

# Case 1

- A 22 year-old man hit a football pole with his occiput during a football game
- He complained of posterior neck pain
- There was diffuse tenderness over his posterior C-spine with no neurological deficit

Case 1  
X-ray  
C-spine



Case 1  
X-ray  
C-spine



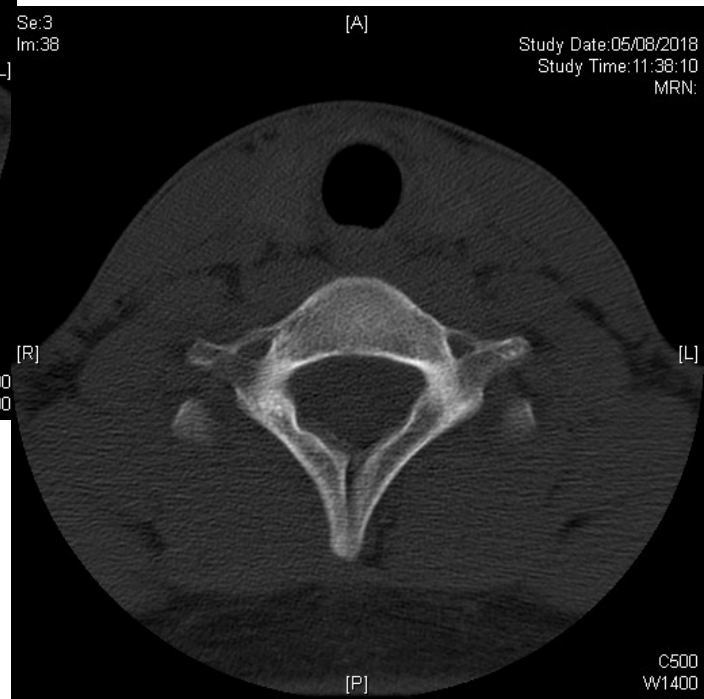
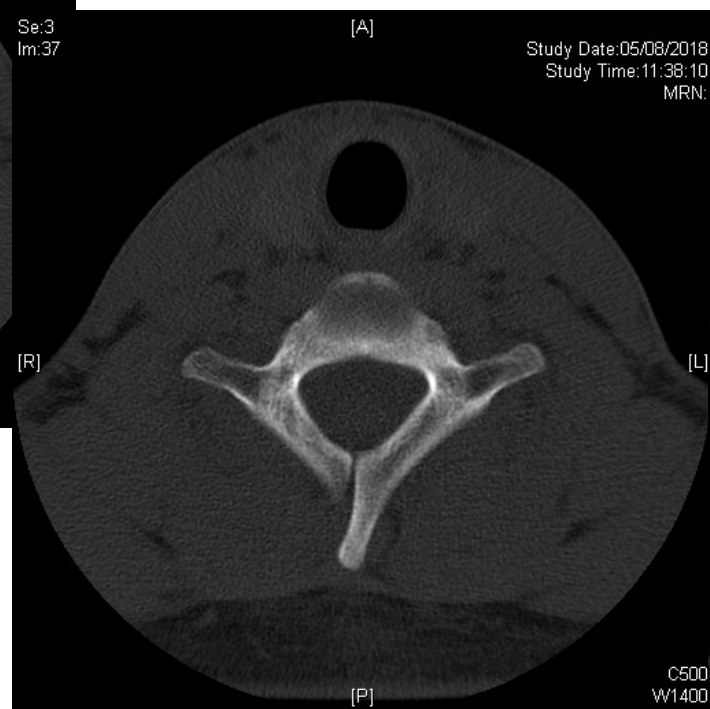
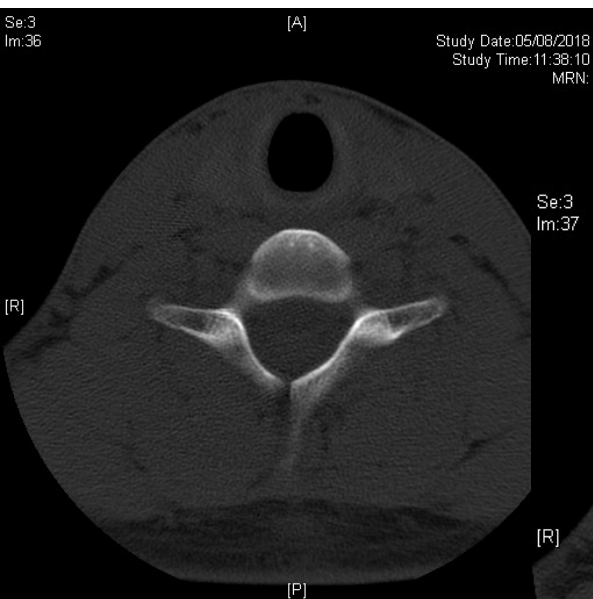
Cross Table LATERAL



