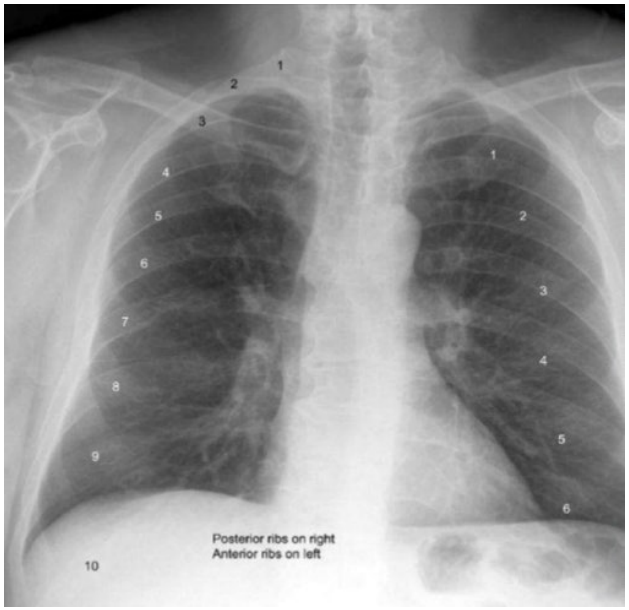


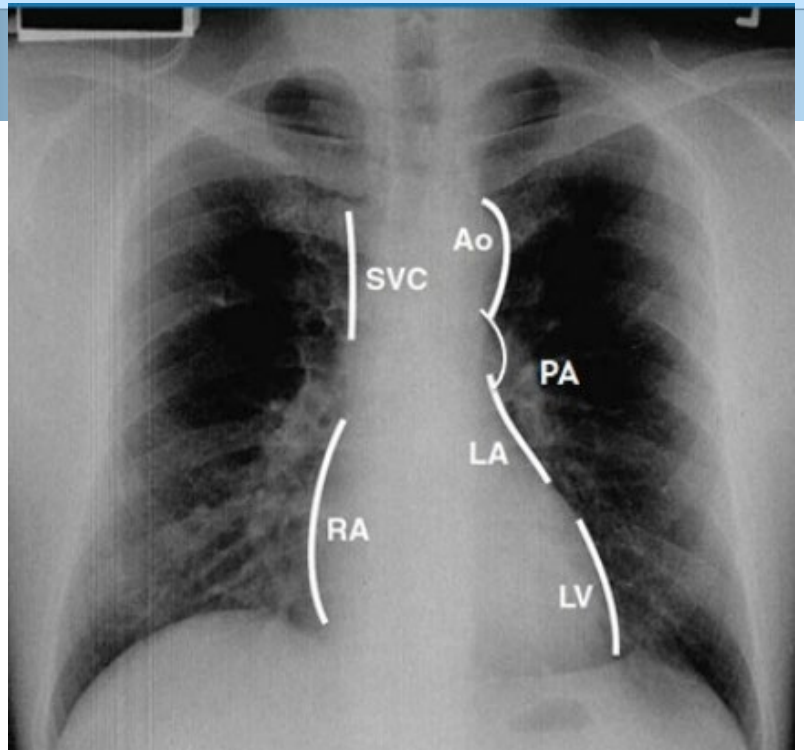
NORMAL X-RAY

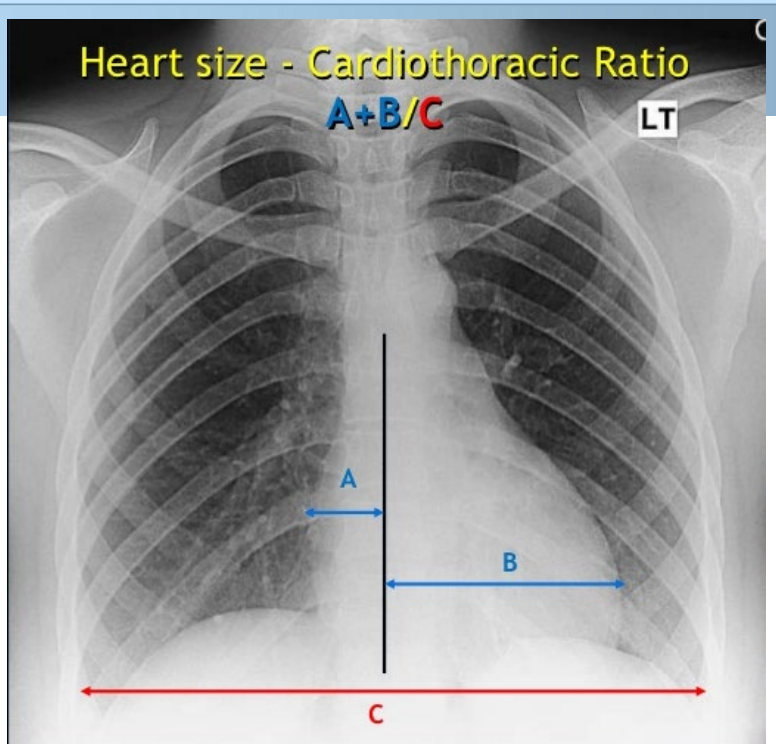


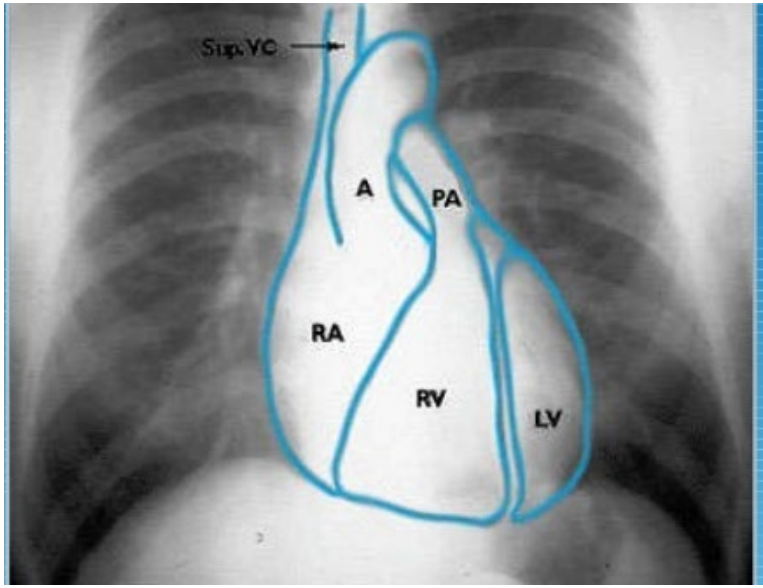

POSTERIOR
ANTERIOR

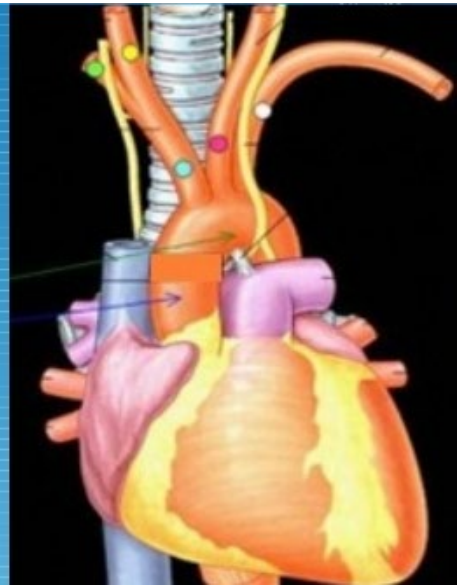



Posterior ribs on right
Anterior ribs on left
10

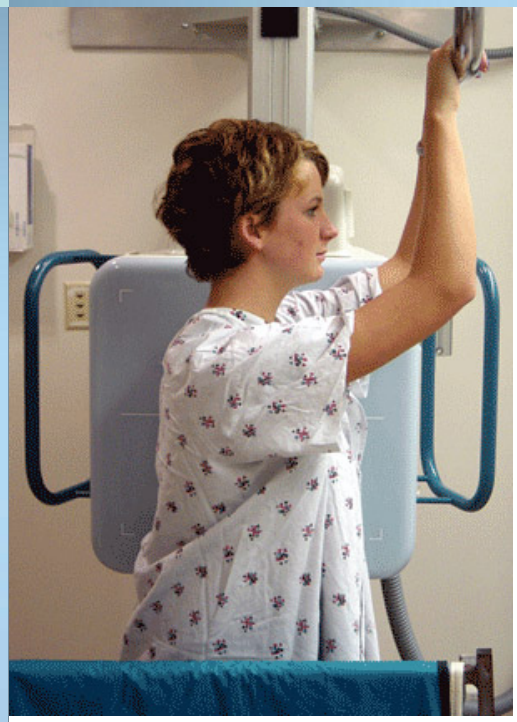

SVC
Ao
PA
LA
RA
LV

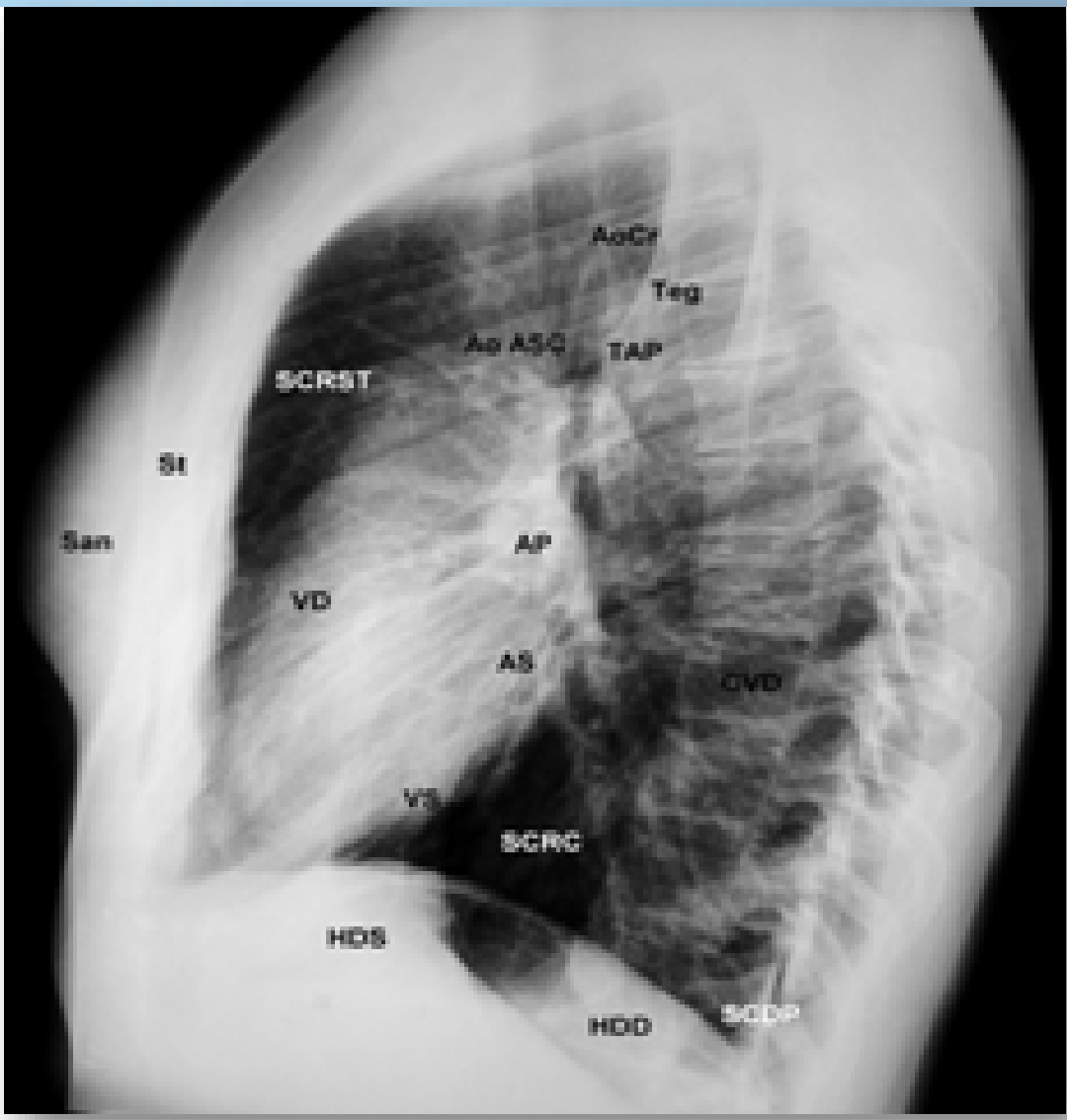

