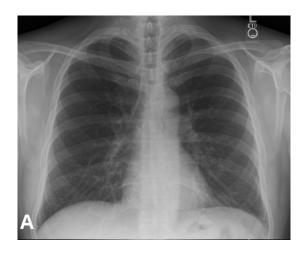


# **CXR** Session

- Interpreting a CXR is a key skill in managing SOB/CP presentations
- Learning outcomes
  - Identify the adequacy of a CXR
  - Identify the anatomy on a CXR
  - Identify life threat CXRs
  - Have a system how to present a CXR
- Structure of session:
  - CXR teaching session: Based on LITFL
  - CXR Quiz Answers
    - Life threat identification
    - Systematic review of CXR
    - Management focusing on 3D's



- Online video: <a href="https://youtu.be/5xhIEQhVJ9I">https://youtu.be/5xhIEQhVJ9I</a>
- LITFL: <a href="https://litfl.com/drsabcde-of-cxr-interpretation/">https://litfl.com/drsabcde-of-cxr-interpretation/</a>
- Articles: BMJ Best Practice









### **Details**

Patient Name, DOB, Date, Film Type

## RIPE Image

Rotation, Inspiration, Picture, Exposure (Penetration)

Soft Tissues & Bones

Airways & Mediastinum

### Breathing

Lung fields & Pleura

### Circulation

Heart position, borders, shape, size

## Diaphragm

#### Extras

ETT, CVP line, NG tube, PA catheters, ECG electrodes, PICC line, chest tube, PPM, AIDC, metalwork

# How to present the CXR

#### **DETAILS**

- This is a frontal (AP/PA) (supine/erect)
- Chest radiograph
- In a "..." year old (man/woman/child)/skeletally immature person.
- Taken on "date/time" with brief PC

#### **ADEQUACY**

 This is an adequate film (If not comment on Rotation, Inspiration, Picture, Exposure)

#### INTERPRETATION

- Either
  - "There is an obvious abnormality in the" (location, then describe, relative negatives)...
  - "I do not see an obvious abnormality and I will now go through the CXR systematically (DRSABCDE approach)

#### **SUMMARY**

**CONCLUSION** including immediate management



**DETAILS** 

- This is an erect PA CXR
- In a 22 year old man
- Taken today for chest pain and productive cough

#### **ADEQUACY**

This is an adequate film

#### INTERPRETATION

 There is an obvious abnormality in the left lung midzone with consolidation and obscuration of the left heart border.
There is no gross hilar adenopathy. Nil collection. Nil effusion.

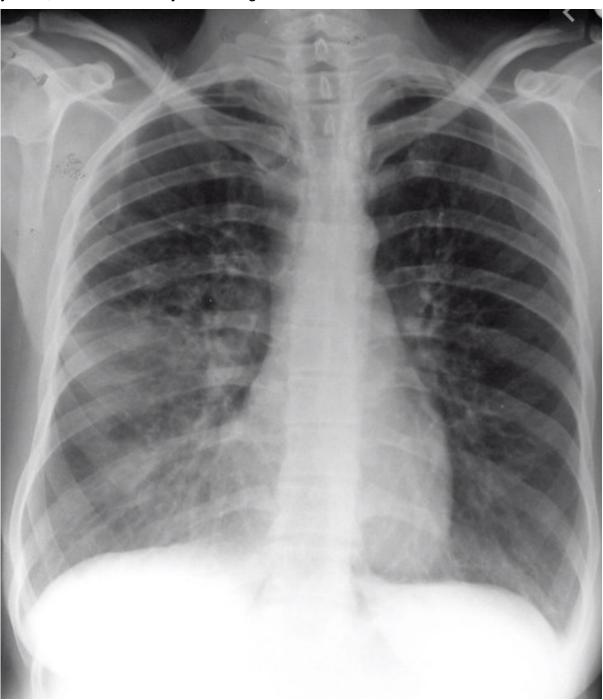
#### **SUMMARY**

 Features are most in keeping with a lingular lobar pneumonia. (also shown on lateral – as density over the heart shadow)

#### CONCLUSION

 I'd consider antibiotic therapy based off the pneumonia severity index (PSI), and O2/hydration based off clinical exam. Gen Med often asks for urinary antigens and a resp panel swab in these cases.

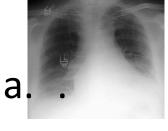
CXR 2: Mr DJ, 22 yrs old, exam date: today: PC: Cough and fevers



CXR 3: Mr DJ, 22 yrs old, exam date: today: PC: 6 weeks cough and fevers

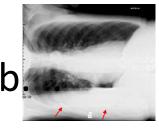
# Match & Label





I. AP





II. PA

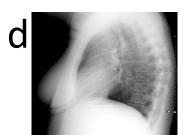




III. Lat

4





IV. Decub



# Match & Label

1.