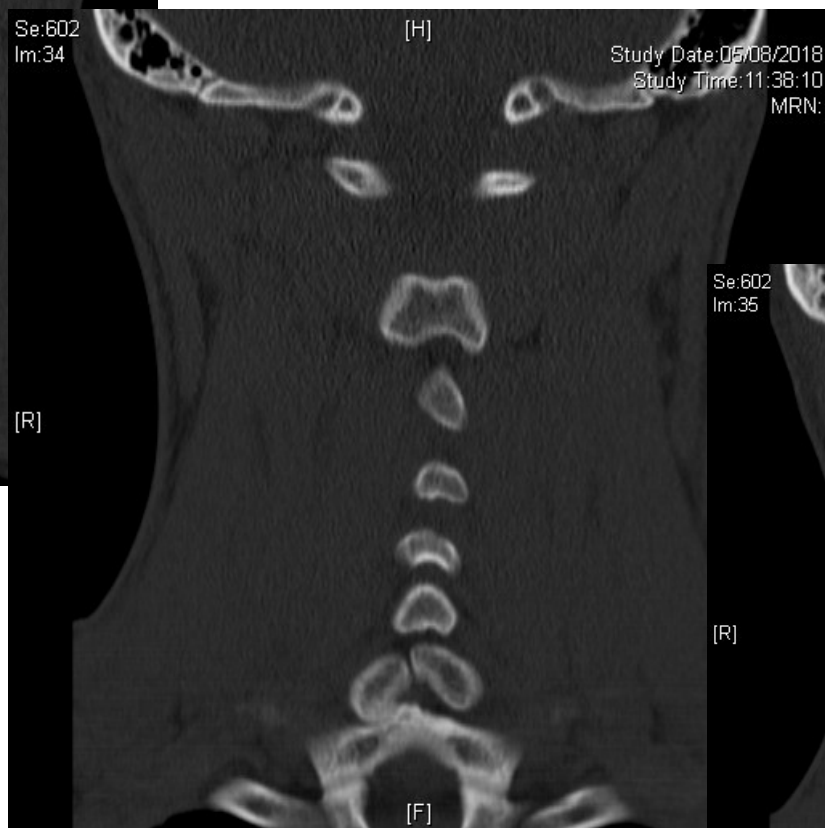
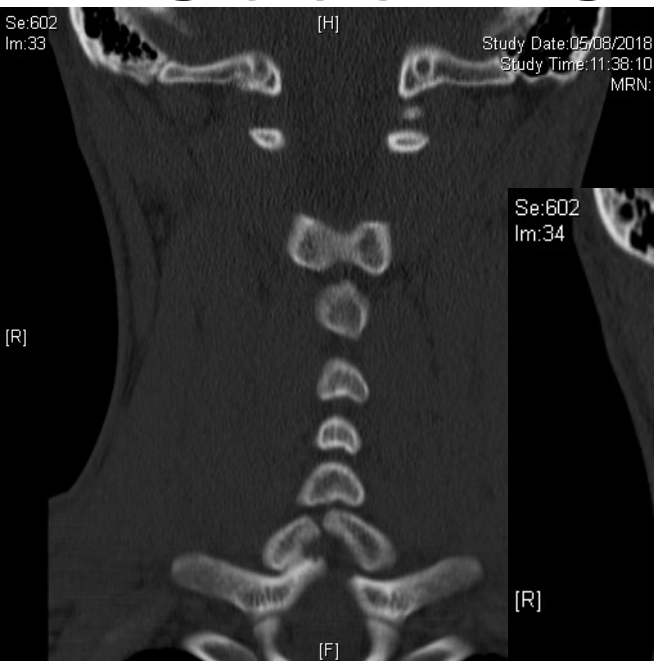
# Case 1

1. Please comment on the C-spine X-ray, what is the abnormal finding?
  - Radiolucent line over C7 vertebral body with normal prevertebral space
2. What will be your initial management?
  - Cervical spine immobilization
  - Urgent Orthopaedic consultation/plain CT C-spine

# Case 1 CT C-spine



# Case 1 CT C-spine



# Case 1

3. CT C-spine was done later, what is the CT finding?

- Well corticated cleft at spinous process of C7 with no adjacent bone fragment or soft tissue swelling

4. What is the diagnosis?

- Neck sprain with congenital unfused posterior spinal process of C7

# Case 2

- A 42 year-old Filipino domestic helper presented with collapse and transient convulsion in the ambulance.
- She was drowsy on arrival, BP 80/50, pulse 142/min., SpO2 99% on 2L NC
- ECG was done.



