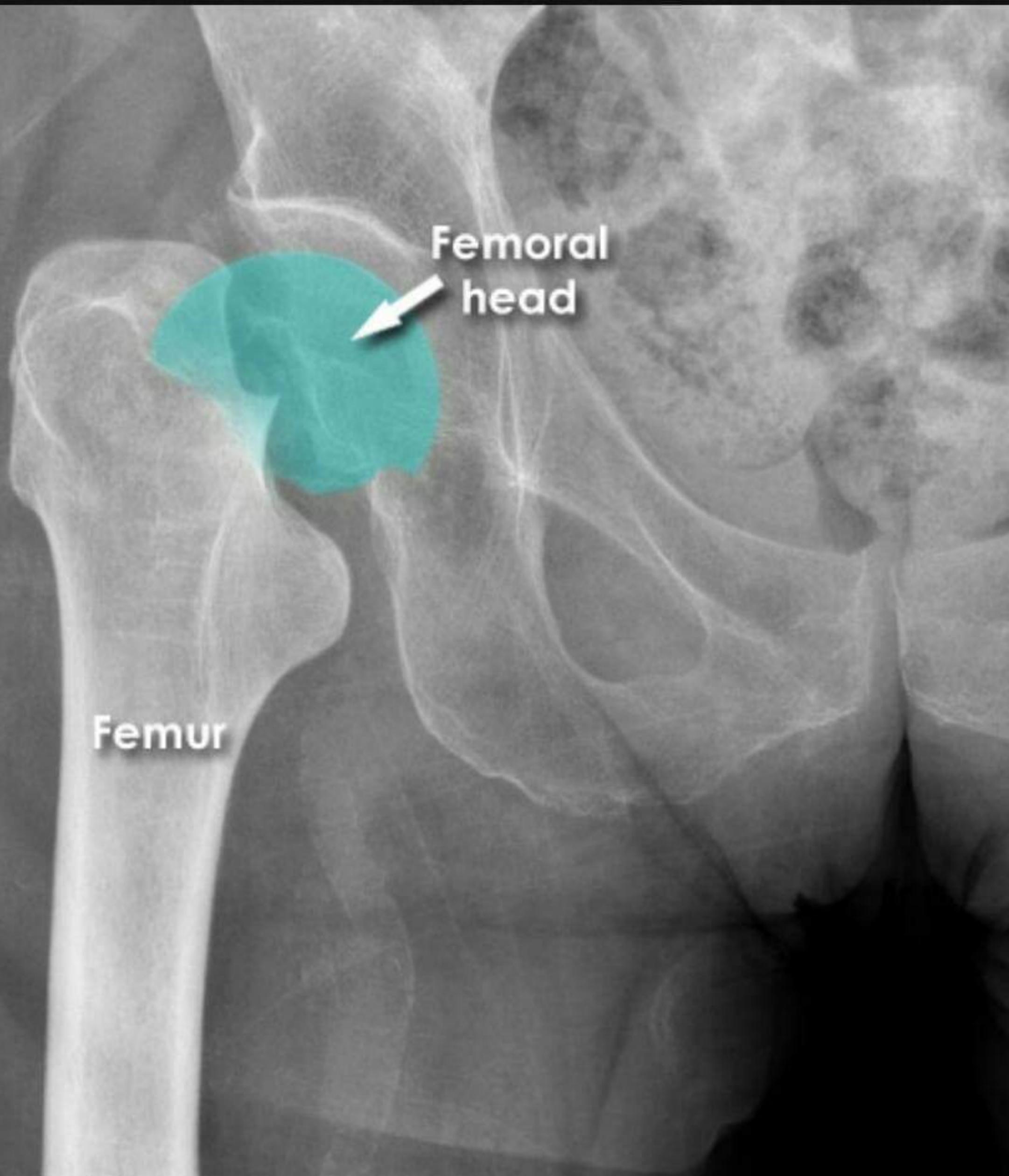




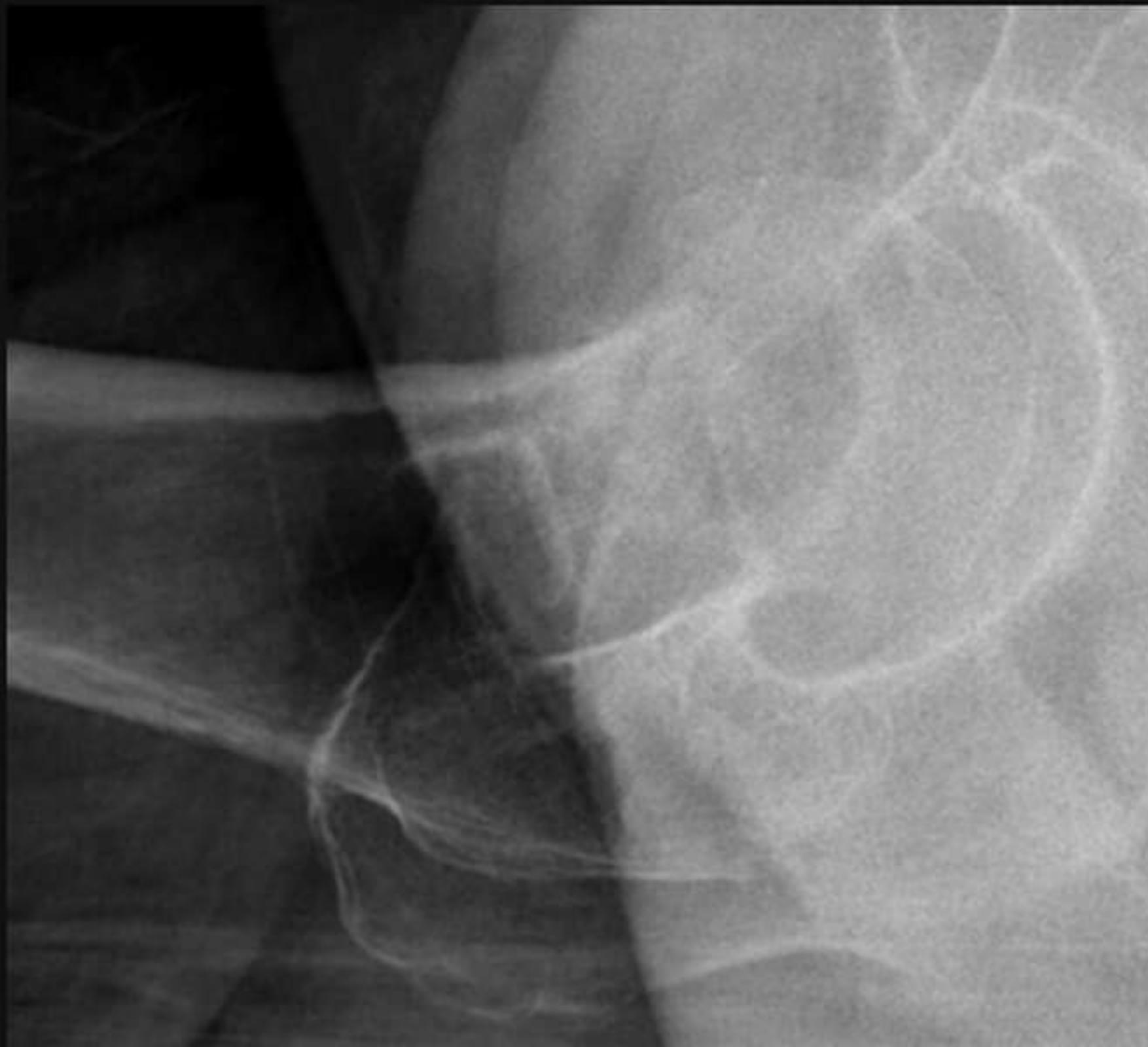
Neck of femur - Subcapital fracture - AP

- ◆ A fracture immediately below the femoral head separates it from the femoral neck
- ◆ There is complete displacement of the neck from the head



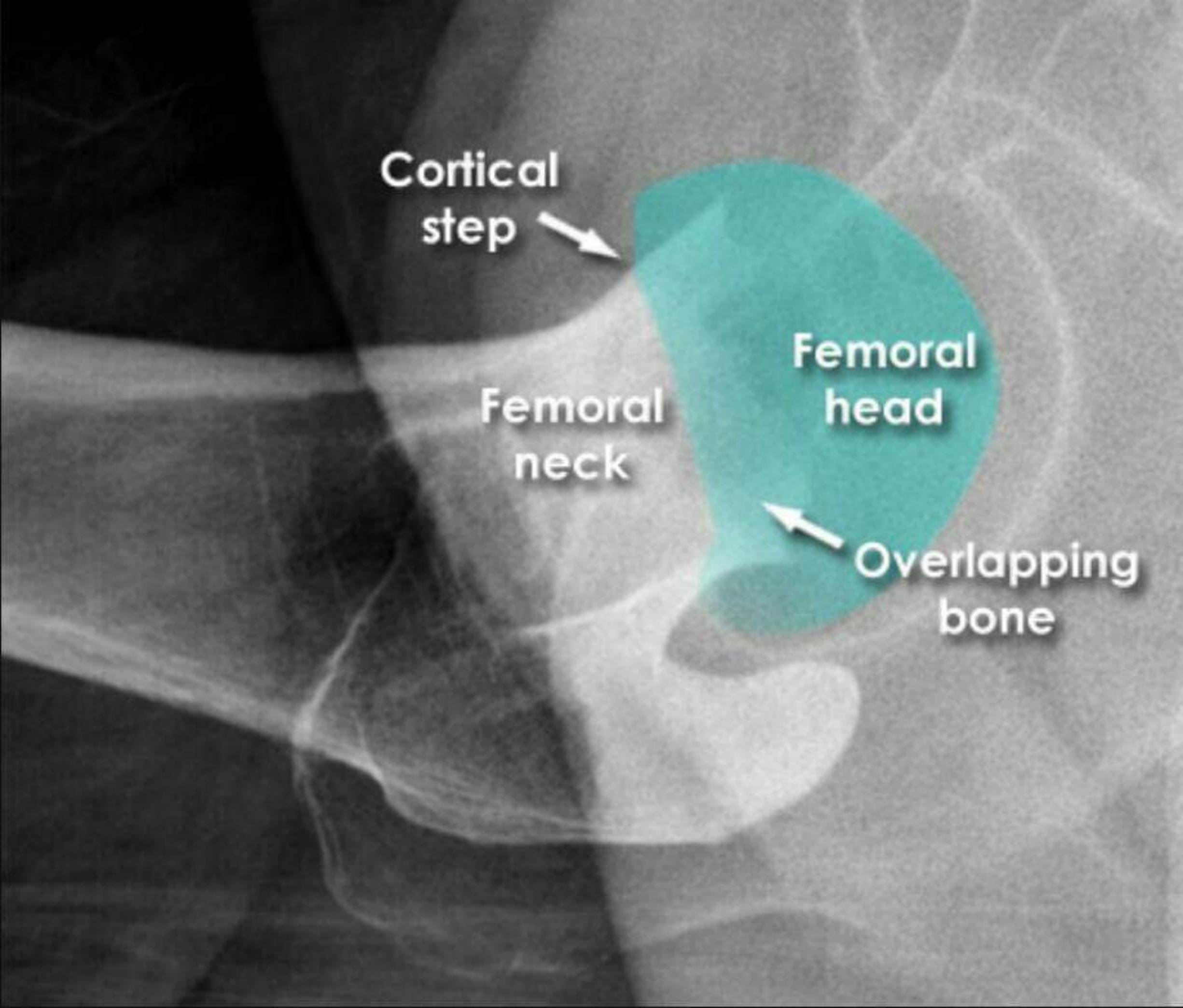
Femur

Femoral
head



Neck of femur - Subcapital fracture - Lateral

- ◆ Neck of femur fractures are often more difficult to see on the lateral image
- ◆ Look for a step in the cortical edge or overlapping bone

A black and white X-ray image of a human femur. The femoral head is highlighted with a teal circle. A white arrow points from the text "Cortical step" to a visible irregularity or fracture line on the femoral neck. Another white arrow points from the text "Overlapping bone" to the area where the femoral head overlaps with the acetabulum.

Cortical
step

Femoral
neck

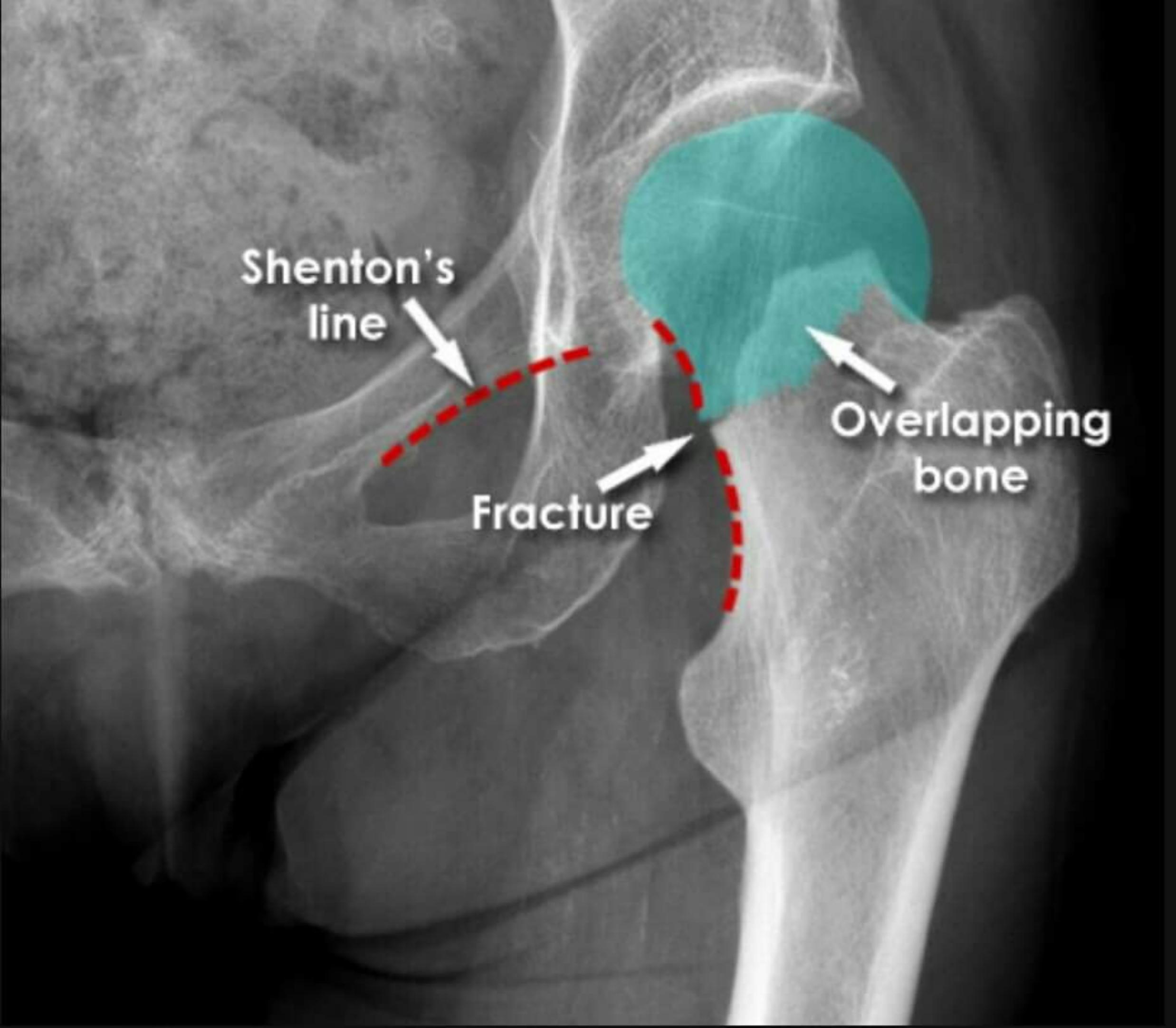
Femoral
head

Overlapping
bone



Neck of femur - Transcervical fracture - AP

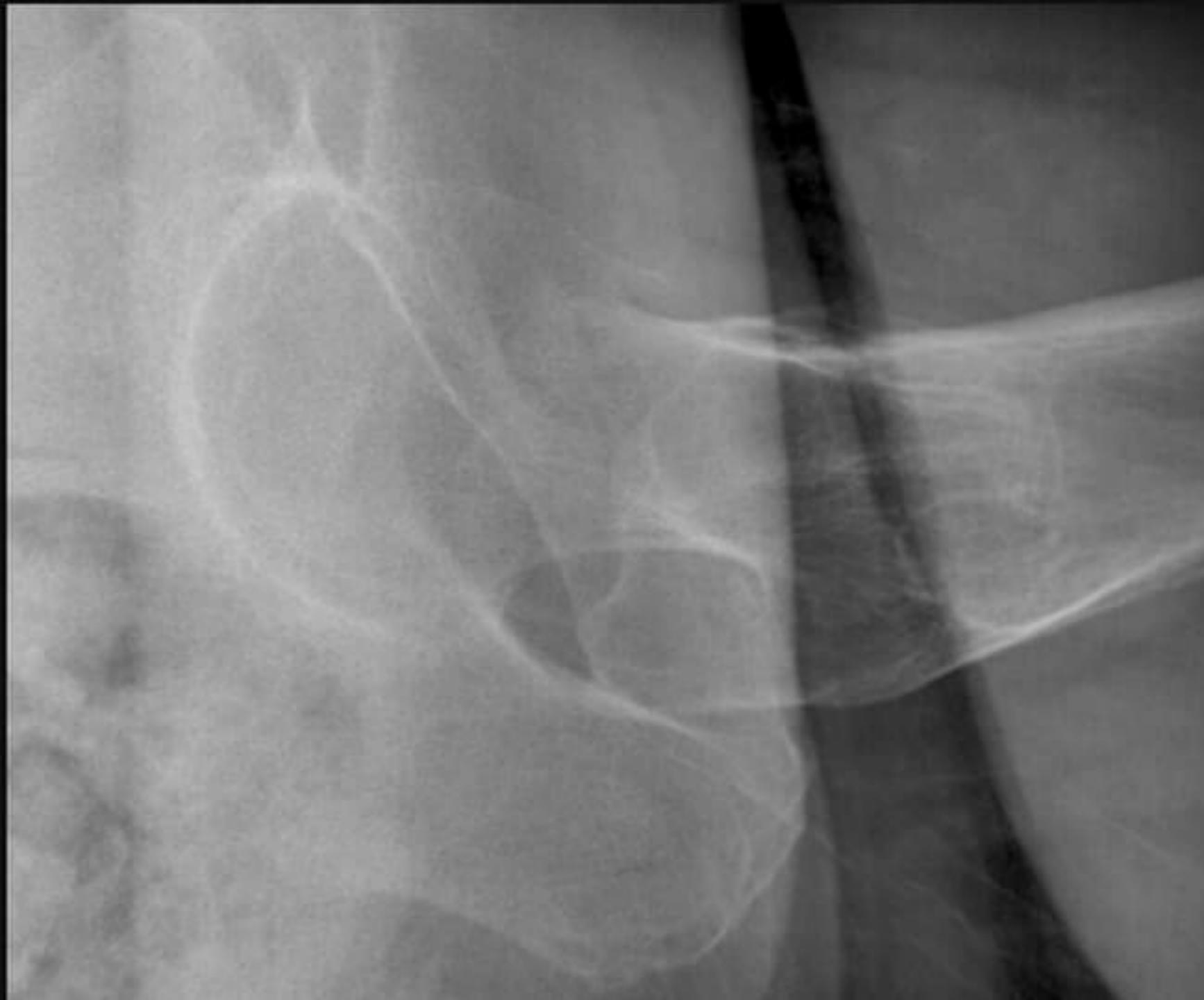
- ◆ A femoral neck fracture is easily visible and Shenton's line is disrupted
- ◆ The fracture line passes all the way across the neck of the femur and there is minor displacement with overlapping of bone