4.



2.



5.

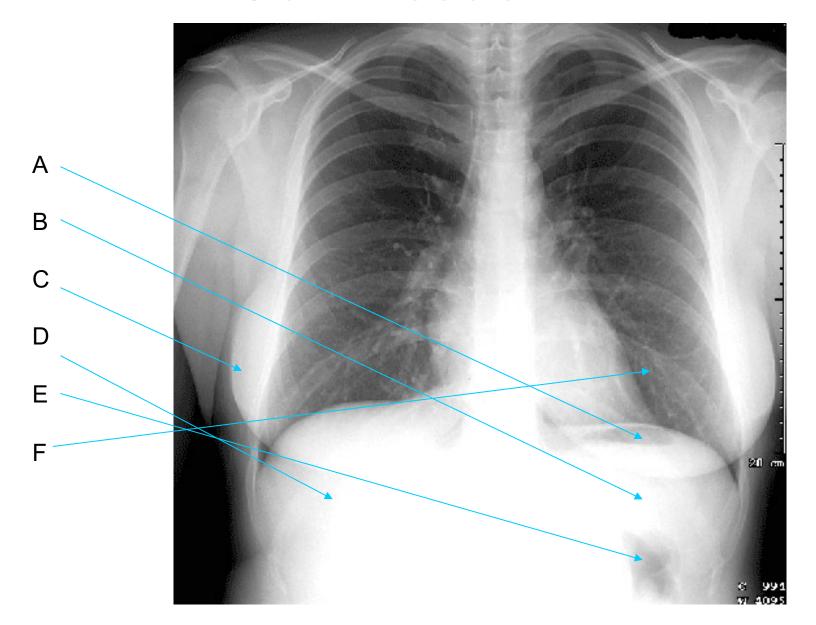


3.

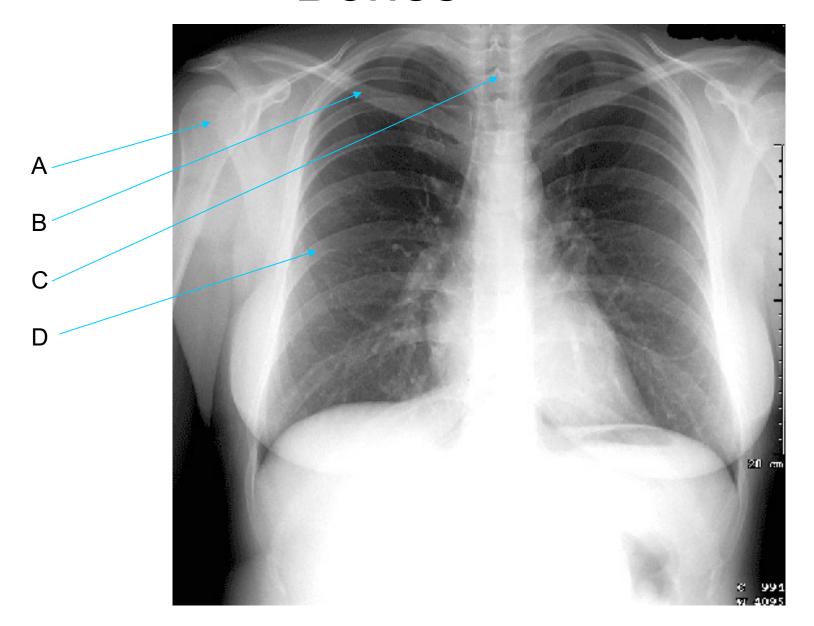


- a. Over exposed
- b. Under exposed
- c. Rotated
- d. Poorly collimated
- e. Under inspiration

# Soft Tissue



# Bones



# Quiz time: Life Threat CXRs

 State the life threat (Danger)