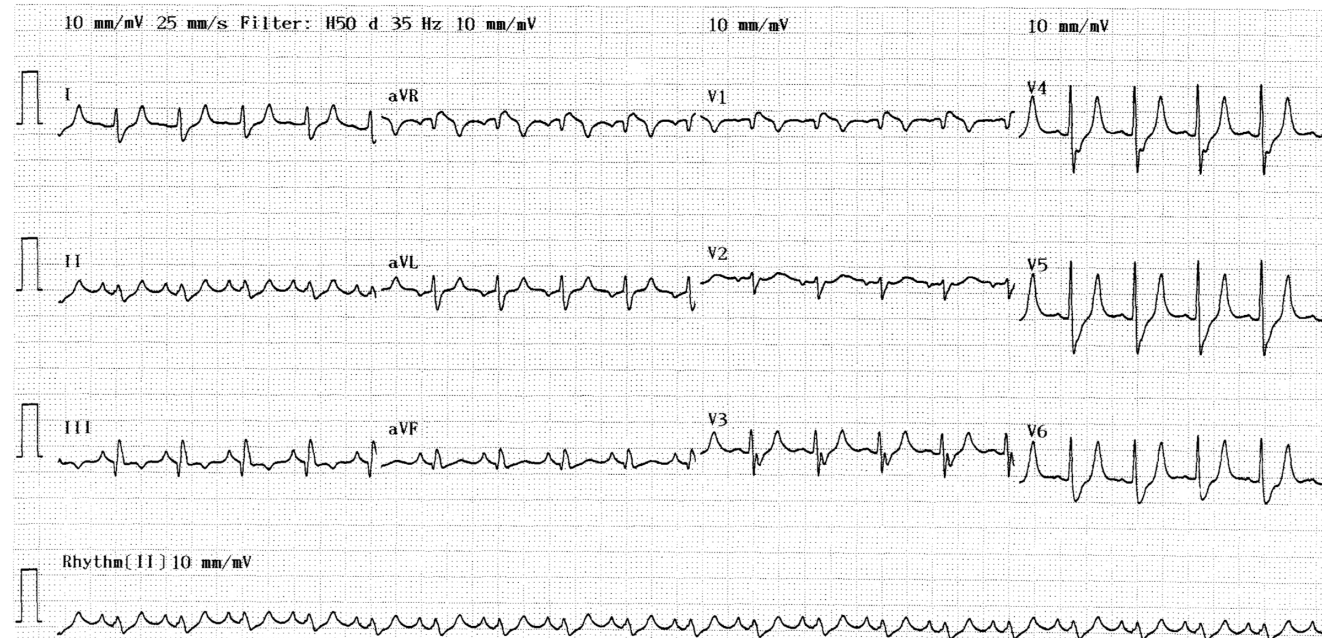
# Case 2

Jan-28-2019 8:26 AM

Name: \_\_\_\_\_  
Sex: Male Birth Date: \_\_\_\_\_ Years  
cm kg mmHg  
Medication:  
Symptoms:  
History:

Vent rate 120 bpm  
PR int 136 ms  
QRS dur 118 ms  
QT/QTc int 324/ 395 ms  
P/QRS/T axis 90/ 25/ 7 °  
RV5/SV1 amp 1.245/ 0.195 mV  
RV5+SV1 amp 1.440 mV

Unconfirmed Report  
Reviewed by:

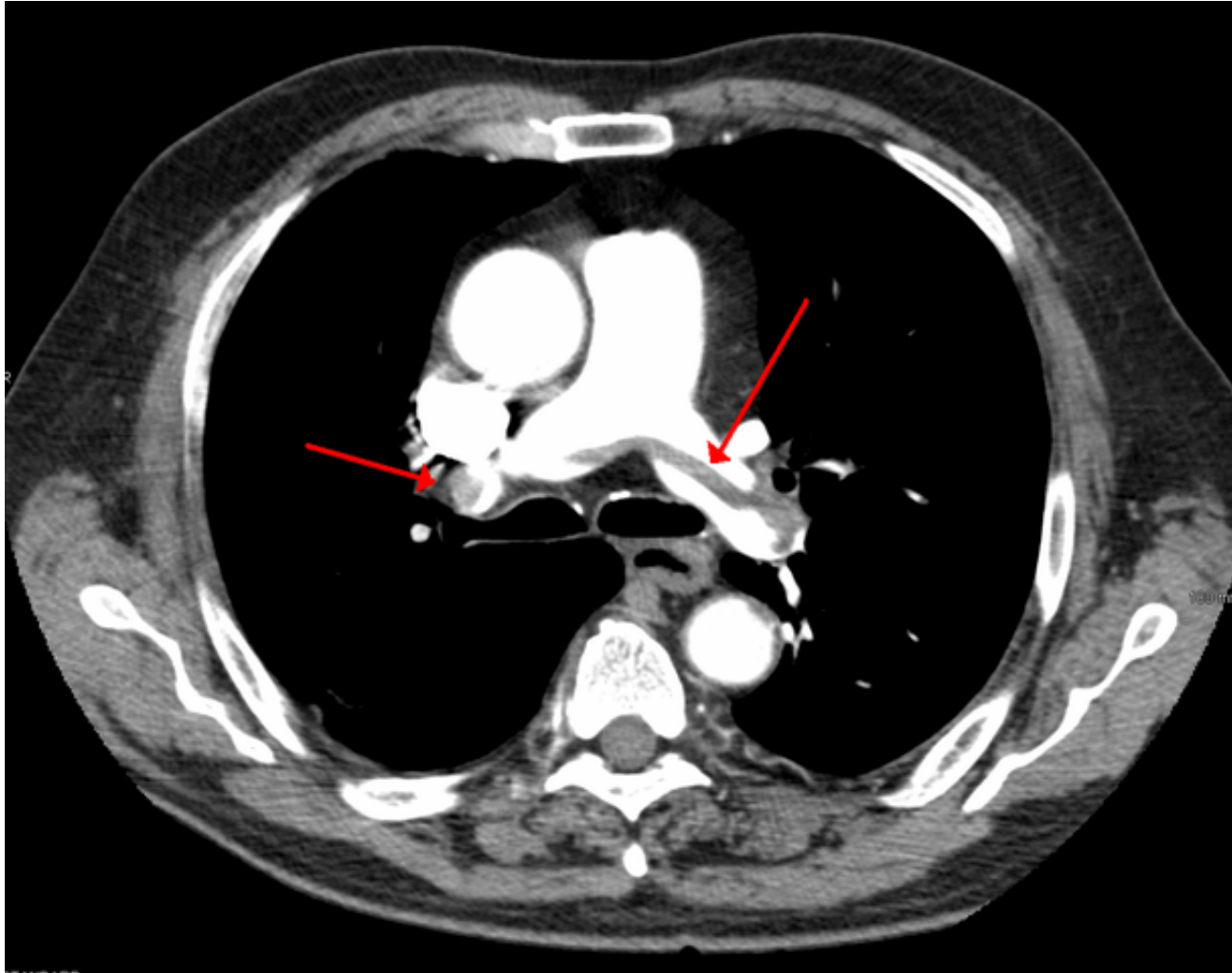


# Case 2

1. What are the ECG findings?
  - Sinus tachycardia
  - Incomplete RBBB
  - SIQIIITIII pattern
2. What investigation can be performed afterwards? And what are the findings to look for?
  - Bedside US to look for right ventricular dysfunction

# Case 2

## CT pulmonary angiogram



# Case 2

## CT pulmonary angiogram



# Case 2

3. After stabilization, a CT pulmonary angiogram was done. What are the abnormalities?

- Filling defects at the bifurcation and in both pulmonary arteries
- Dilated right ventricle