Shenton's
line

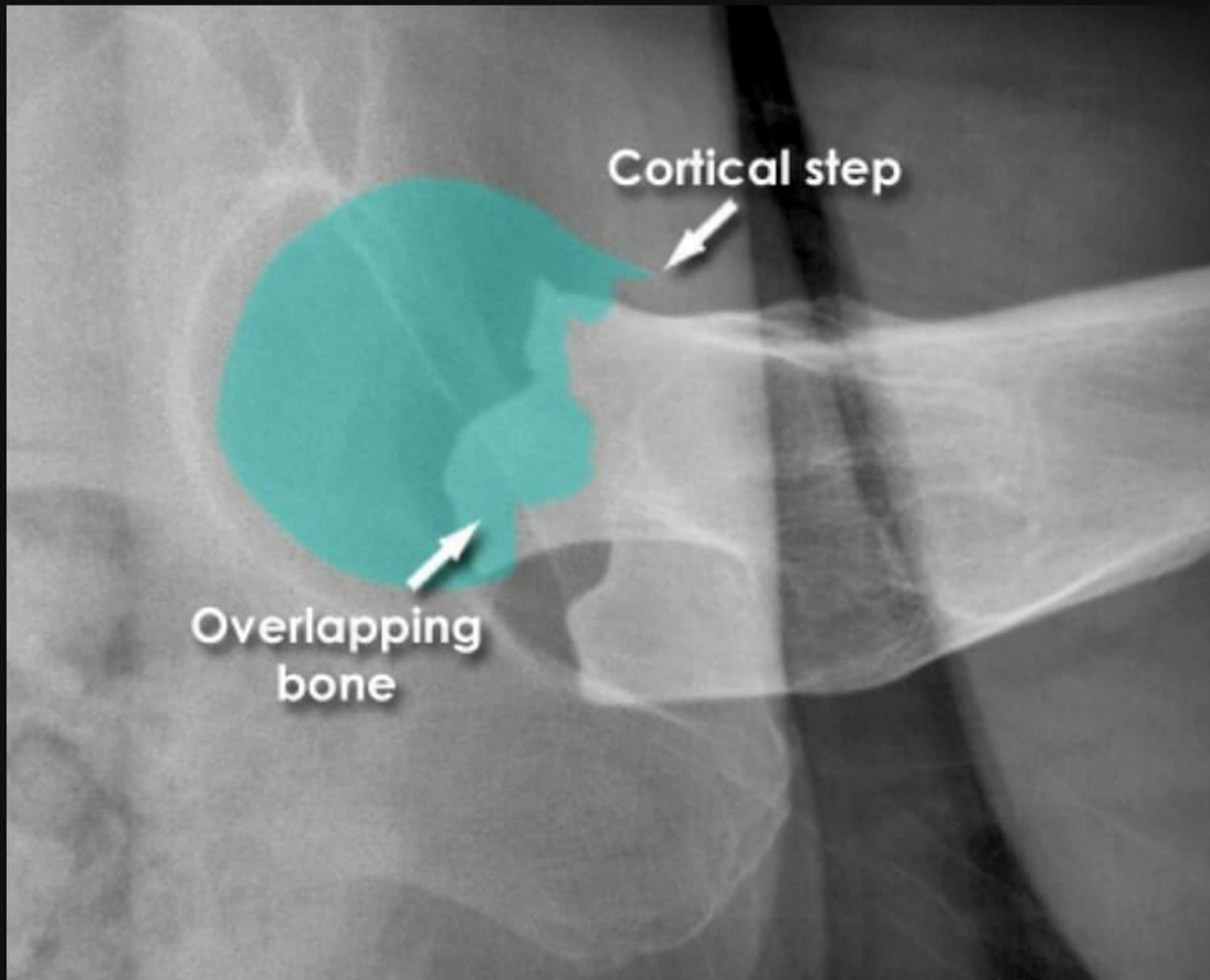
Fracture

Overlapping
bone



Neck of femur - Transcervical fracture - Lateral

- ◆ The lateral image shows a step in the cortex and overlapping bone

An X-ray image of a bone structure, likely a vertebra, showing a fracture. A large teal circle highlights the fractured area. Two white arrows point to specific features: one arrow points to a 'Cortical step' (a vertical ridge) on the right side of the fracture, and another arrow points to 'Overlapping bone' at the bottom left of the fracture site.

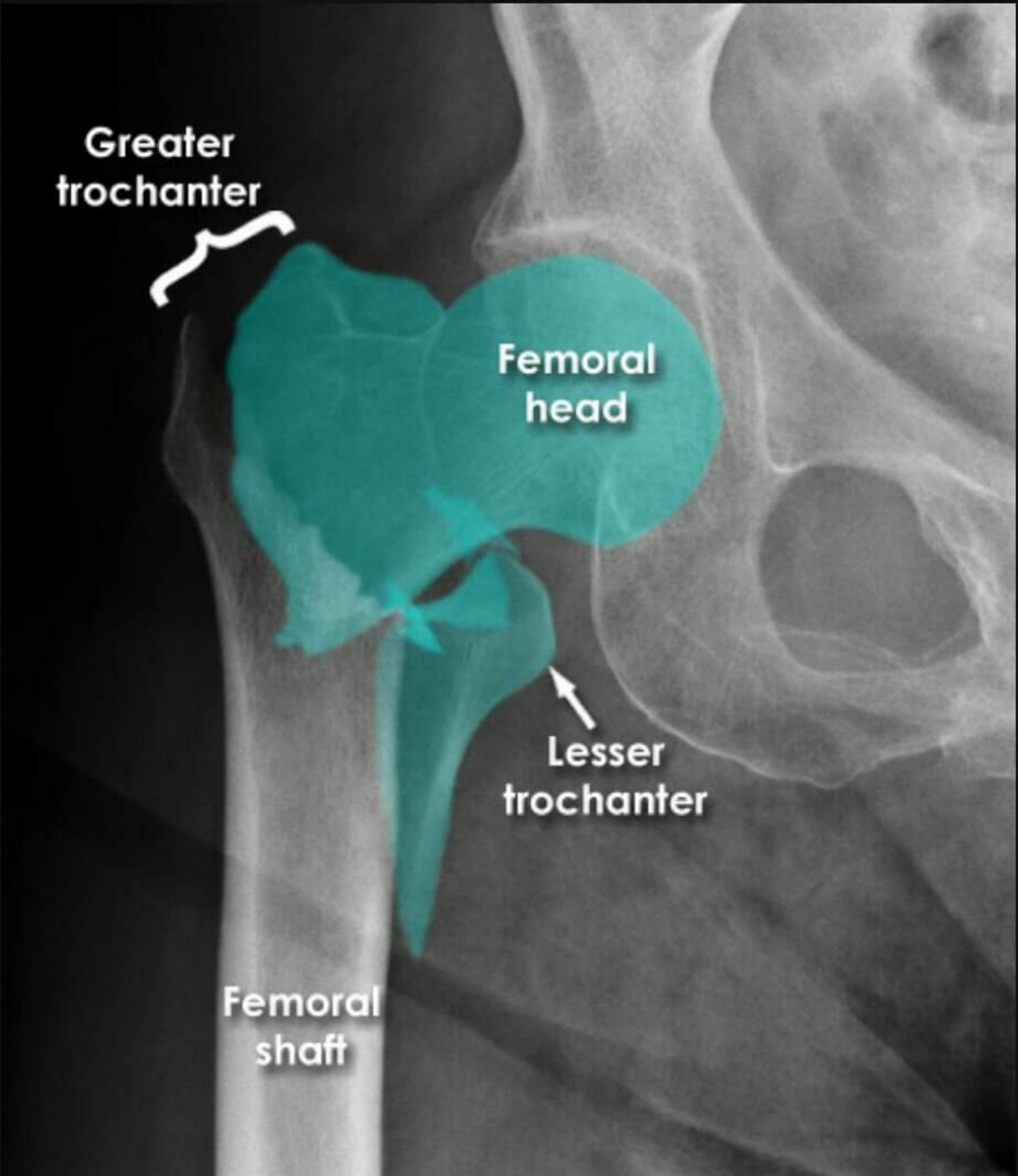
Cortical step

Overlapping
bone



Hip - Intertrochanteric fracture - AP

- ◆ A fracture passes between the trochanters
- ◆ As is often the case with intertrochanteric fractures there is comminution of the lesser trochanter

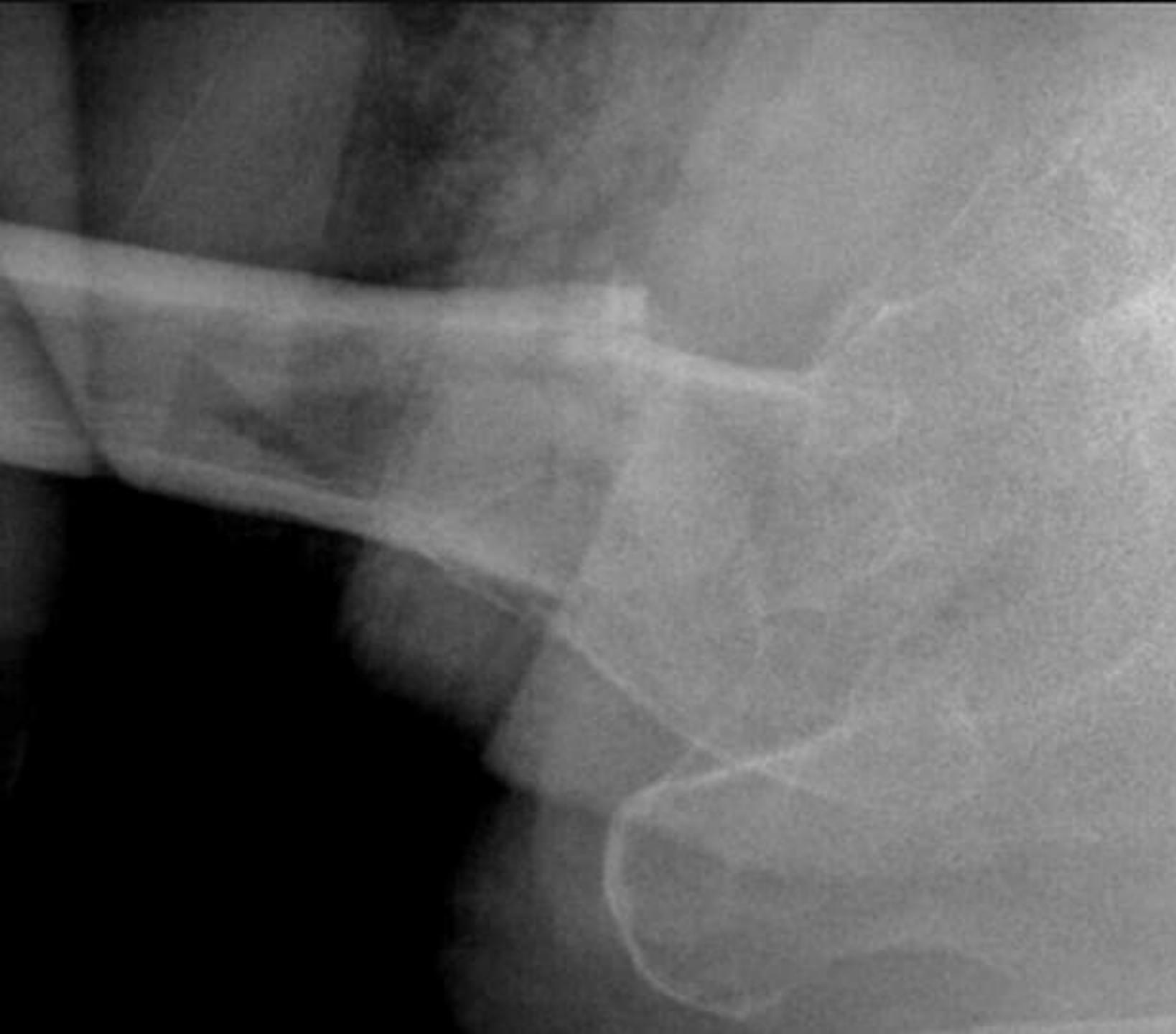


Greater
trochanter

Femoral
head

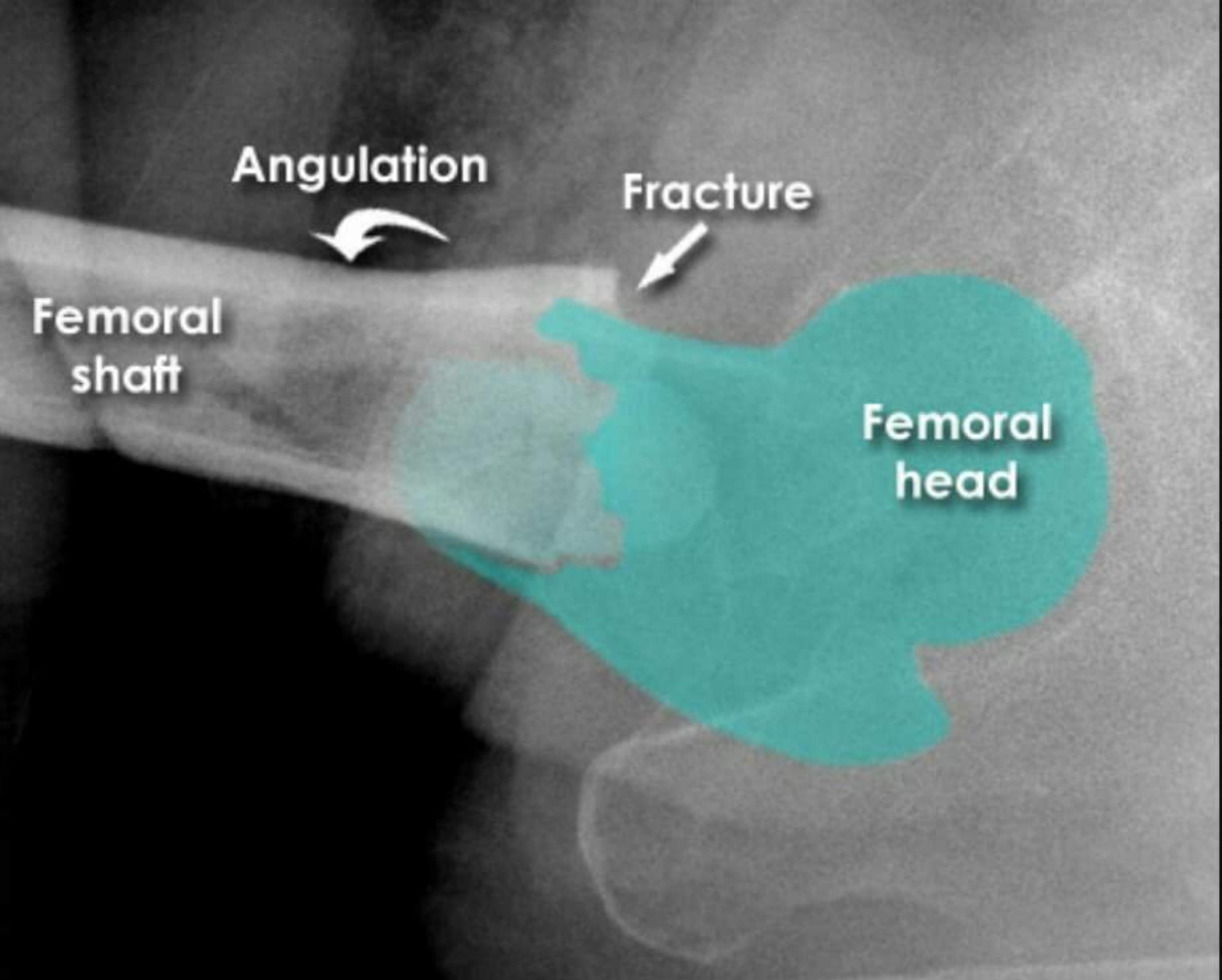
Lesser
trochanter

Femoral
shaft



Hip - Intertrochanteric fracture - Lateral

- ◆ The lateral image shows a step in the cortex anteriorly and angulation of the femoral shaft

A grayscale X-ray image of a human femur (thigh bone). The bone is oriented vertically. A large, irregularly shaped green area highlights the proximal portion of the femur, covering the femoral head and neck. Two white arrows point from text labels to specific features: one arrow points to the left side of the shaft with the label 'Angulation', and another arrow points to the proximal end with the label 'Fracture'.