 Give Summary with Impression

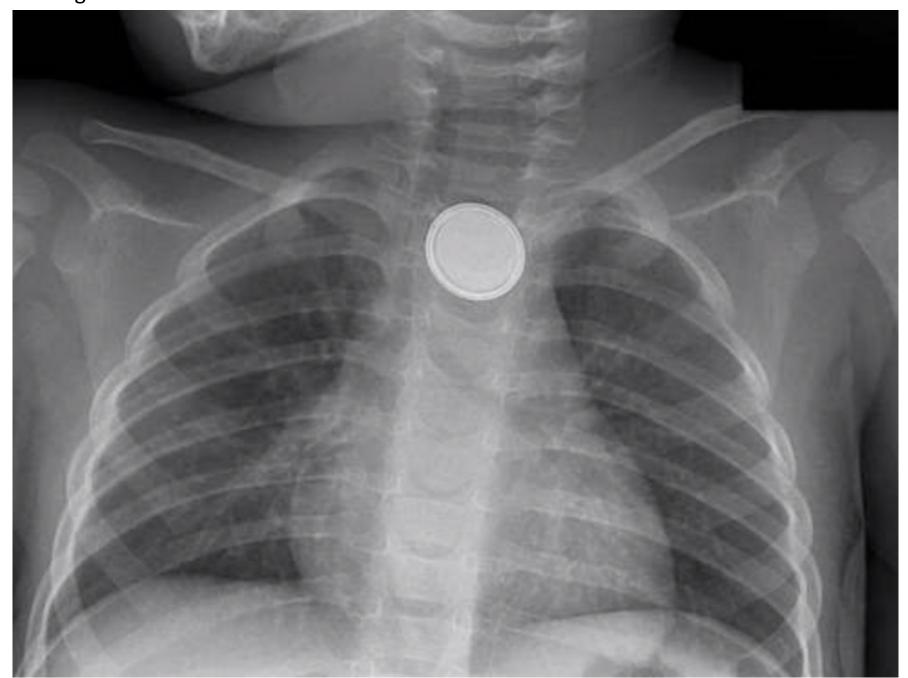
Recommend first line management (Distress)



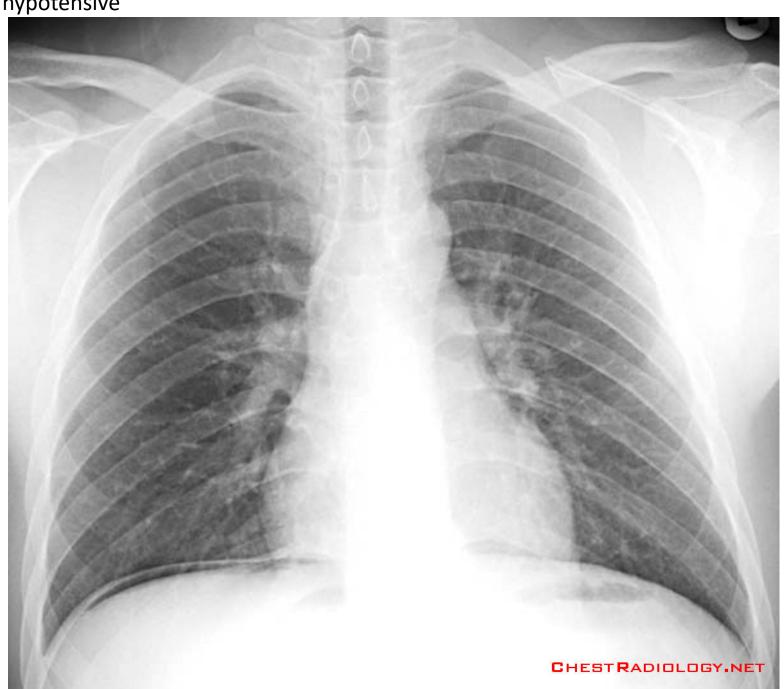
EXAMPLE: Choking child after playing with coin in mouth, reduced sats.

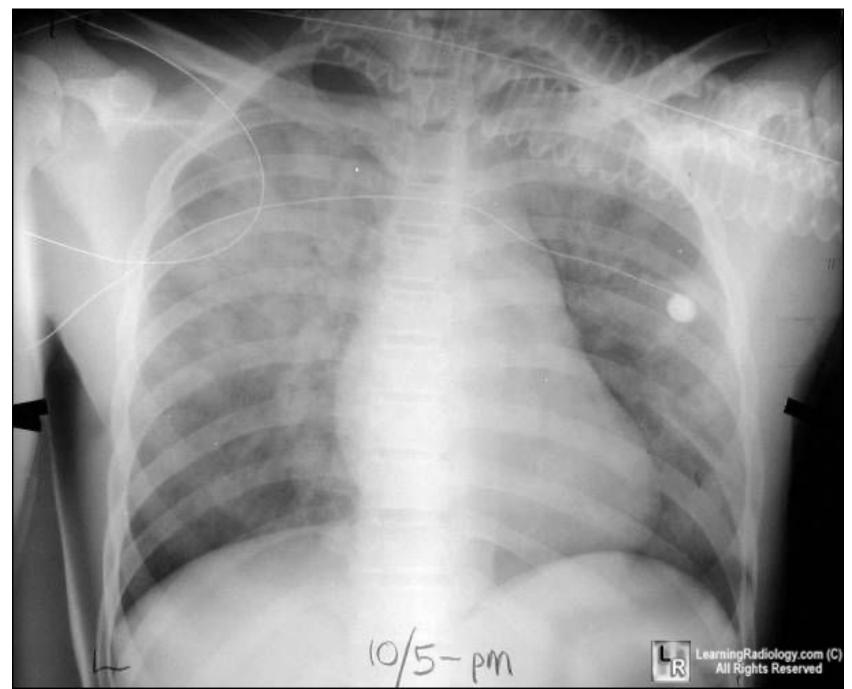
- This is an airway life threat
- There is a linear metallic foreign body projected over the trachea, it appears to be an aspirated coin
- Manage in paeds resus and put out anaesthetic airway emergency call, see if ENT available, set up for RSI