Heart size - Cardiothoracic Ratio
A+B/C
LT
A
B
C


Sup. VC
A
PA
RA
RV
LV



LATERAL POSITION/ORIENTATION



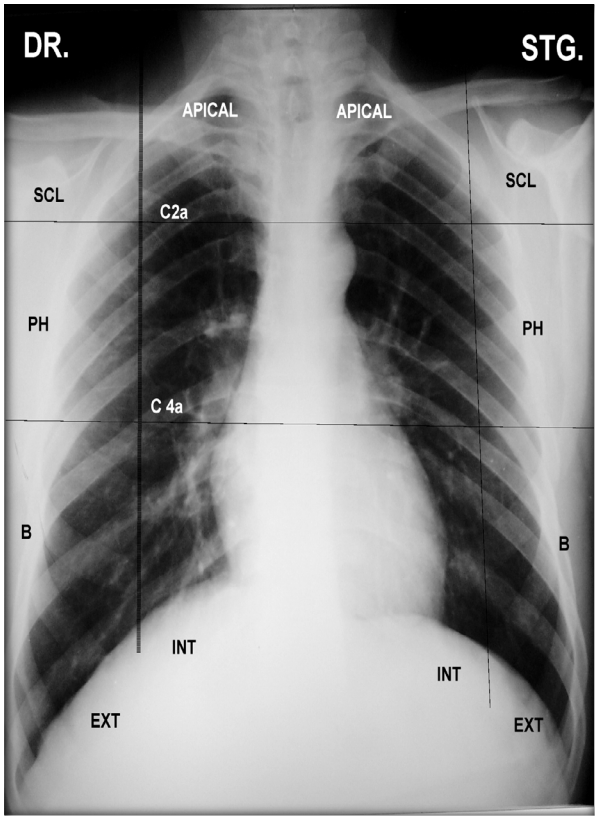


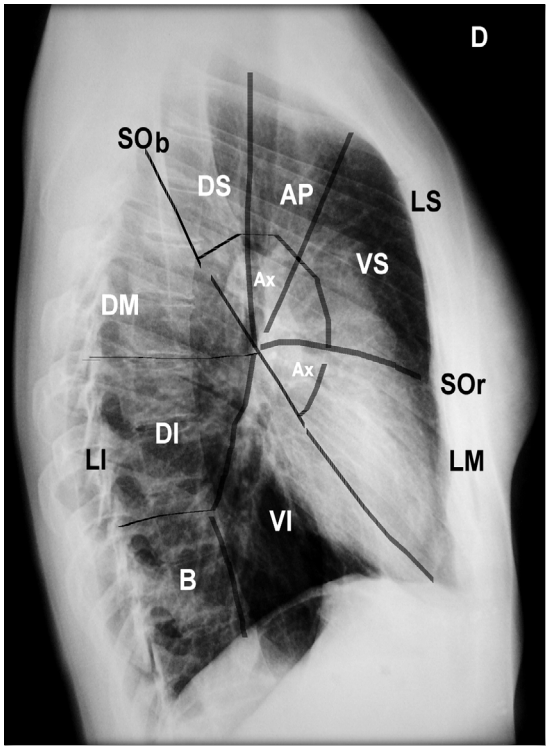
SCRST=retrosternal space,
SCRC=retrocardiac space,
San=breast
St=sternum
VD=right ventricle
AP=pulmonary artery
AS=let atrium
VS=left ventricle
AoASC=ascending aorta;
TAP=pulmonary artery trunk;