Angulation

Femoral
shaft

Fracture

Femoral
head



Hip - Subtrochanteric fracture - AP

- ◆ This is a fracture of the proximal femoral shaft rather than the 'hip'

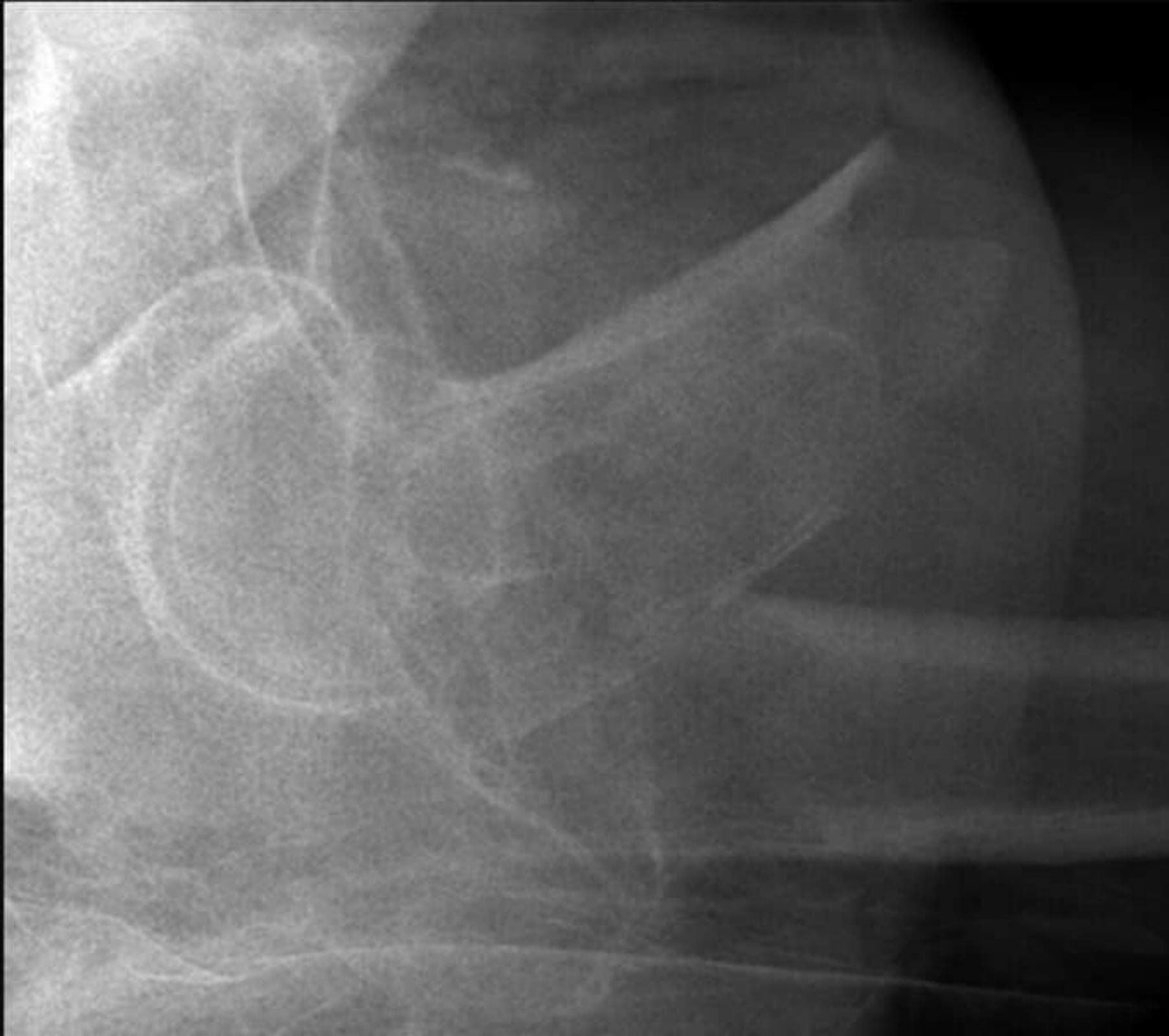
A grayscale anatomical photograph of a human femur (thigh bone) from a lateral perspective. The proximal end of the bone is highlighted with a large teal circle. Four anatomical features are labeled: 'Greater trochanter' points to the top of the proximal femur with a white arrow; 'Proximal femur' is centered within the teal highlight; 'Lesser trochanter' points to the lower, lateral side of the proximal femur with a white arrow; and 'Femoral shaft' points to the long, straight part of the bone below the proximal end with a white arrow.

Greater
trochanter

Proximal
femur

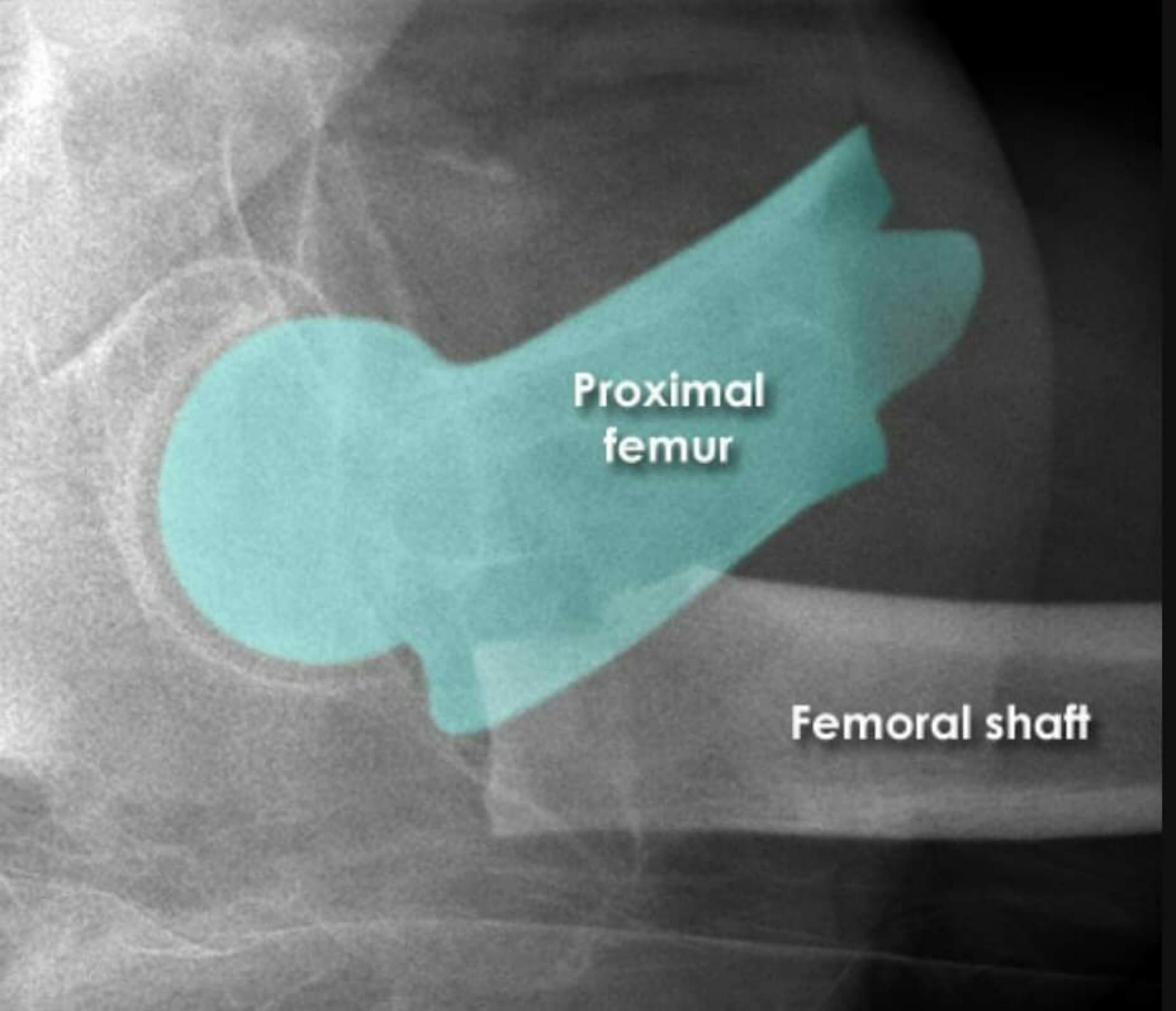
Lesser
trochanter

Femoral
shaft



Hip - Subtrochanteric fracture - Lateral

- ◆ The degree of displacement is much more easily appreciated on the lateral image



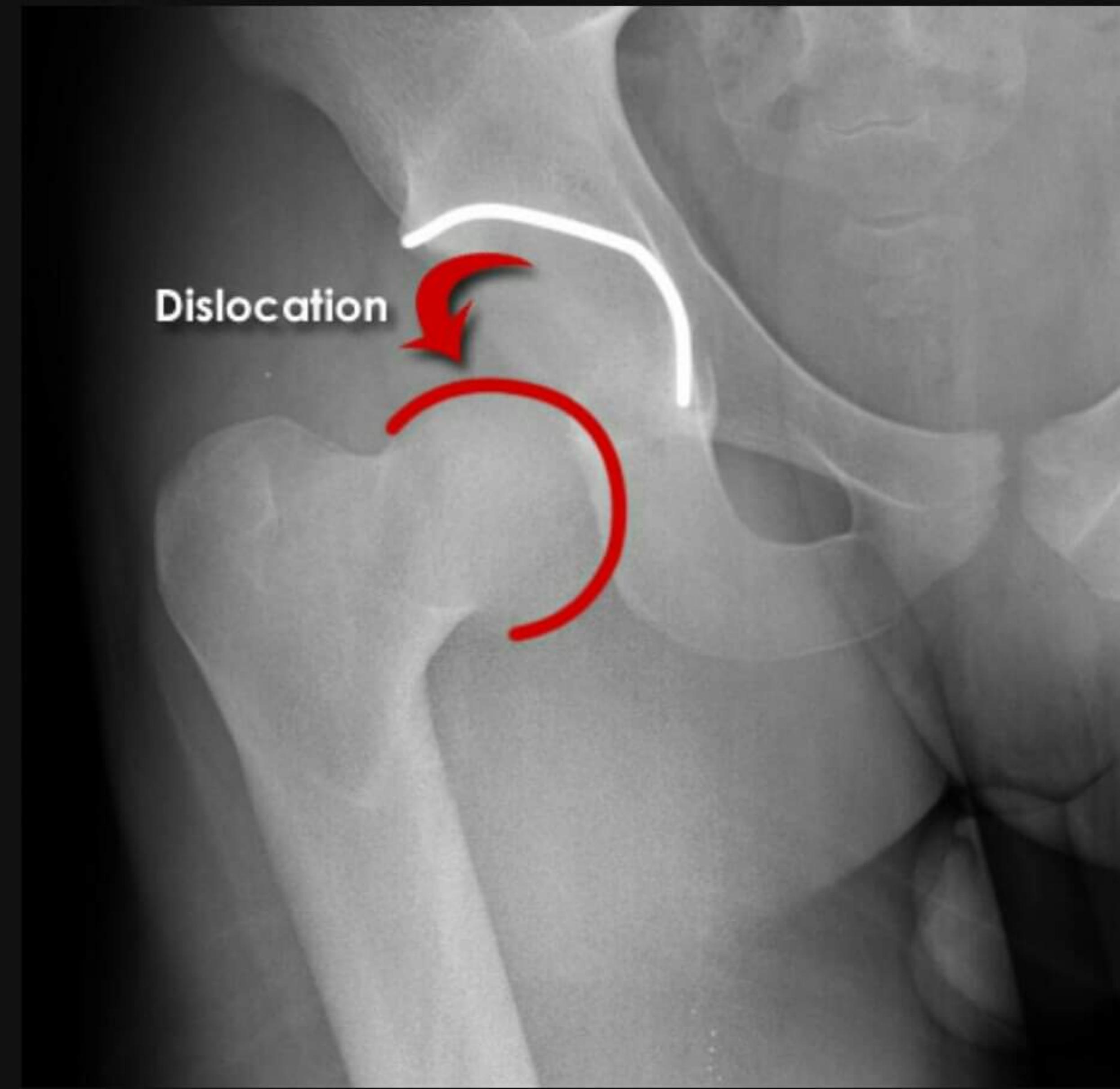
Proximal
femur

Femoral shaft

A black and white anteroposterior (AP) radiograph of a human hip joint. The femoral head is visible at the top, and the acetabulum is at the bottom. In this image, the femoral head is positioned anteriorly and superiorly to its normal position, indicating a hip dislocation. The surrounding soft tissue and other bones are also visible.

Hip joint dislocation - AP

- ◆ Hip dislocation is a relatively uncommon injury which is usually obvious radiologically
- ◆ X-rays are usually acquired with the aim of showing a fracture