4. What is the diagnosis and what specific therapy should be considered?

- Acute pulmonary embolism with right heart strain
- Thrombolytic therapy

# Case 3a

- A 76 man was knocked down by a taxi
- He complained of left knee pain

1. What is the X-ray finding?

2. What will you do next?

# Case 3a

Uncooperative



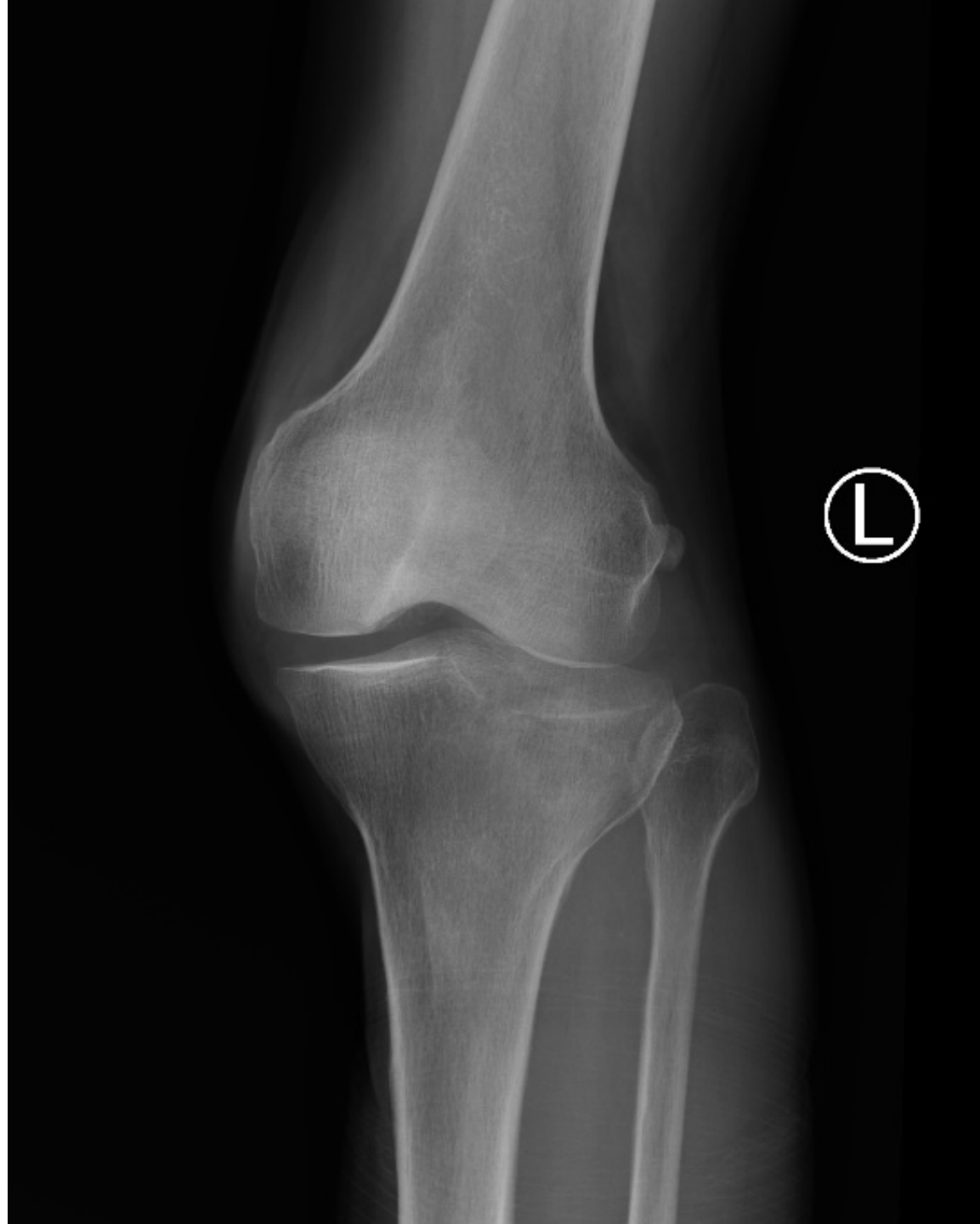
# Case 3a

- A 76 man was knocked down by a taxi
  - He complained of left knee pain
1. What is the X-ray finding?
    - Nonalignment of the lateral femoral condyle and tibia on AP view
    - Suspected fracture tibial plateau
  1. What will you do next?
    - X-ray oblique view or CT scan