Drooling child

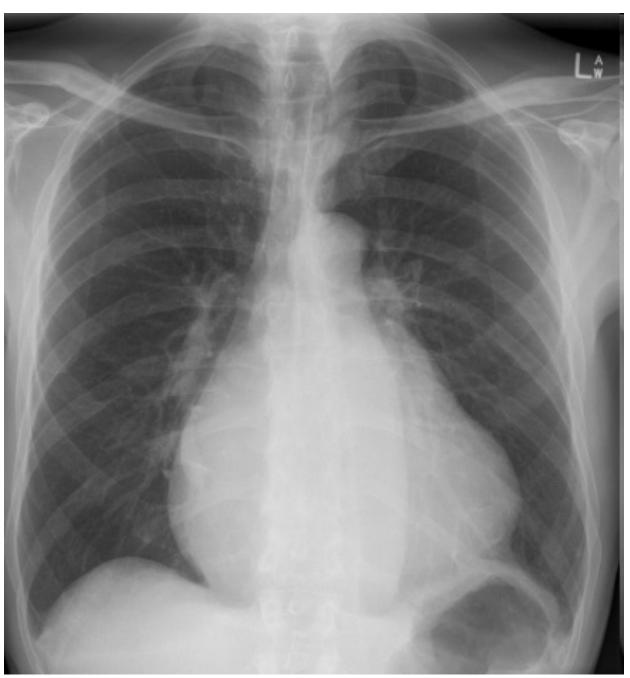


Febrile hypotensive

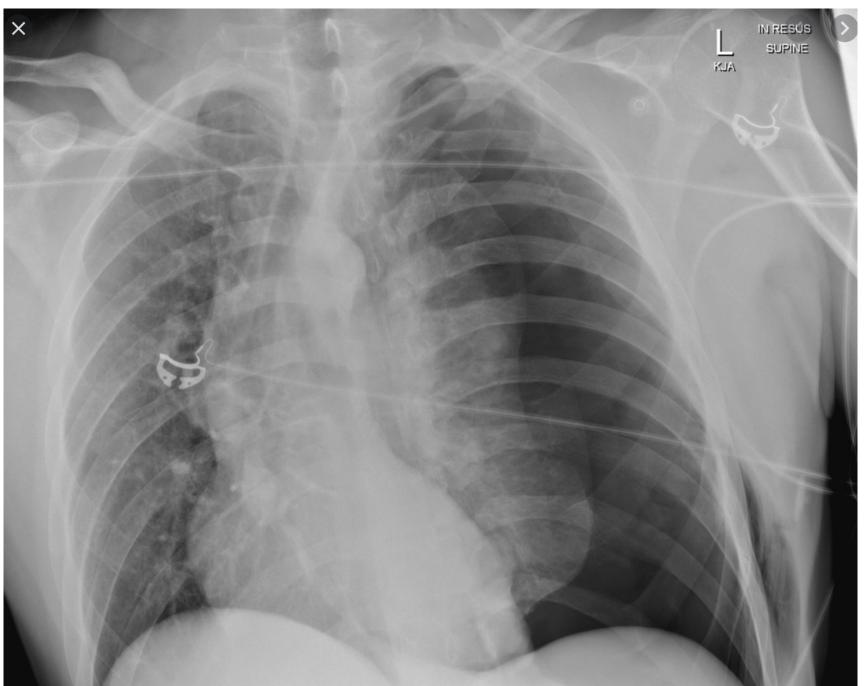




# SOB and hypotensive



## Reduced GCS



Severe CP PA Erect Inspiration Severe CP



Pleural CP & SOB post long flight



# Post procedure



Fever, cough, sats 80%. Family member covid +ve