Dislocation



Anterior

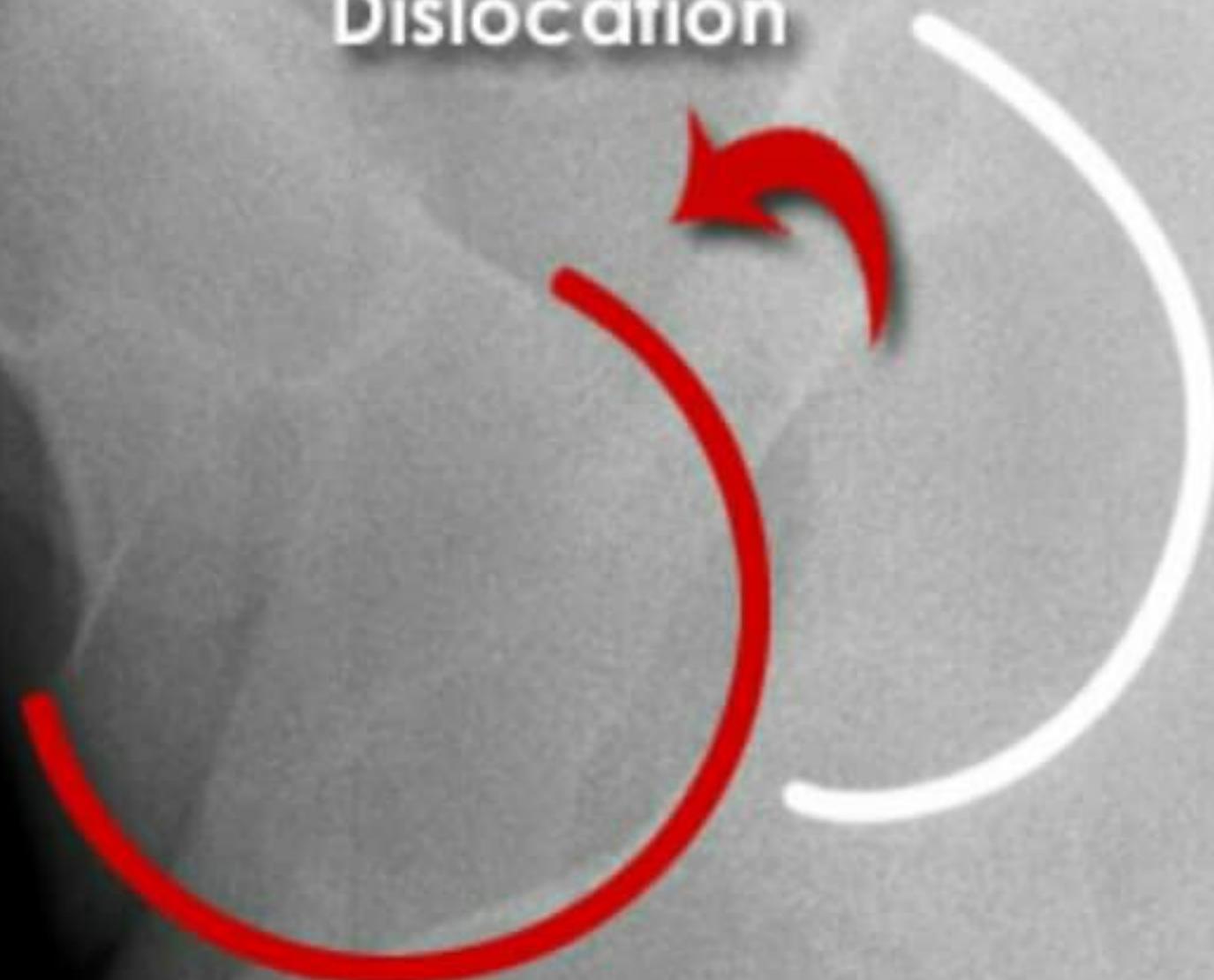
Posterior

Hip joint dislocation - Lateral

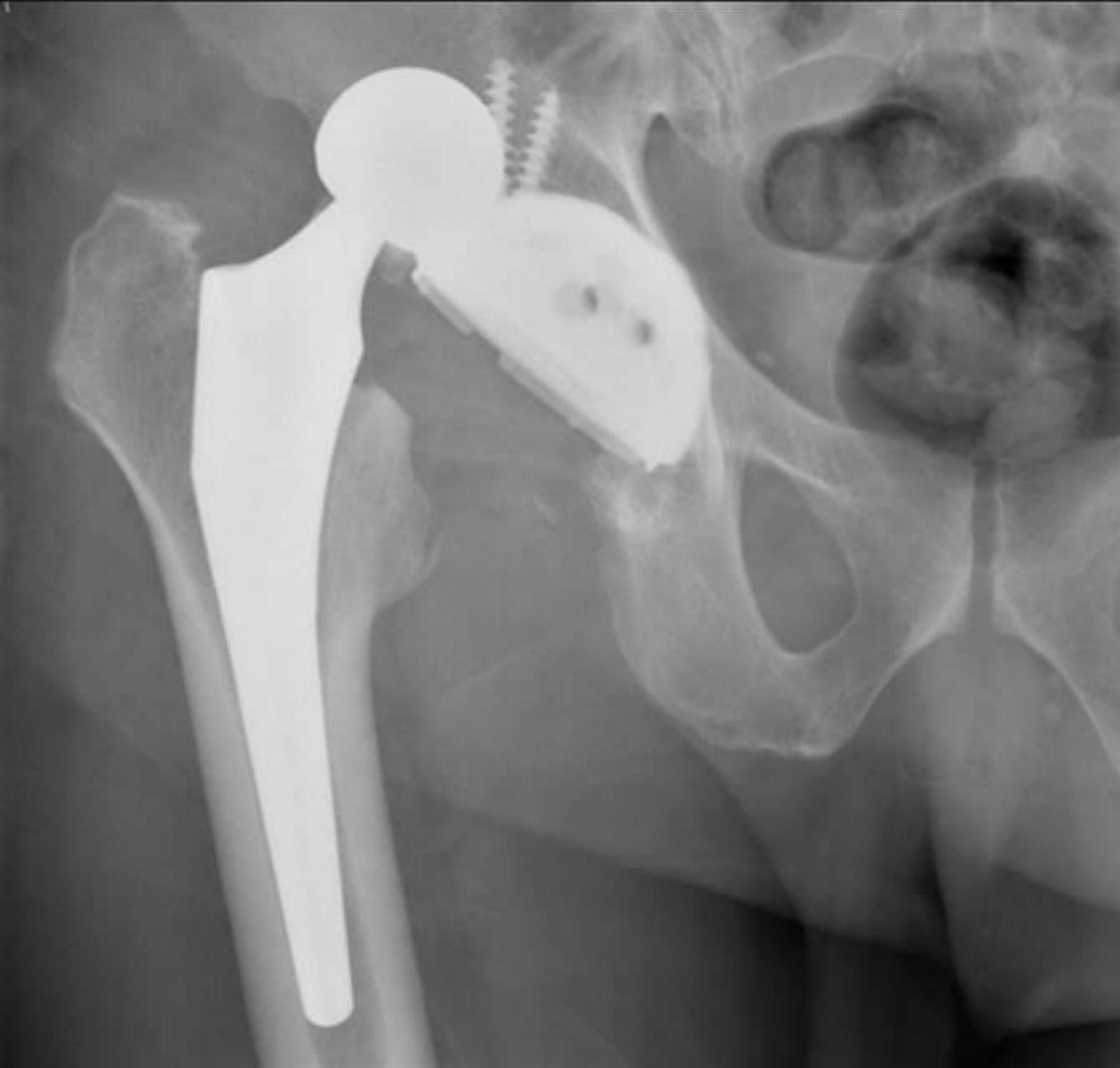
- ◆ The lateral image shows the direction of dislocation which is usually posterior - as in this case

Anterior

Dislocation



Posterior



Hip joint prosthesis dislocation - AP

- ◆ Hip dislocation is much more common in individuals with hip replacements
- ◆ The 'ball' of the femoral component should sit neatly in the 'socket' of the acetabular component

Femoral
component

Acetabular
component



Hip - Pathological fracture - AP

- ◆ A fracture of the femoral neck is accompanied by avulsion of the greater trochanter
- ◆ The bone texture is abnormal in this patient with a known malignancy - indicating a pathological fracture
- ◆ Always check for signs of a pathological process when assessing X-rays for fractures

Greater
trochanter

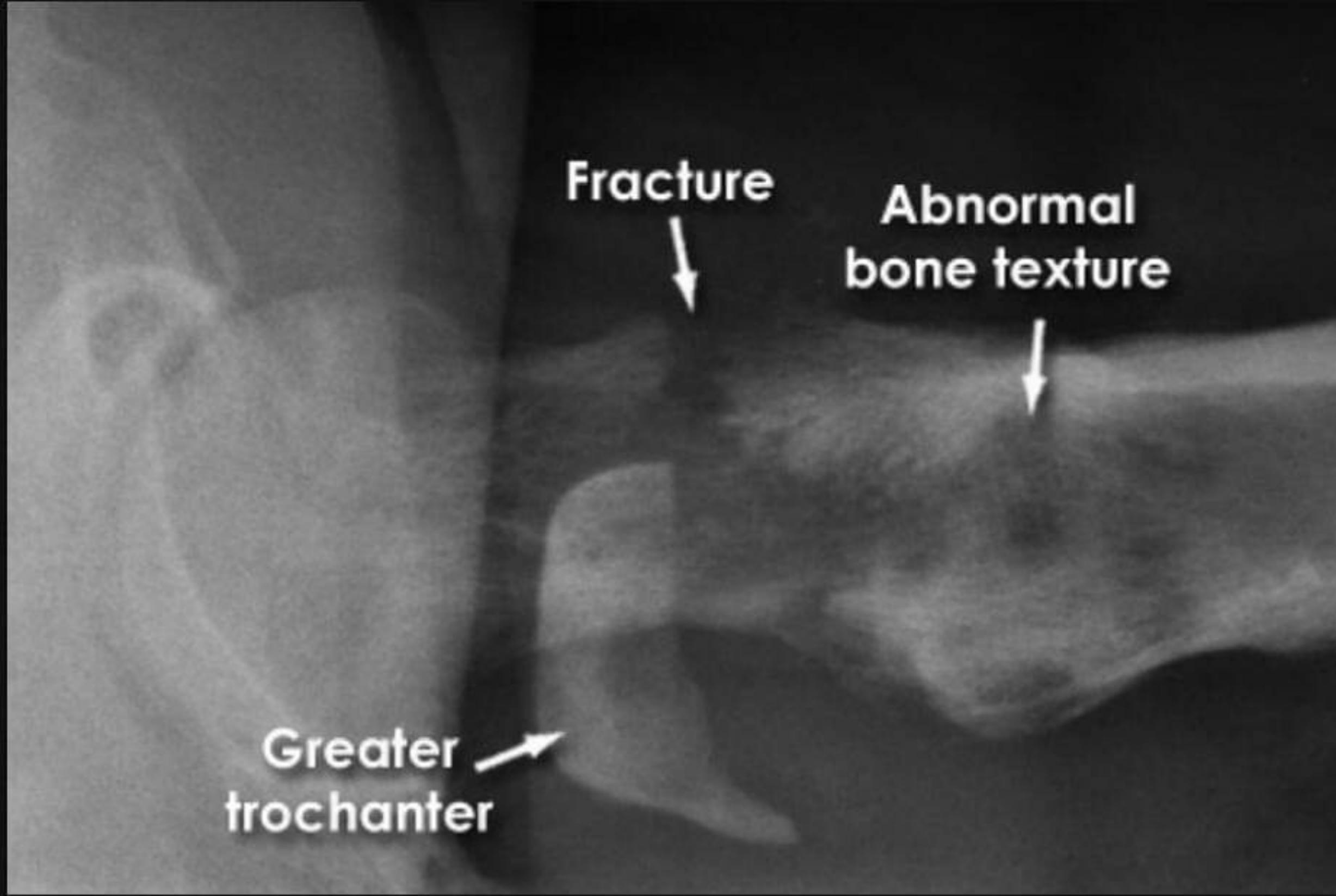
Fracture

Abnormal
bone texture



Hip - Pathological fracture - Lateral

- ◆ The lateral image also shows the fractures and the abnormal bone texture



A black and white radiograph of the right femur. The femur is oriented vertically, with the head at the top and the knee at the bottom. A vertical fracture line is visible in the upper third of the shaft. To the right of the fracture, there is an area of decreased density and irregular bone structure. An arrow points to the greater trochanter on the lateral side of the femur.

Fracture

↓

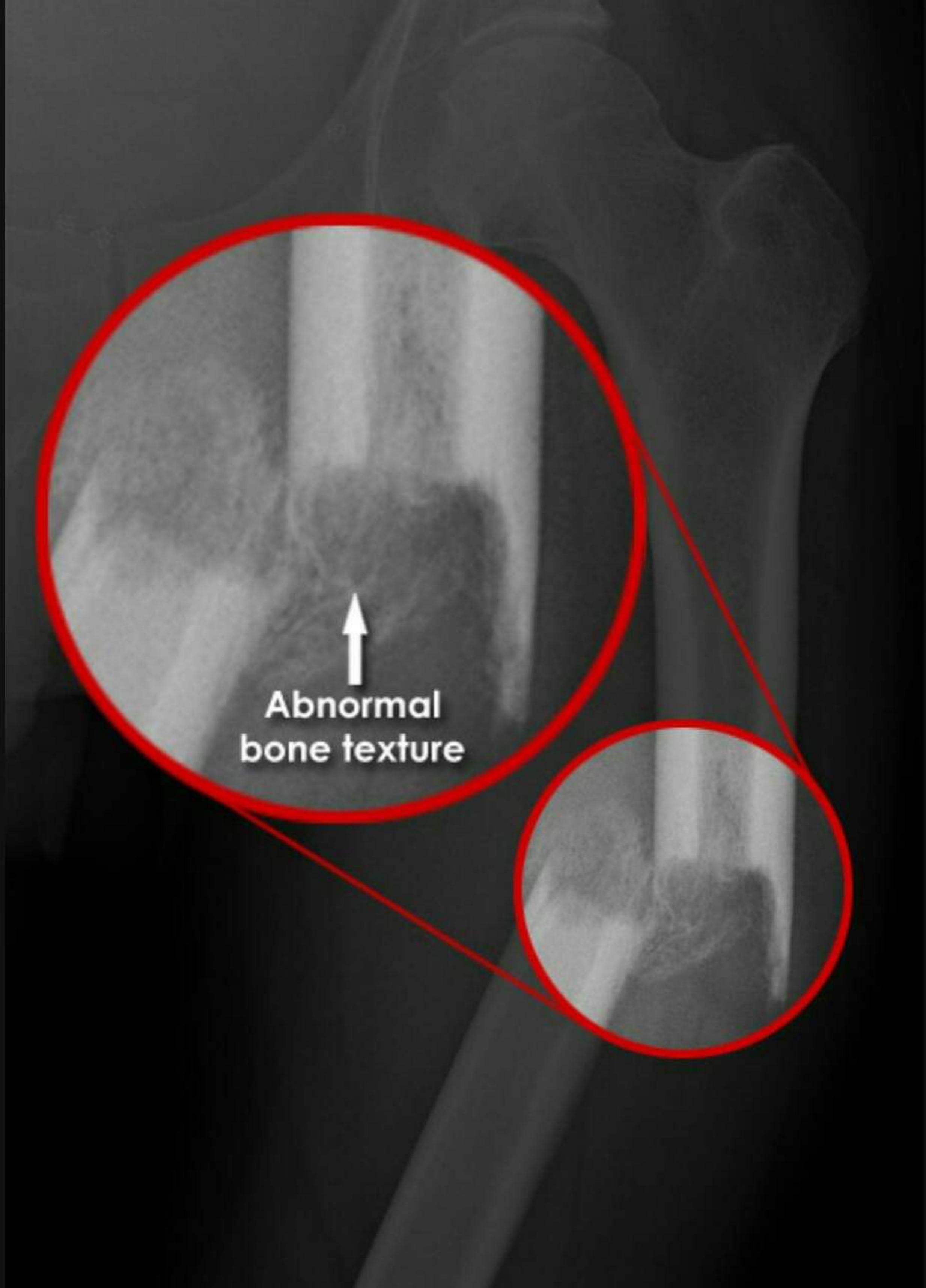
Abnormal
bone texture

Greater
trochanter



Femoral shaft fracture - Pathological

- ◆ Fractures of the femur usually require high force injury and are easily demonstrated with X-ray because of the high degree of displacement
- ◆ A femoral shaft fracture without a history of high force injury should raise the suspicion of a pathological fracture - as in this case



**Abnormal
bone texture**

The image shows a grayscale X-ray of a bone structure. Two specific areas are highlighted with red circles. The larger circle on the left points to a region where the bone's normal trabecular pattern is disrupted, appearing as a darker, more solid area. A white arrow points to this abnormal texture. The second, smaller red circle highlights a similar irregularity in the bone structure on the right side.



Femoral shaft fracture - Periprosthetic

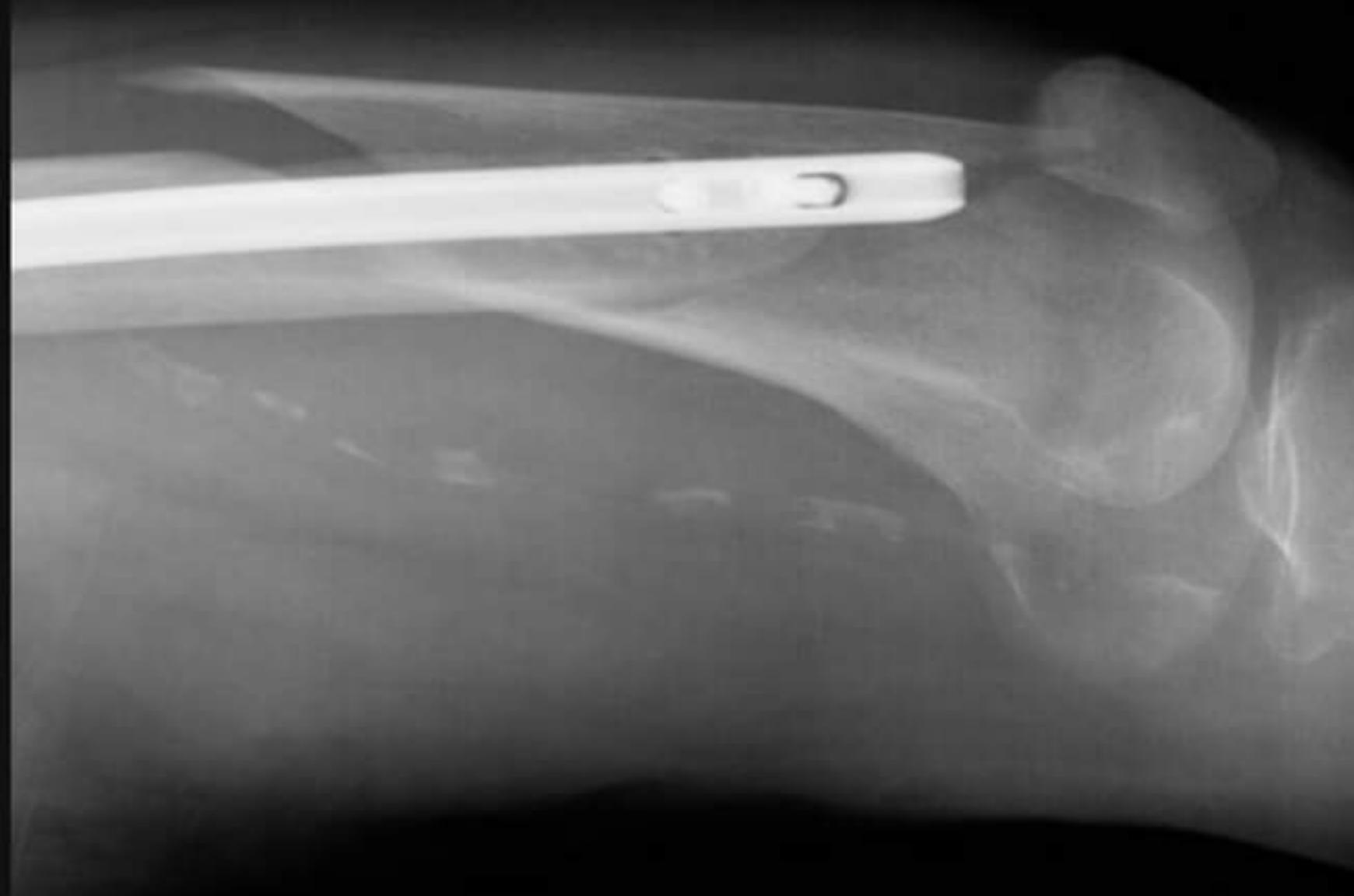
- ◆ Fractures of the femur are also relatively common in those with femoral metalwork