# Case 3a

oblique view



# Case 3a

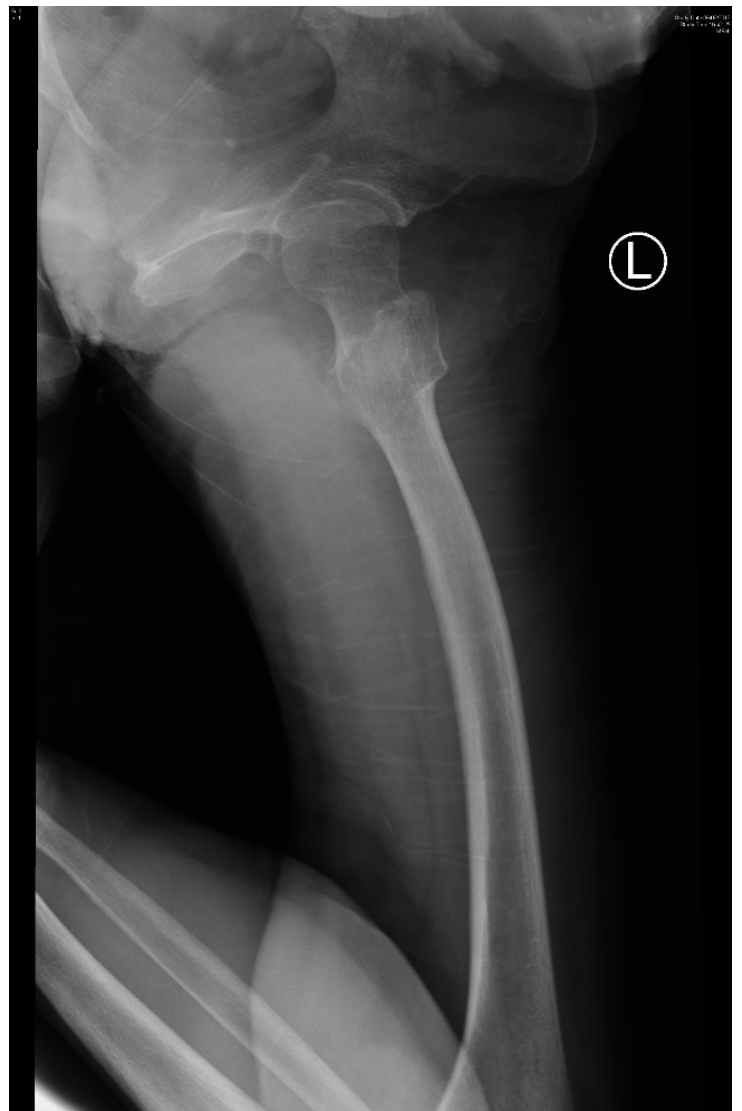


# Case 3b

- A 72 year-old woman presented with left hip contusion

1. What is the X-ray finding?
2. What will be your management?

# Case 3b



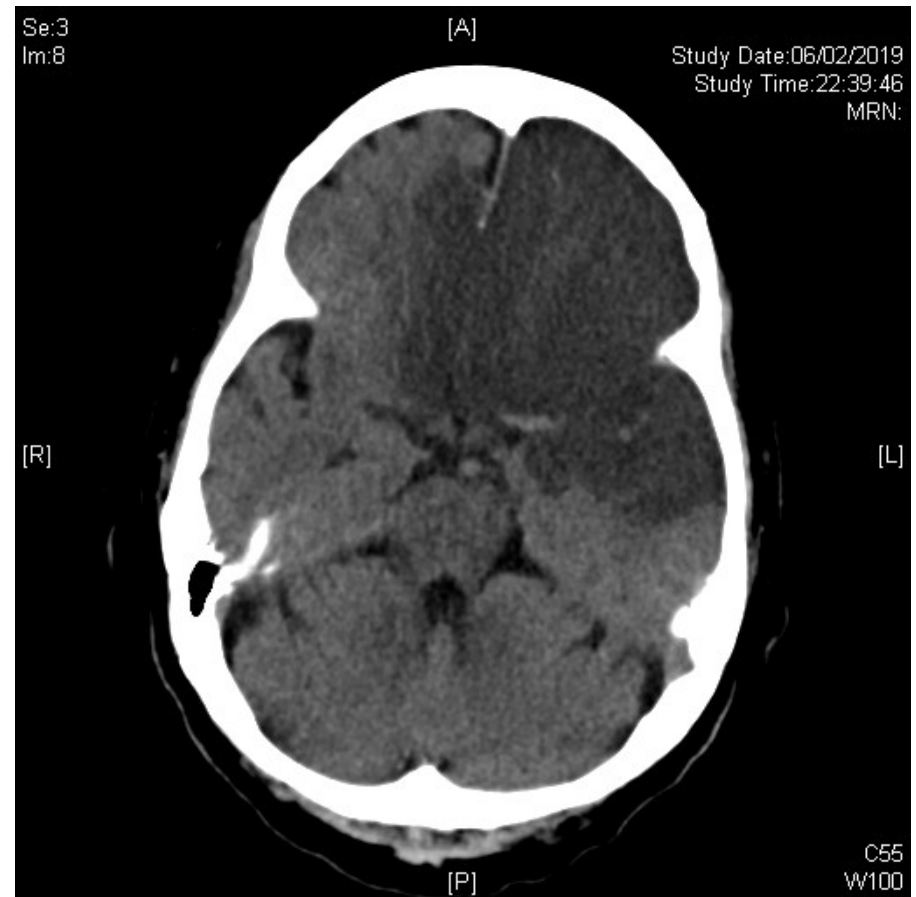
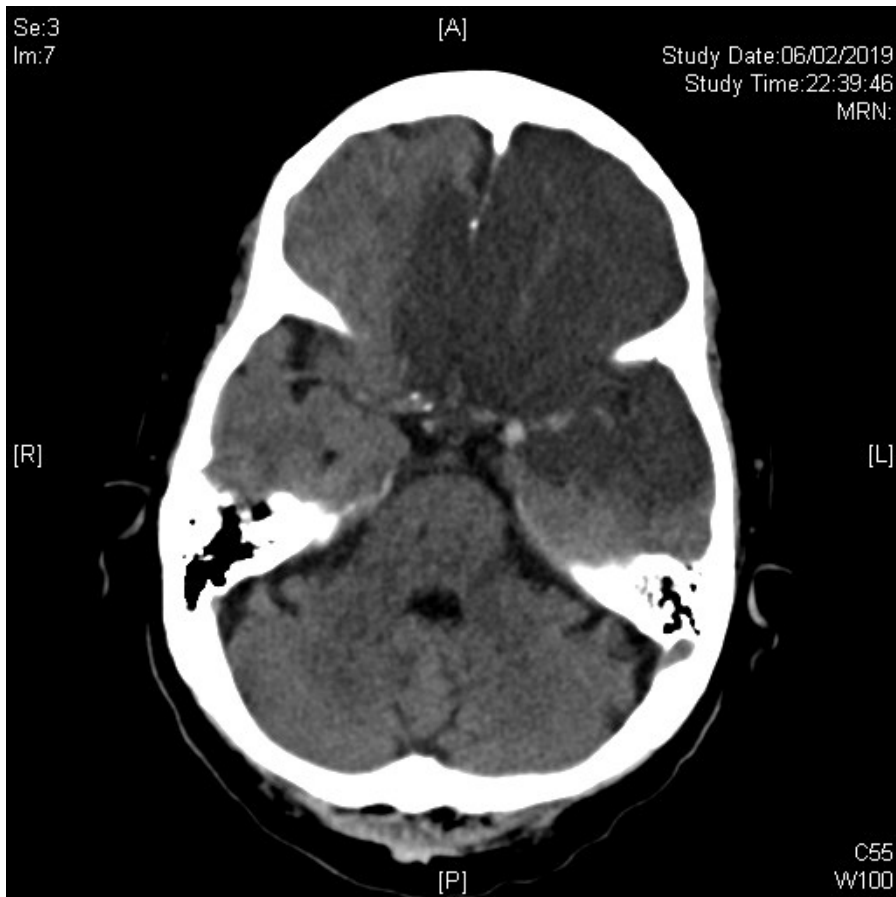
# Case 3b