AoCr=aortic crosa
HDS/HDD= left/right hemidiaphragma
SCDP=posterior costo-diaphragmatic sinus

SEMIOLOGY OPACITY

Semiologic features:
NFLDSICR

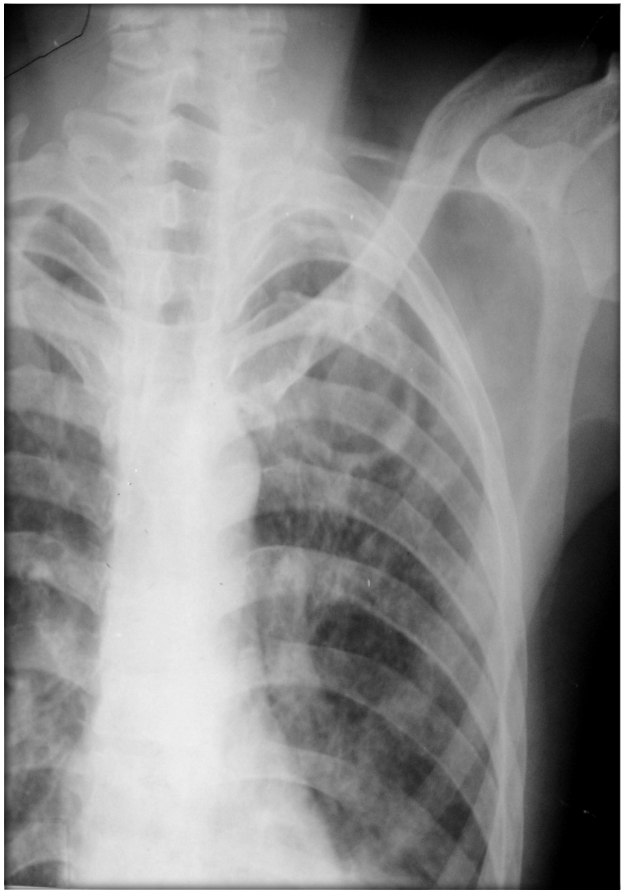
- ***Number***;
- ***Form (SHAPE)***
- ***Localization***
- ***Dimensions***
- ***Structure***
- ***Opacity intensities***
- ***Outline (contur)***
- ***Relationship*** with neighbourng structures





SEMIOLOGY CIRCUMSCRIBED LUCENCY

- number
- localization
- dimensions
- form – round ones: air cyst, emphysema bulbs, tertiary cavity or irregular form: neoplasic cavities, growing bacillary cavities.
- opaque ring circumscribing the image: internal outline, external outline, thickness, its continuity.
- **Ring law** - the thicker the ring circumscribing a hypertransparence image, reduced intensity and more diffuse external outline, the more increased evolutive potential the lesion gets; if the ring gets a clear outline, thinner and more intense, evolutive potential is more reduced (chronic lesion).



SEMIOLOGY MIXED LESIONS

- number
- localization
- dimension
- form – round/oval: unilocular abscesses, irregular – multilocullar abscesses
- separation limit – horizontal or waved (opened hydatic cyst).