Intramedullary
nail

Fracture

Femoral shaft fracture - Periprosthetic

- ◆ The lateral view shows angulation and comminution



Fracture
fragment

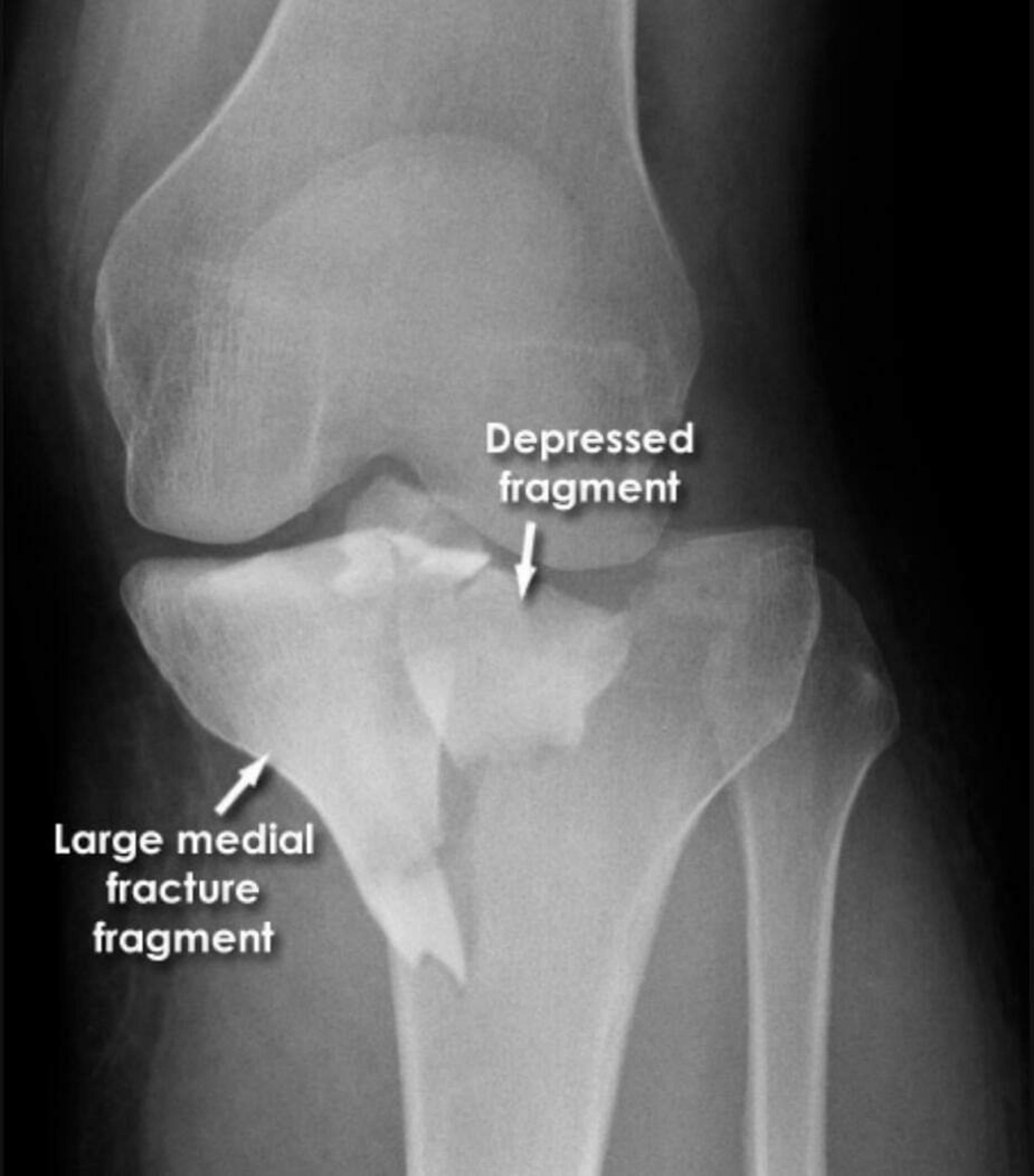
Intramedullary nail

Femoral
condyles



Knee - Tibial plateau fracture - AP

- ◆ (Same patient as image below)
- ◆ This is a severely comminuted fracture of the tibial plateau with depression of a large fragment centrally



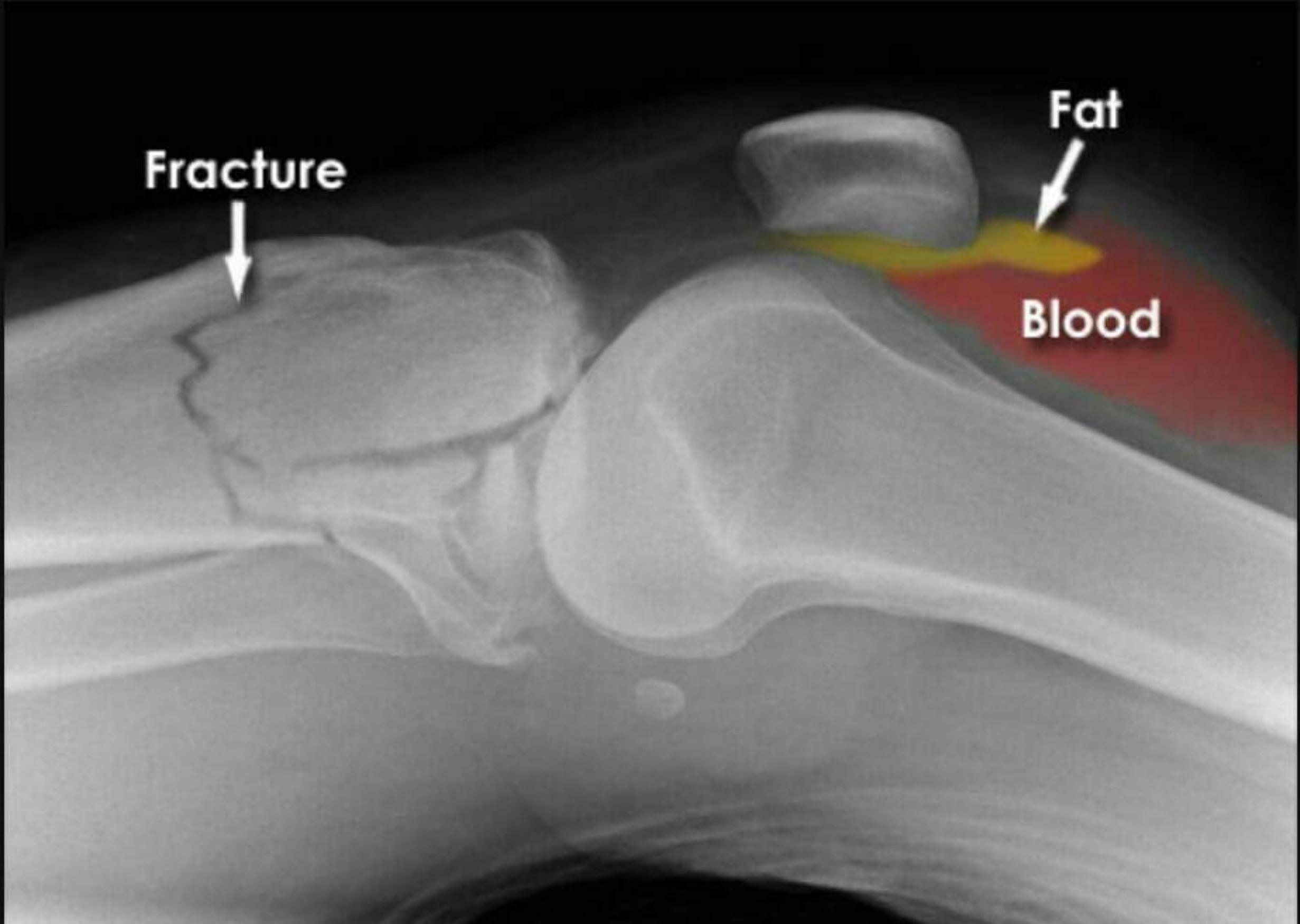
Depressed
fragment

Large medial
fracture
fragment



Knee - Tibial plateau fracture - Lateral

- ◆ (Same patient as image above)
- ◆ The lateral image shows fracturing of the proximal tibia and a lipohaemarthrosis (fat and blood in the joint)



A grayscale axial CT scan of a knee joint. The femur and tibia are visible. A white curved arrow points to a fracture line in the femoral epiphysis. Another white arrow points to a region of high density (yellow/red) in the soft tissue, labeled 'Blood'. The surrounding tissue is labeled 'Fat'.

Fracture

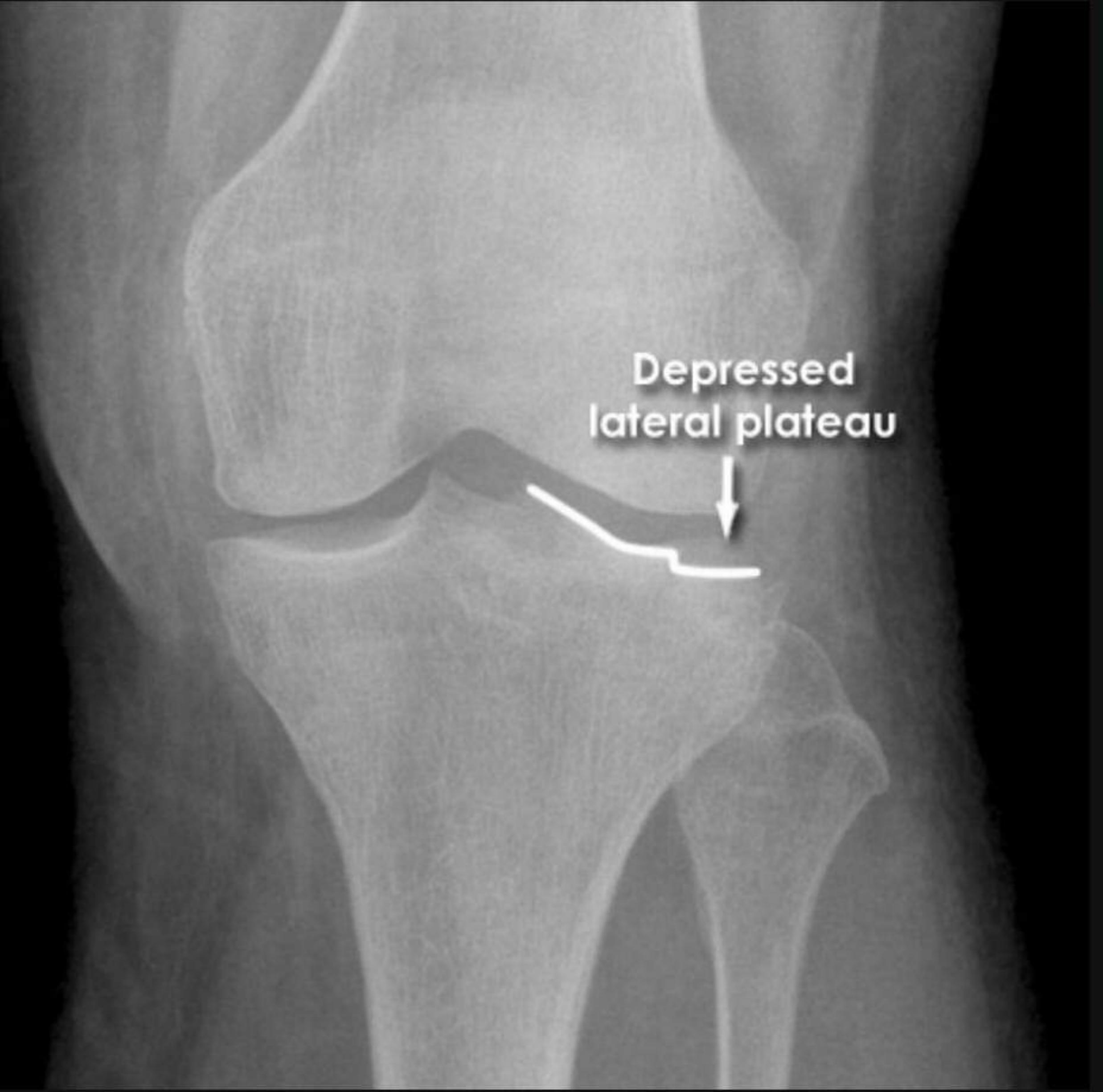
Fat

Blood



Knee - Tibial plateau fracture - Subtle - AP

- ◆ (Same patient as image below)
- ◆ Loss of integrity of the tibial plateau cortex is a serious injury even if the injury is more subtle - as in this case



This image is an anterior-posterior (AP) radiograph of a knee joint. The femur is on the left and the tibia is on the right. The patella is visible at the top. A white line and arrow point to a depression in the lateral plateau of the tibial articular surface. The text 'Depressed lateral plateau' is overlaid in the upper right quadrant.

Depressed
lateral plateau



Knee - Tibial plateau fracture - Subtle - Lateral

- ◆ (Same patient as image above)
- ◆ The lateral view does not show an obvious fracture
- ◆ As is often the case the presence of a lipohaemarthrosis is the most obvious sign of injury



Fat
Blood



Knee - Patellar fracture - Lateral

- ◆ This image shows wide separation of the upper and lower poles of the patella

Lipohaemarthrosis

Quadriceps
tendon
action



Patellar
tendon
action



A black and white radiograph of a knee joint from an anterior-posterior perspective. The femur is visible on the left, and the tibia is on the right. The patella is located in the center, just below the femoral head. The joint space appears relatively normal.

Knee - Patellar fracture - AP

- ◆ A fractured patella is often less easily seen on the Anterior-Posterior (AP) view



Wide
separation



Knee - Patellar fracture - AP

- ◆ A patella fracture may be very subtle
- ◆ The presence of a joint effusion (haemarthrosis or lipohaemarthrosis) in the context of trauma is a helpful indicator of a fracture

An X-ray image of a shoulder joint. A red shaded area is visible between the humeral head and the glenoid cavity, indicating the presence of blood (haemarthrosis). A white arrow points to a vertical crack in the articular surface of the humeral head, indicating a fracture.

Haemarthrosis

Fracture

A black and white anterior-posterior (AP) radiograph of a knee joint. The femur is on the left and the tibia is on the right. The patella is visible as a small, triangular bone in front of the knee. In this image, the patella appears to be shifted laterally, which is a characteristic finding in patellar dislocation.