- A 72 year-old woman presented with left hip contusion
1. What is the X-ray finding?
    - Disrupted Shenton line of left hip/fracture neck of left femur
  2. What will be your management?
    - Admit Orthopaedic ward for surgical treatment

# Case 4

- Answer the following questions with reference to the CT brain above:
1. Is the CT brain a contrast or non-contrast scan?

# Case 4 – CT brain



# Case 4

- Answer the following questions with reference to the CT brain above:
  1. Is the CT brain a contrast or non-contrast scan?
    - Non-contrast



# Case 4

## 2. What are the CT abnormalities?

- Hypodense area over left frontal, medial right frontal, anterior left temporal lobes (suggestive of infarct)
- Increased density over left middle cerebral artery, left anterior communicating artery
- Loss of/effacement of left anterior sulci (suggestive of edema)
- Mild anterior mid-line shift to left

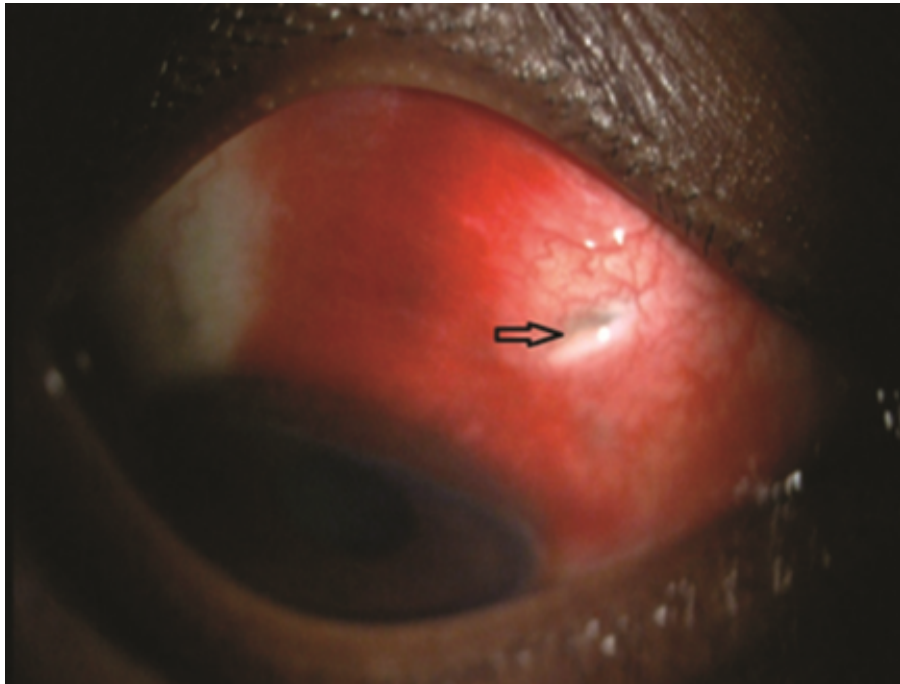
# Case 4

3. What is your diagnosis and what is the name of the specific CT brain sign?
  - Left MCA infarct, with blood clot in left MCA
  - Hyperdense MCA sign
4. What is the implication?
  - It has been associated with a poorer outcome