Knee - Patellar dislocation - AP

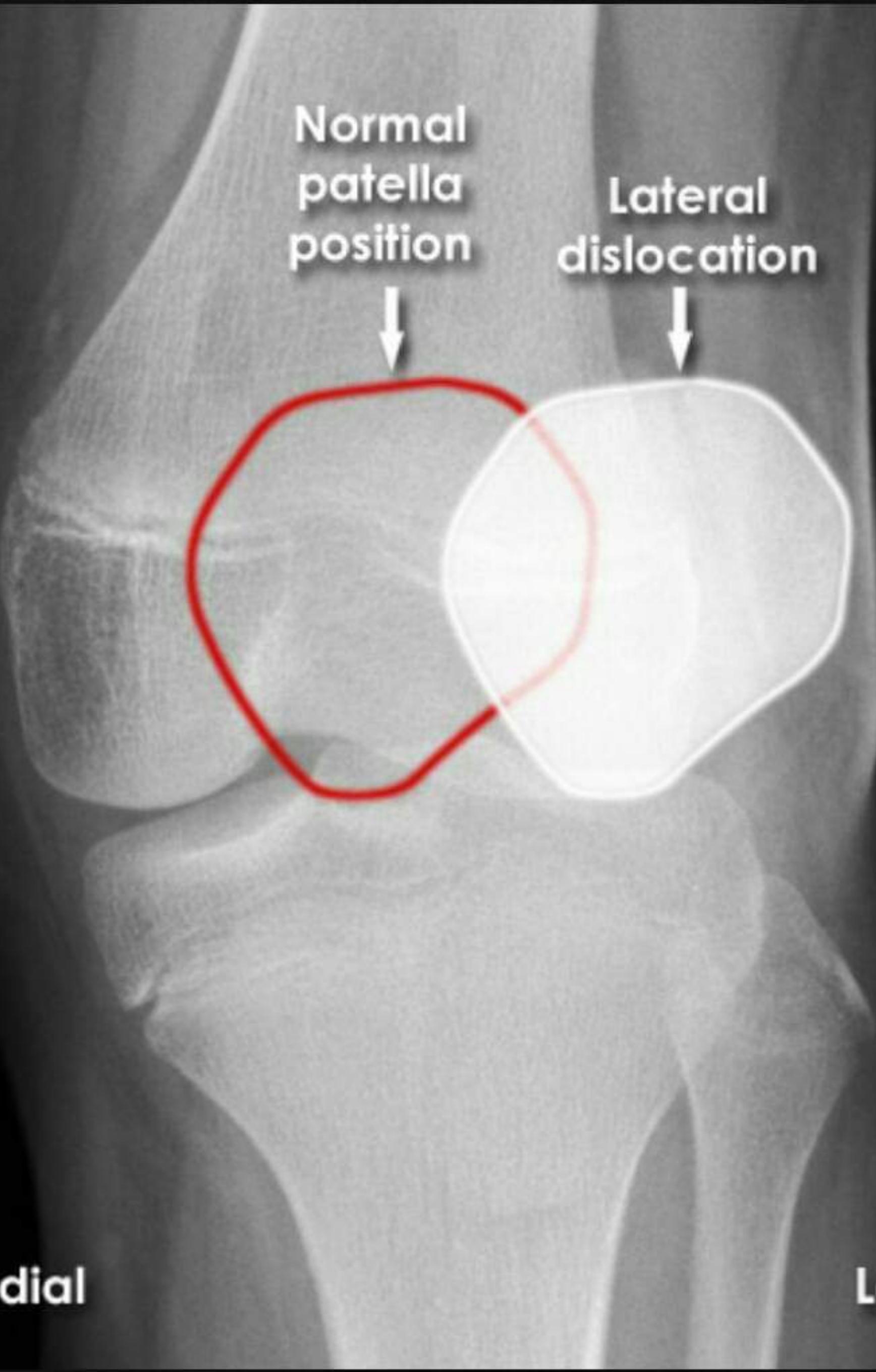
- ◆ The patella is laterally displaced

Medial

Lateral

Normal
patella
position

Lateral
dislocation



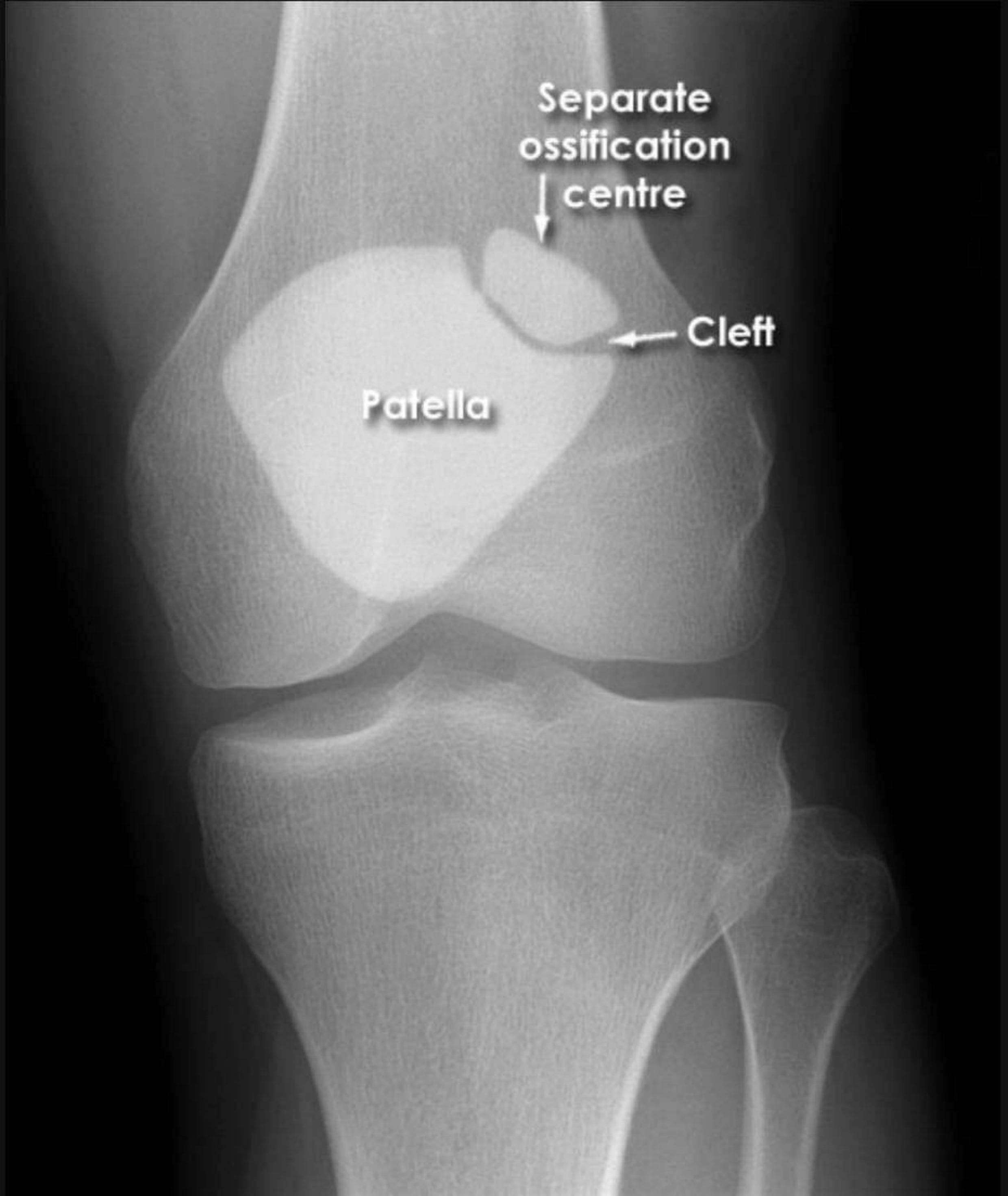
Medial

Lateral

A black and white anterior-posterior (AP) radiograph of a knee joint. The femur is on the left and the tibia is on the right. The patella is visible at the top of the femoral condyles. A small, separate ossification center is visible on the lateral side of the patella, which is characteristic of bipartite patella.

Knee - Bipartite patella - AP

- ◆ Bipartite patella - a normal variant - is often confused with a fractured patella
- ◆ The smaller part is a separate ossification centre and is most commonly located superiorly and laterally - as in this case



Separate
ossification
↓ centre

← Cleft

Patella

? Fracture



The lateral image does not show a joint effusion

- ◆ The 'cleft' between the 2 parts has a smooth cortical surface

No Fracture



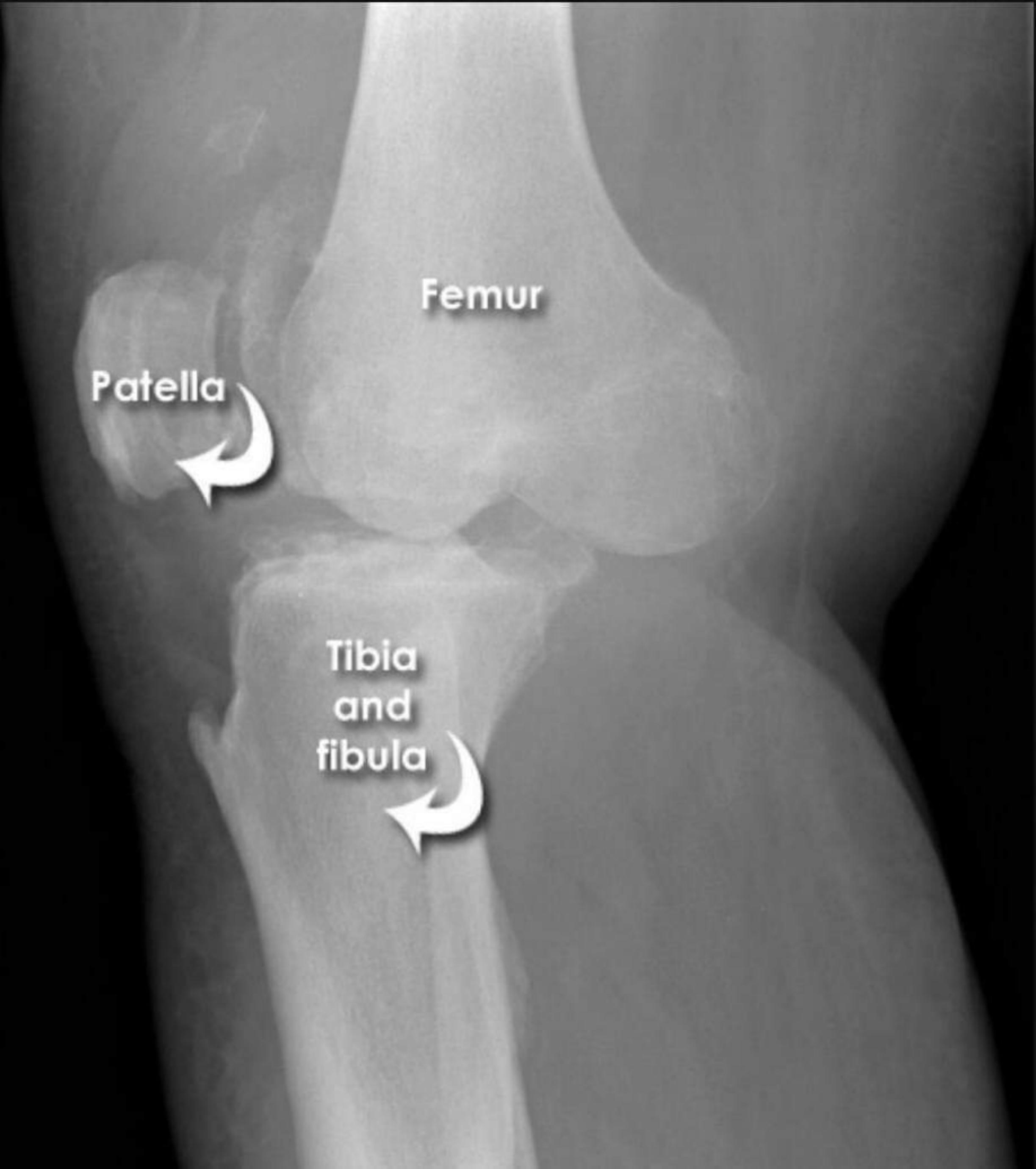
A black and white radiograph of a human shoulder joint. The humeral head is centered in the glenoid cavity. A vertical white arrow points to a distinct cleft or fracture line on the medial (posterior) aspect of the glenoid cavity floor. The surrounding bone structures appear normal.

Cleft



Knee - Dislocation - AP

- ◆ Total dislocation of the knee (not just the patella) results from high force injury
- ◆ This view shows normal Anterior-Posterior (AP) orientation of the femur
- ◆ The tibia and fibula are rotated such that they are viewed as if on a lateral image

A black and white X-ray photograph of a human knee joint. The femur is the upper bone, the tibia is the lower bone, and the patella is the small bone in front of the knee.

Femur

Patella

Tibia
and
fibula

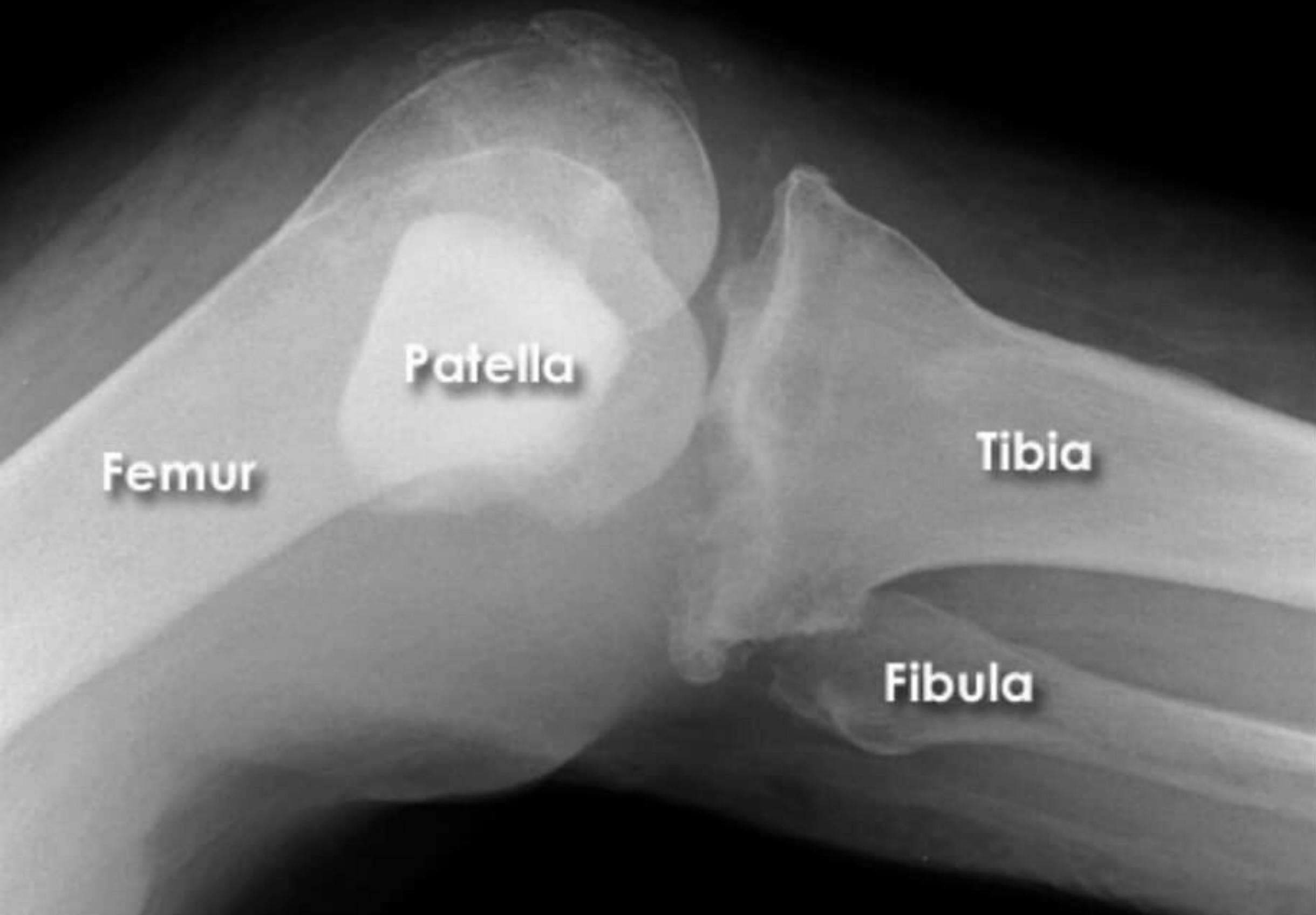
HORIZONTAL BEAM



Knee - Dislocation - Lateral

- ◆ The tibia and fibula are facing the viewer on this lateral image of the knee - indicating marked rotational displacement

HORIZONTAL BEAM



Femur

Patella

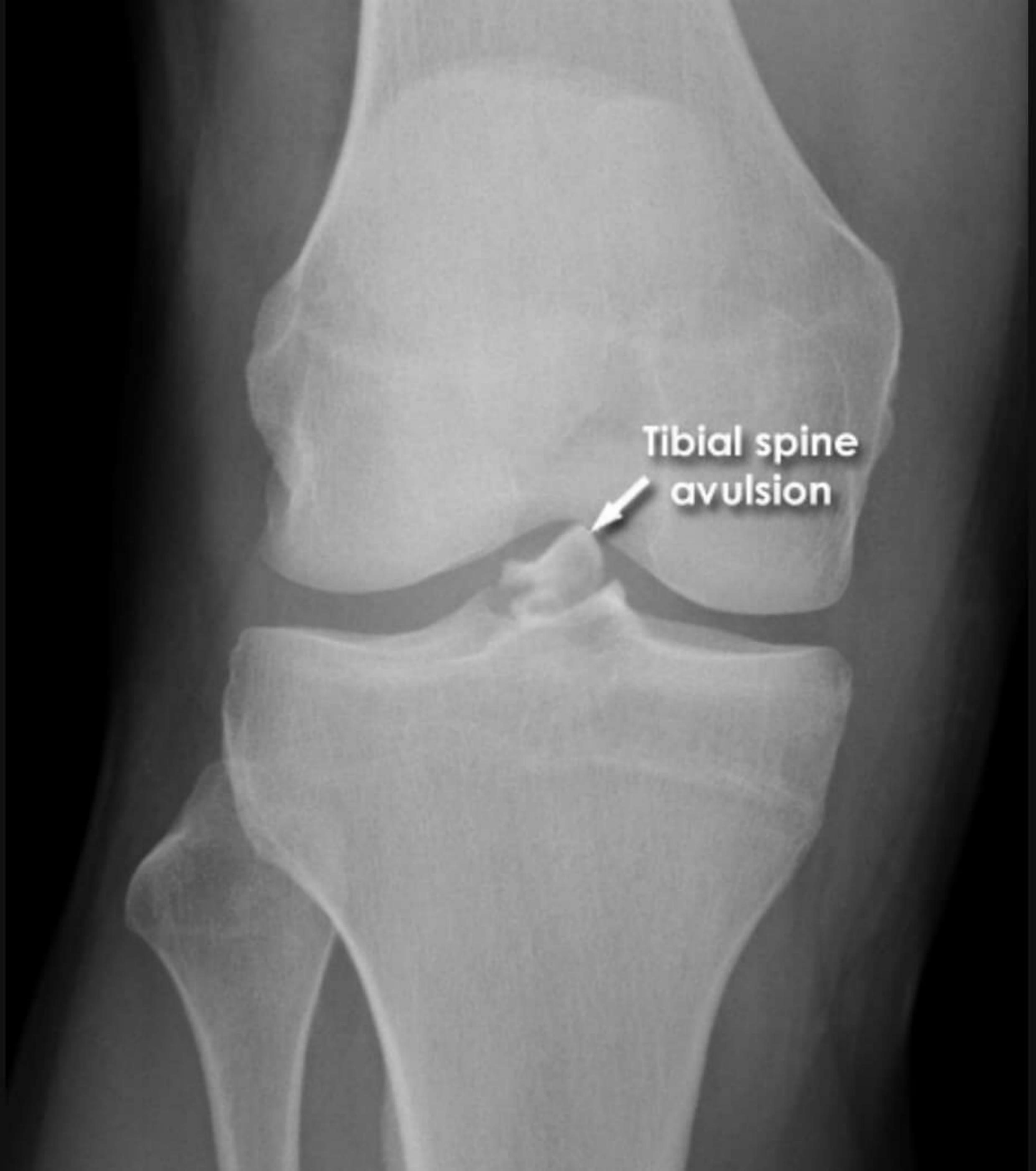
Tibia

Fibula



Avulsion fracture - AP

- ◆ Avulsion injury may occur at the insertion point of any ligament around the knee
- ◆ This is an avulsion injury of the ACL (Anterior Cruciate Ligament) which attaches adjacent to the tibial spines of the intercondylar eminence



A black and white radiograph of a knee joint in an anterior-posterior view. The femur is on the left and the tibia is on the right. A small, dark, triangular fragment of bone is visible at the top of the tibia, just below the patella. A white arrow points to this fragment, indicating the site of the avulsion. The surrounding soft tissue and other bony structures appear relatively normal.

Tibial spine
avulsion

AP



Lateral



Fibular head fracture - AP

- ◆ Fractures of the fibular head are often subtle
- ◆ If a fracture of the proximal fibula is seen then consider the possibility of a Maisonneuve injury - a proximal fibula fracture with associated fracture or ligament injury of the medial ankle

AP

Lateral



Fracture



Fracture

A black and white anterior-posterior (AP) radiograph of a human knee joint. The image shows the femur (thigh bone) on the left and the tibia/fibula (lower leg bones) on the right. The knee joint is centered, and the surrounding soft tissue and bone structures are visible.

Tibia/fibula fracture - AP

- ◆ Fractures of the tibia and fibula are usually easily spotted



Tibia/fibula fracture - AP

- ◆ Fractures of the tibia and fibula are usually easily spotted

Comminution



Tibia/fibula fracture - Full length AP

- ◆ Always ensure you see 2 views of the whole length of both bones
- ◆ This image shows a further fracture of the fibula proximally
- ◆ The fibular fracture can be described as 'segmental'

Proximal
fibular
fracture

Segmental
fibular
fracture



Segmental fracture - Tibia - AP and Lateral

- ◆ The tibia is fragmented into segments - a 'segmental fracture'
- ◆ Careful attention is required so that other injuries of clinical importance are not overlooked - such as the tibial plateau fracture
- ◆ (Images of the distal tibia and fibula showed no further fracture in this case)

Tibial
plateau
fracture

Segmental
tibial
fracture

Fibular
fracture

Segmental
tibial
fracture

A black and white radiograph showing the anterior-posterior view of a human tibia and knee. The image captures the long bone of the lower leg, from the knee joint down to the ankle. The knee joint is visible at the top left, showing the femoral condyles and the patellofemoral joint. The tibial shaft is straight and ends at the tibial plateau, which articulates with the femur. The medial and lateral epicondyles of the femur are also visible. The surrounding soft tissue and skin are not visible as they are behind the glass plate of the X-ray machine.

Tibial stress fracture - AP

- ◆ The tibia is a common site for stress fractures.
- ◆ These fractures result from repeated loading in a normal bone.
- ◆ Normal vascular lines should not be mistaken for fractures.



A black and white anteroposterior (AP) radiograph of a knee joint. The femur and tibia are visible. A horizontal line of increased density runs through the middle of the femoral shaft. Two white arrows point to this line, indicating a stress reaction. The text "Stress reaction" is written next to one of the arrows.

Stress
reaction

Normal
vascular
line



Tibia - Toddler's fracture - AP

- ◆ A very subtle fracture line is seen in this young child who presented with refusal to weight-bear.

A grayscale X-ray image of a human femur (thigh bone) oriented vertically. The bone shows a clear, transverse fracture line near the midshaft. The surrounding soft tissue and the opposite femur are also visible.

Fracture



Ankle - Malleolus fracture - Weber A - AP

- ◆ The lateral malleolus tip is fractured
- ◆ This is a 'Weber A' injury - distal to the ankle joint

Fibula

Tibia

Normal
joint
spacing

Talus

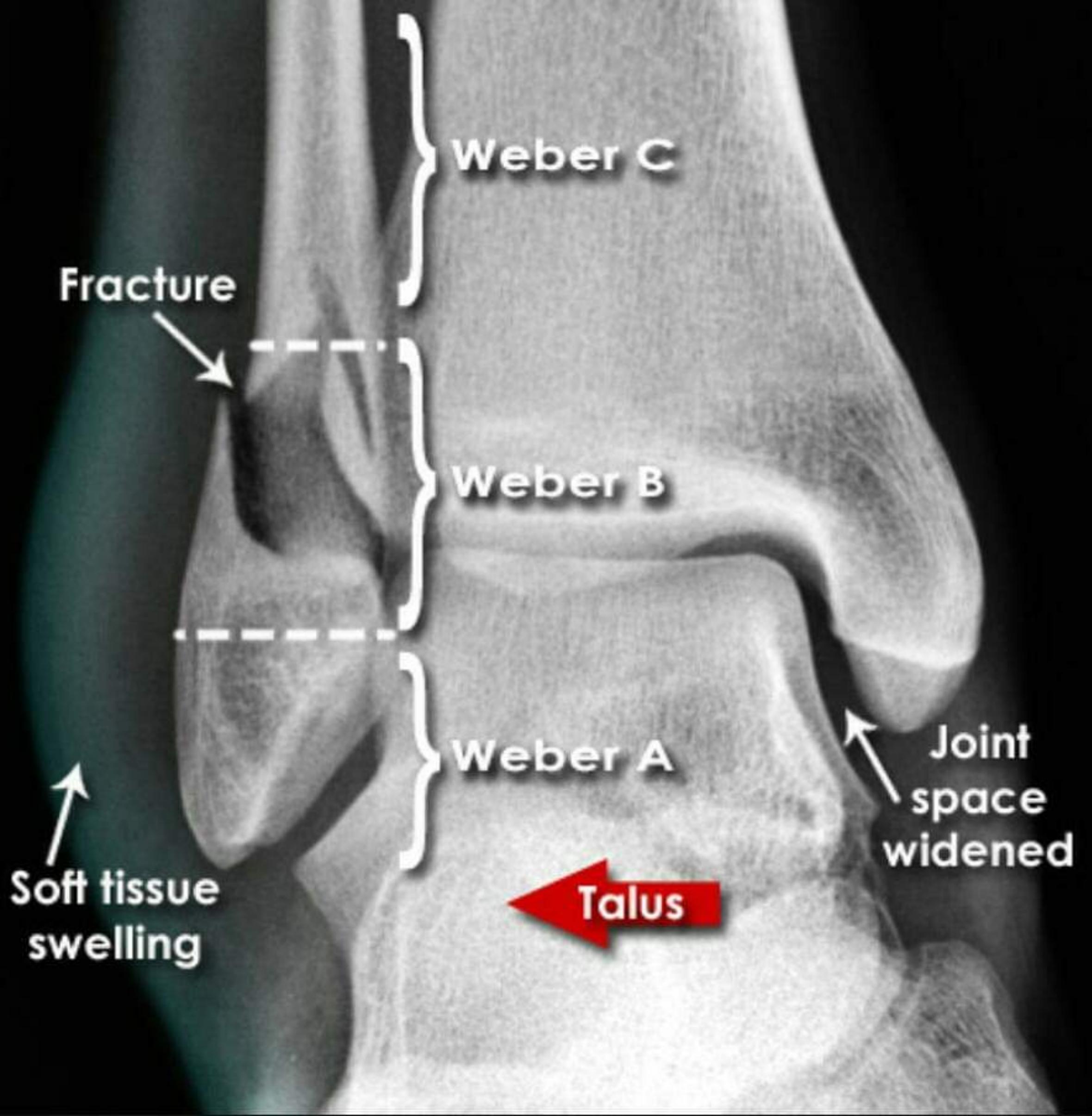
Fracture





Ankle - Malleolus fracture - Weber B - AP

- ◆ (Same patient as image below)
- ◆ A 'Weber B' fracture is at the same level as the ankle joint





Ankle - Malleolus fracture - Weber B - Lateral

- ◆ (Same patient as image above)
- ◆ The lateral view shows a less obvious fracture line through the distal fibula - partly obscured by the tibia

Fracture

Fibula



Ankle - Bimalleolar fracture - Weber C - AP

- ◆ The lateral malleolus fracture is a 'Weber C' injury - above the ankle joint
- ◆ There is a transverse medial malleolus fracture
- ◆ The distal tibiofibular joint is also widened
- ◆ The ankle is completely unstable; the structures beyond the dotted line are detached from the tibia or fibula proximally



A black and white Anterior-Posterior (AP) radiograph of a human ankle. The image shows the tibia and fibula bones. The talus bone is visible at the bottom, articulating with both the tibia and fibula. The malleoli (lateral and medial) are clearly visible on either side of the joint. There are fractures visible in both the lateral and medial malleoli, characteristic of a tri-malleolar fracture.

Ankle - Trimalleolar fracture - AP ankle

- ◆ The Anterior-Posterior (AP) image shows fractures of both the lateral malleolus (Weber C) and medial malleolus



Medial
malleolus
fracture

Lateral
malleolus
fracture

Ankle - Trimalleolar fracture - Lateral

- ◆ The lateral image shows an additional fracture line passing in the coronal plane to the articular surface of the tibia
- ◆ The posterior corner of the tibia is also known as the 'posterior malleolus'







Maisonneuve fracture - AP distal tibia/fibula

- ◆ This image does not show a fracture, but subtle widening of the ankle medially indicates instability at the distal tibiofibular joint
- ◆ A Maisonneuve fracture should be suspected and images of the proximal fibula obtained

↑
Proximal
fracture

?

Widened
medial gutter

Lateral
malleolus
intact



Maisonneuve fracture - Lateral (proximal)

- ◆ Here is the Maisonneuve fracture - a fracture of the proximal fibula associated with fracture or ligament injury of the medial ankle

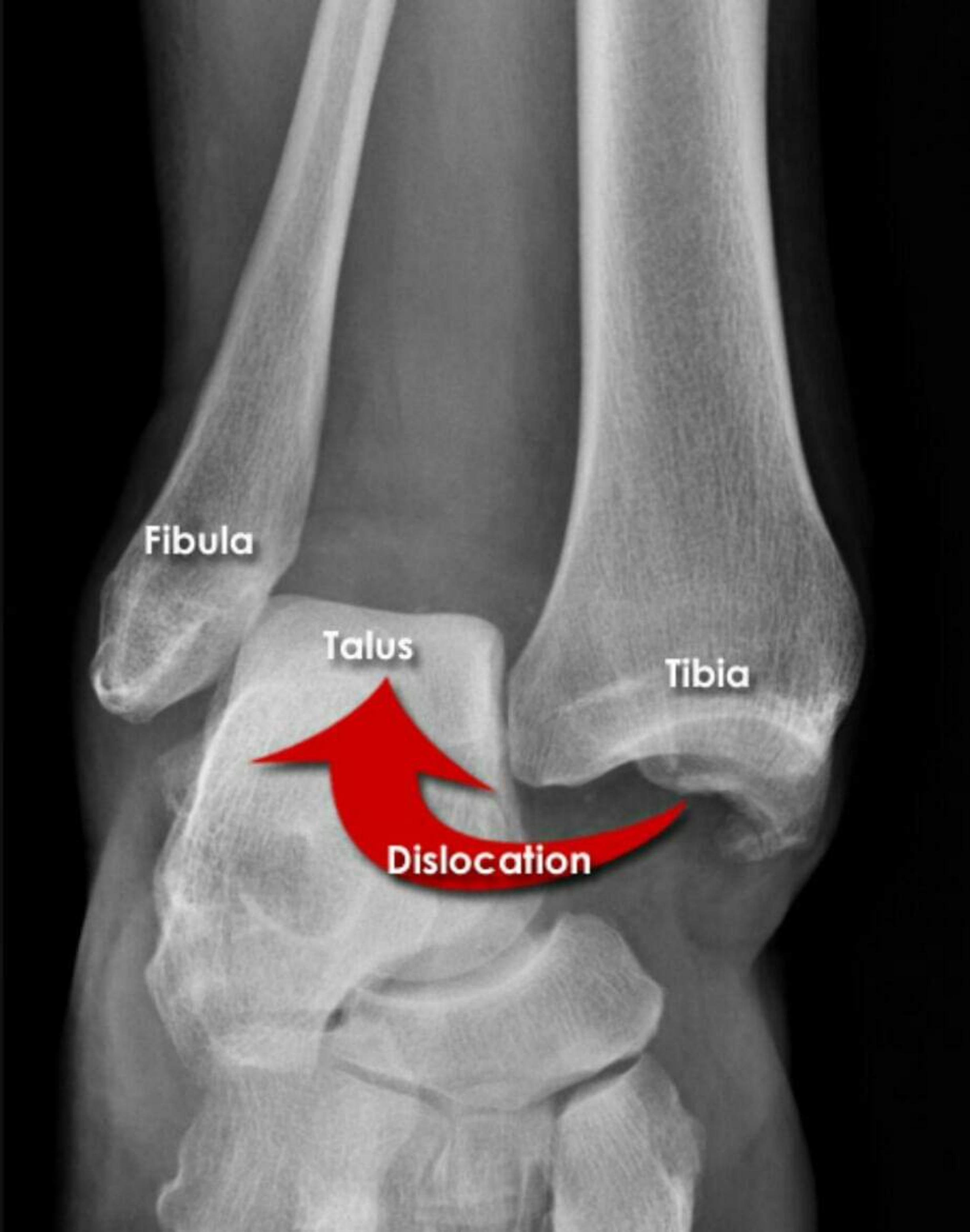
A black and white radiograph showing the anterior-posterior view of a human shoulder joint. The humeral head is centered in the glenoid fossa. The acromion and clavicle are visible at the top, and the scapula is visible below.

Proximal
fibular
fracture

Ankle - Dislocation - AP view

- ◆ This image shows complete dislocation of the talus from the tibia



A black and white radiograph of an ankle joint. The tibia is on the right, the fibula is on the left, and the talus is centered between them. A red graphic overlay highlights the dislocation, consisting of a red arrow pointing upwards and a red curved band around the middle of the talus.

Fibula

Talus

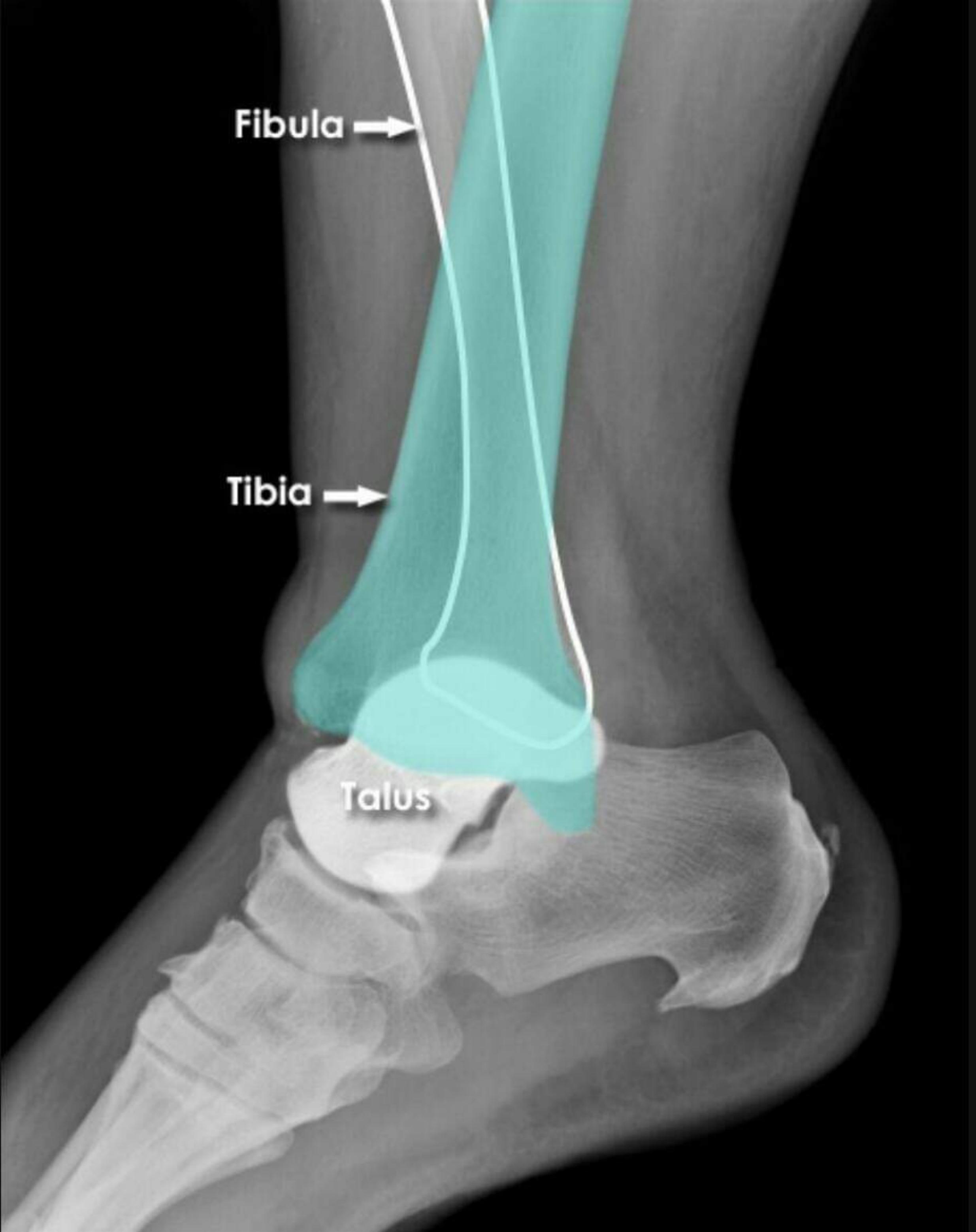
Tibia

Dislocation

Ankle - Dislocation - Lateral

- ◆ The lateral image also shows the tibia and fibula are no longer parallel





Fibula →

Tibia →

Talus



Ankle - Dislocation - Lateral (proximal)

- ◆ If there is widening of the tibia and fibula distally (as in the first image) then always get further views of the proximal portions of these bones
- ◆ This lateral image shows a fibula fracture