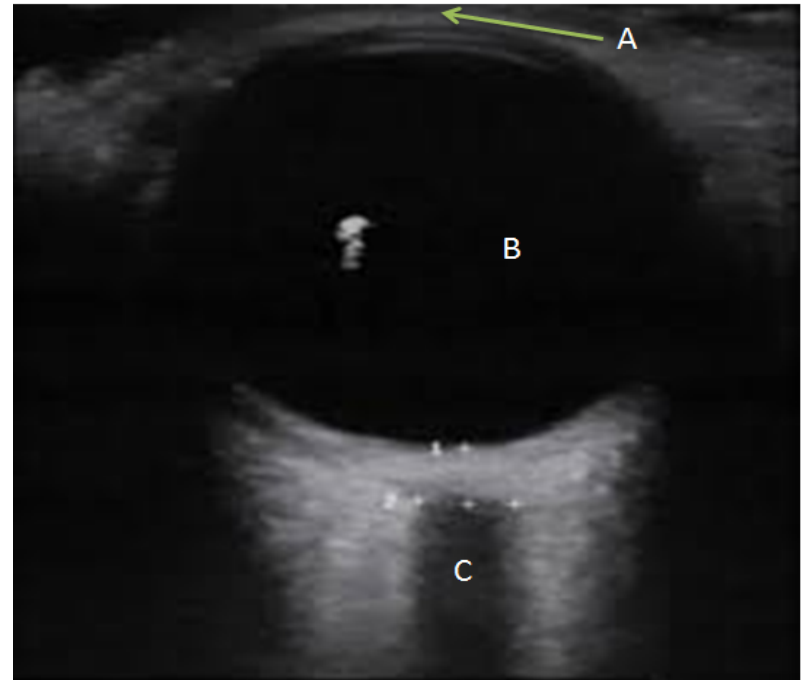
# Case 4

5. What is the specific treatment of choice?
  - Endovascular clot retrieval techniques
6. What could give similar appearance over the left MCA?
  - Calcified atherosclerotic disease
  - High hematocrit (e.g. polycythemia)

# Case 5



Picture 1.



Picture 2.

# Case 5

- A 31 year-old man presented with left eye injury by metal chip flying off a nail when hammering against the wall.
- 1) Describe the clinical finding in picture 1.:
    - Subconjunctival hemorrhage in superior bulbar conjunctiva
    - Underlying black spot which could represent underlying choroid or impacted foreign body
  - 2) What radiological modality is shown in picture 2.:
    - Ultrasound of globe

# Case 5

3) What are layer A and structures B and C:

- A - cornea
- B - vitreous
- C - optic nerve

4) What is the abnormality shown in picture 2.?

- Intra-ocular foreign body casting reverberation artefact

# Case 5

5) What other beside examination/test you will do?

- Visual acuity
- Intra-ocular pressure

6) What is the emergency management?

- Urgent consult Ophthalmologist for urgent removal and repair

# Case 6

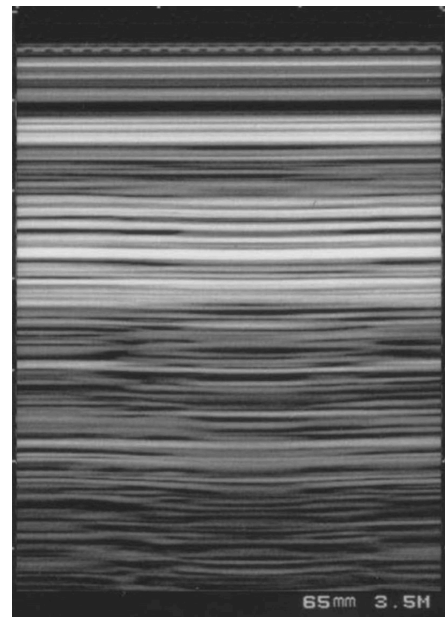
- A 42 year-old man has injury on duty.
- He suffered from blunt chest injury when inflating a van tie which exploded.
- This is his lung ultrasound:



# Case 6



Right upper lung



Left upper lung



Right lower lung



Left lower lung

# Case 6

1. What is the name of lung ultrasound sign showed in his right lung?
  - Sea-shore sign
2. What is the name of lung ultrasound sign showed in his left upper lung zone and what is the implication?
  - stratosphere sign / barcode sign, potential pneumothorax

# Case 6

3. What is the abnormality showed in his left lower Lung ultrasound?
  - Left pleural fluid
4. What is your next immediate action if patient has increasing respiratory distress and hypotension, and in what surface anatomical landmark?
  - Left needle thoracostomy; left 5th intercostal space just anterior to mid-axillary line
  - Follow by left chest drain

# Case 6

5. What is the indication of urgent thoracotomy?

- >1.5 L chest tube output upon tube insertion (within 1 hour of injury)
- Ongoing chest tube output, >200 cc/hr, over 4 hours

End