Fibular
fracture

Ankle - 'Pilon' fracture - AP

- ◆ A 'pilon' fracture is any fracture of the distal tibia which involves the articular surface of the tibia - also known as the 'tibial plafond'



Medial
malleolus
fracture ↓

Lateral
malleolus
fracture ←

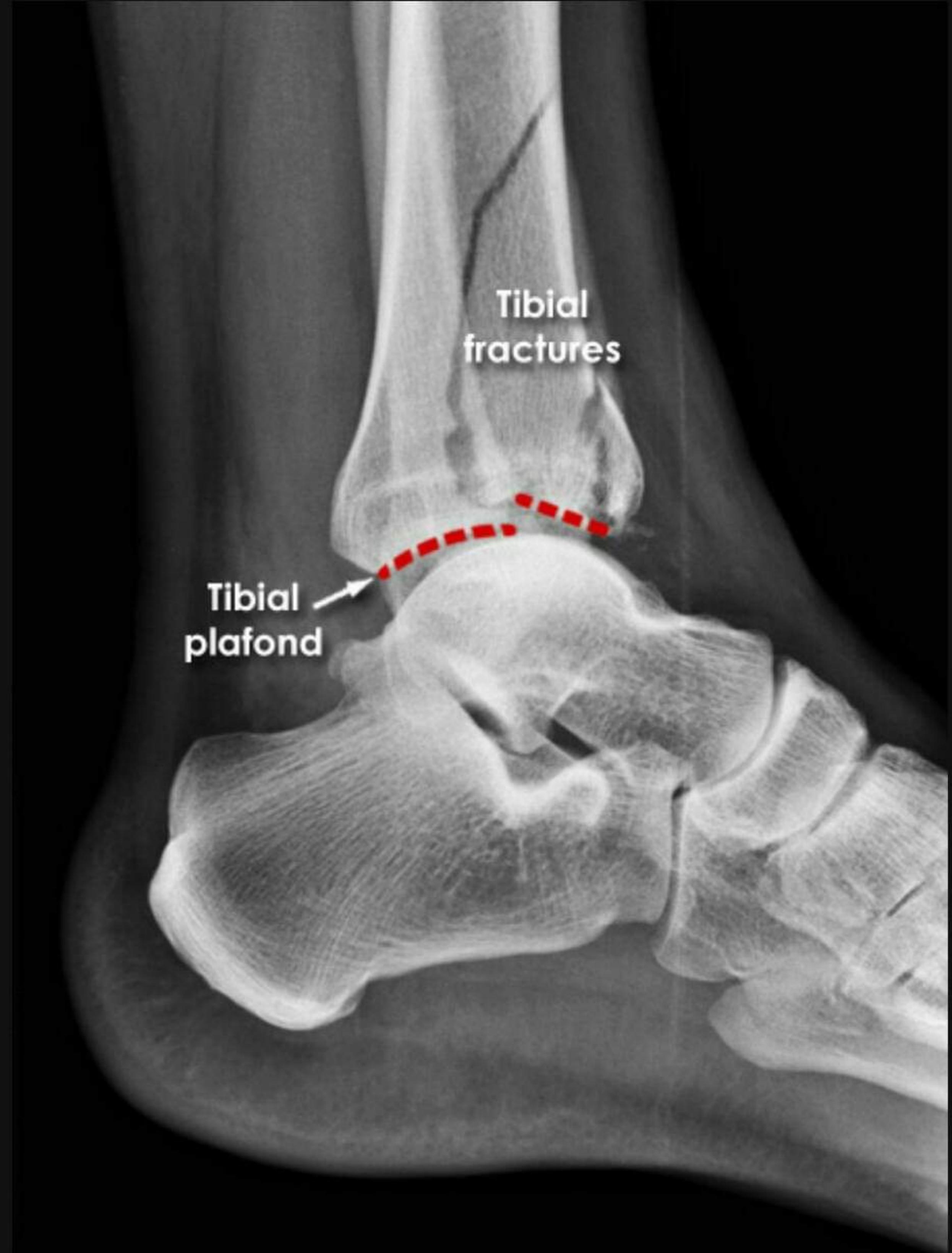
← Pilon
fracture

Tibial
plafond

A black and white lateral X-ray of a human ankle. The tibia and fibula are visible on the left, and the talus and calcaneus are on the right. A significant fracture line is visible in the middle of the tibia, just above the ankle joint, creating a distinct step or depression in the bone surface. The surrounding soft tissue and other bones appear relatively normal.

Ankle - 'Pilon' fracture - Lateral

- ◆ The lateral image demonstrates a step in the tibial plafond

An anterior-posterior (AP) radiograph of a knee joint. The femur is visible on the left, and the tibia and fibula are on the right. A red dashed line highlights a fracture line in the proximal tibia, just below the femoral condyles. The articular surface of the tibia is labeled "Tibial plafond".

Tibial
fractures

Tibial
plafond



Ankle - Osteochondral fracture - AP

- ◆ Irregularity or depression of the talar dome surface may represent a significant defect of the bone (oste) and cartilage (chondro)
- ◆ The talar dome surface is an important review area which should be assessed on all ankle X-rays

A black and white anterior-posterior radiograph of a knee joint. The femur is on the left, and the tibia and fibula are on the right. The tibial plateau is labeled 'Tibial plafond'. The fibula is labeled 'Fibula'. A callout box is positioned over the talar dome area, containing the text 'Talar dome' and 'Osteochondral fracture'. A red curved arrow points from the text 'Talar dome' towards the talar dome on the radiograph. A white arrow points upwards from the text 'Osteochondral fracture' towards the same area.

Tibial plafond

Fibula

Talar
dome

Osteochondral
fracture



Ankle - Salter-Harris fracture - Lateral

- ◆ A distal tibial fracture passes to the growth plate
- ◆ Note the normal unfused calcaneal apophysis which should not be mistaken for a fracture



Fracture
fragment

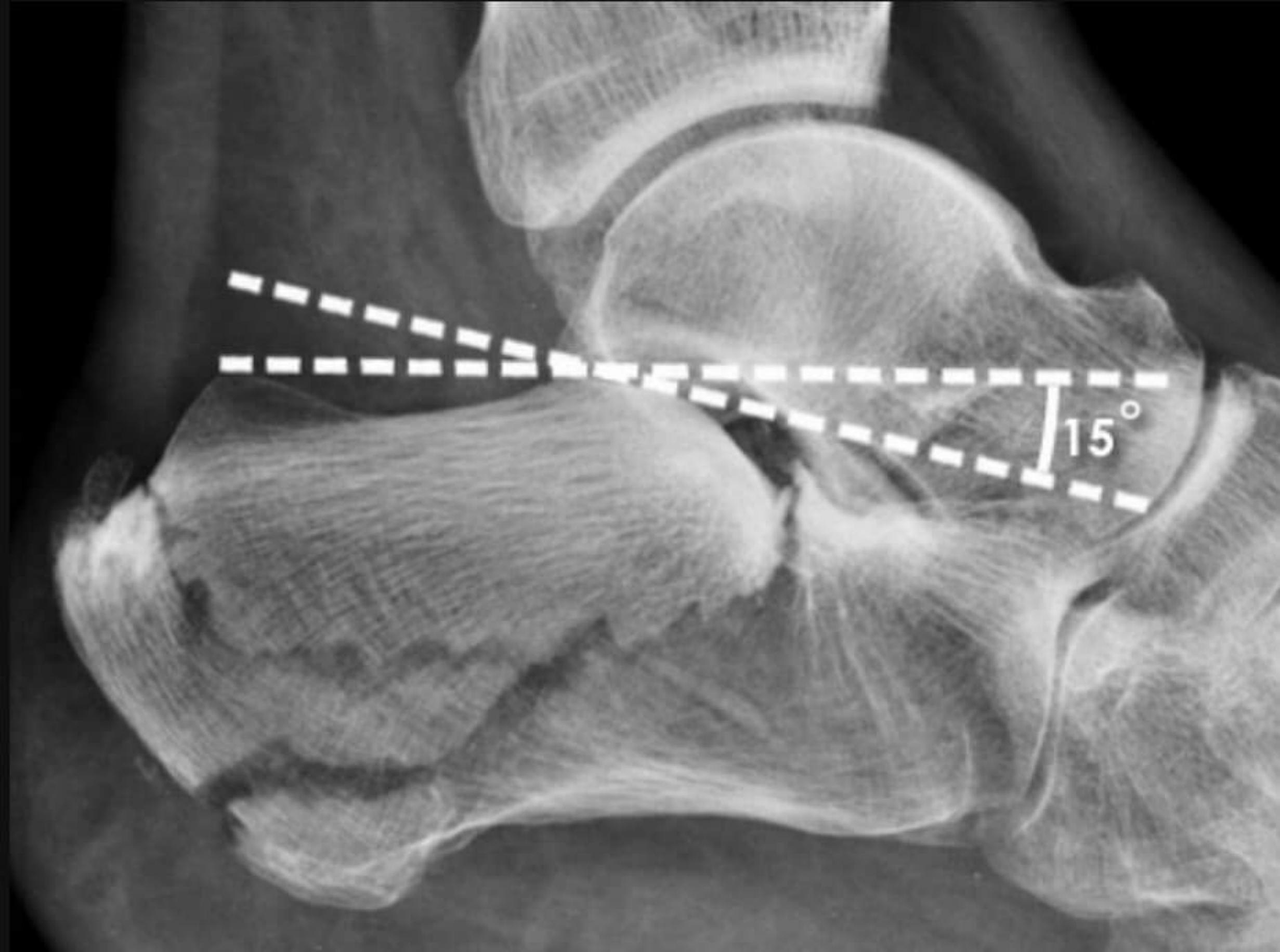
Growth
plate

Normal
calcaneal
apophysis



Calcaneus fracture - Reduced Bohler's angle - Lateral

- ◆ Fractures to the calcaneus usually result in flattening of the bone with reduction in Bohler's angle (normally 28-40°)

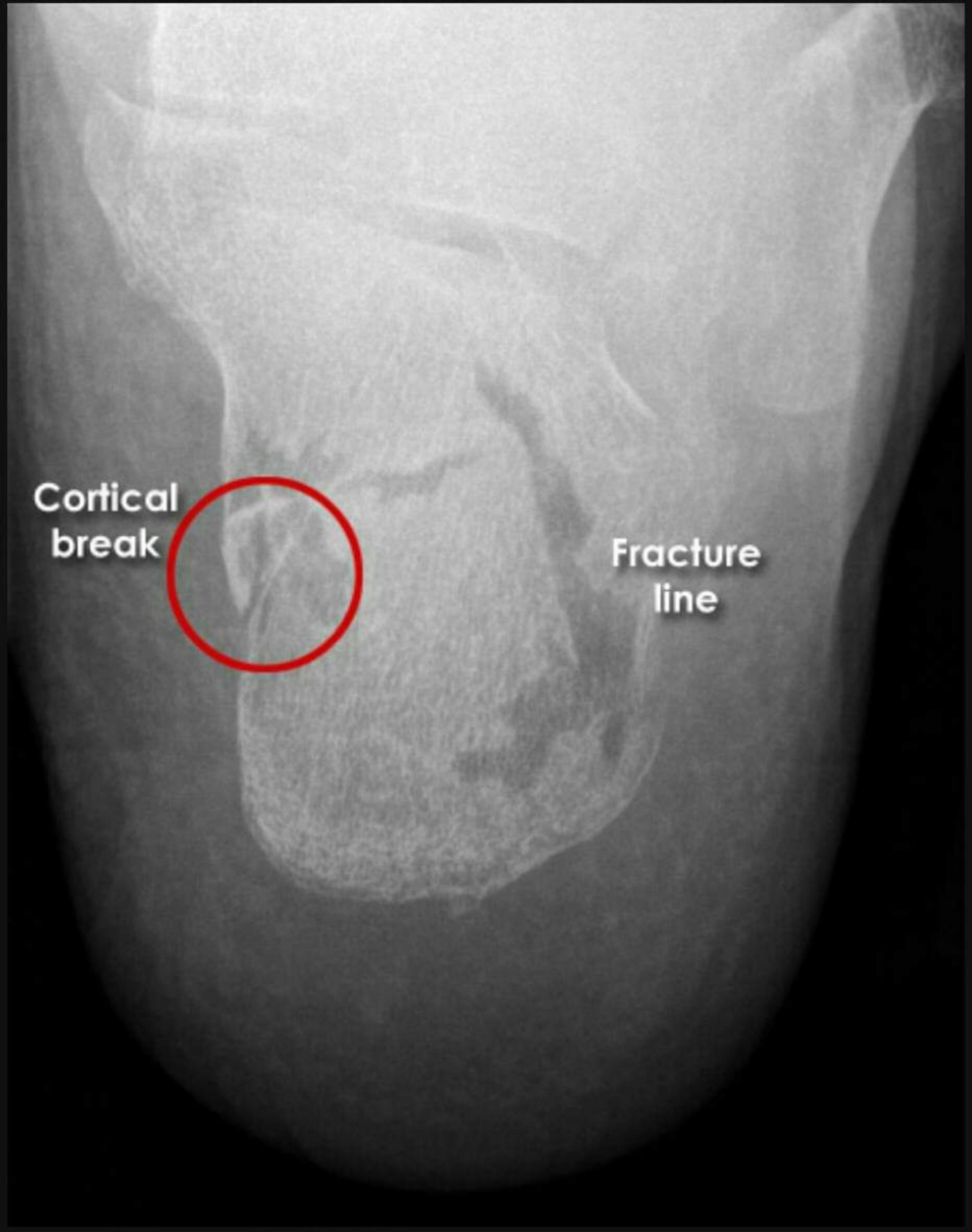


15°



Calcaneus fracture - Axial

- ◆ (Same patient as image above)
- ◆ On the axial view look for fracture lines and breaks in the cortex



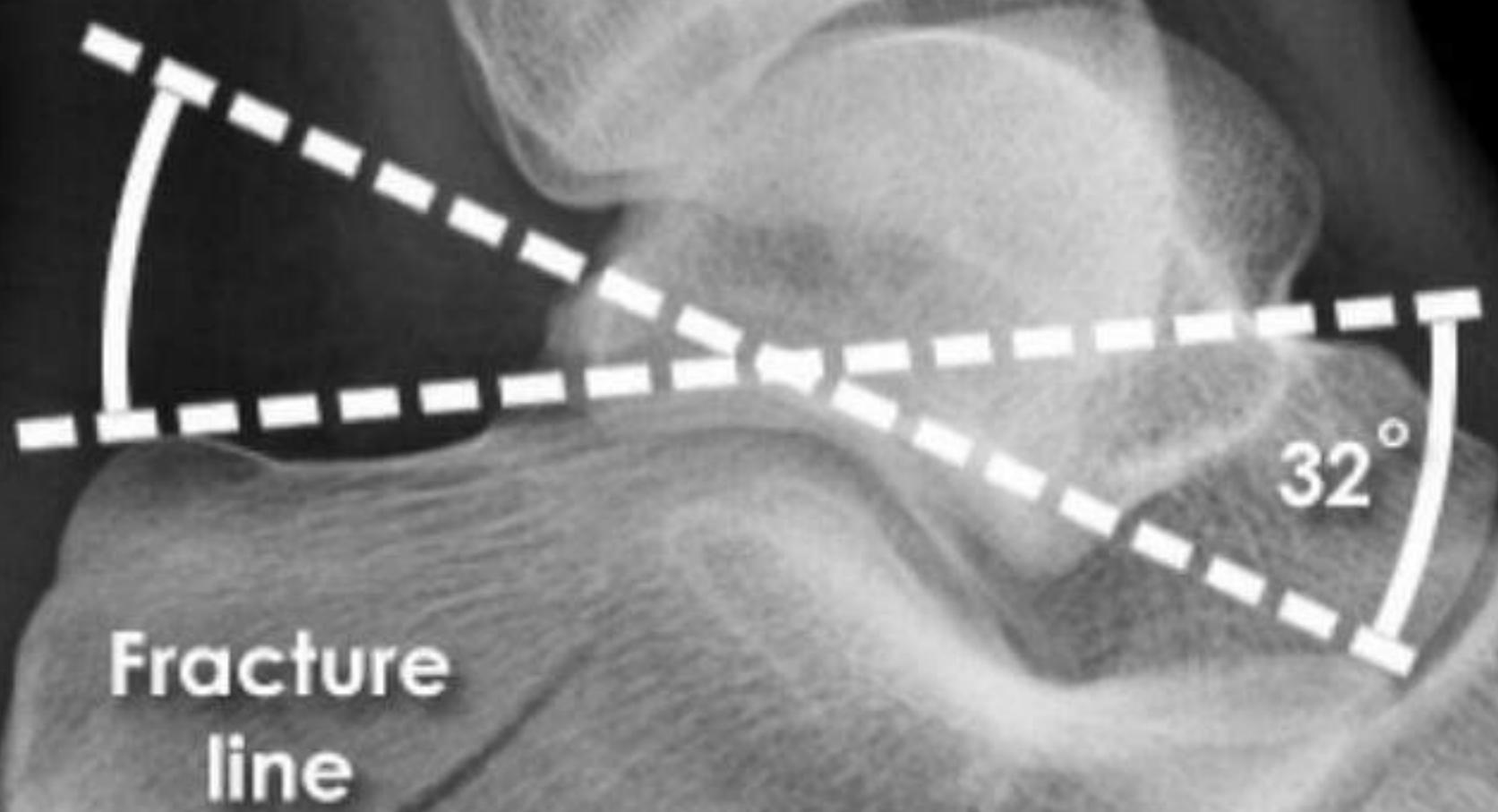
Cortical
break

Fracture
line



**Calcaneus fracture - Normal Bohler's angle -
Lateral**

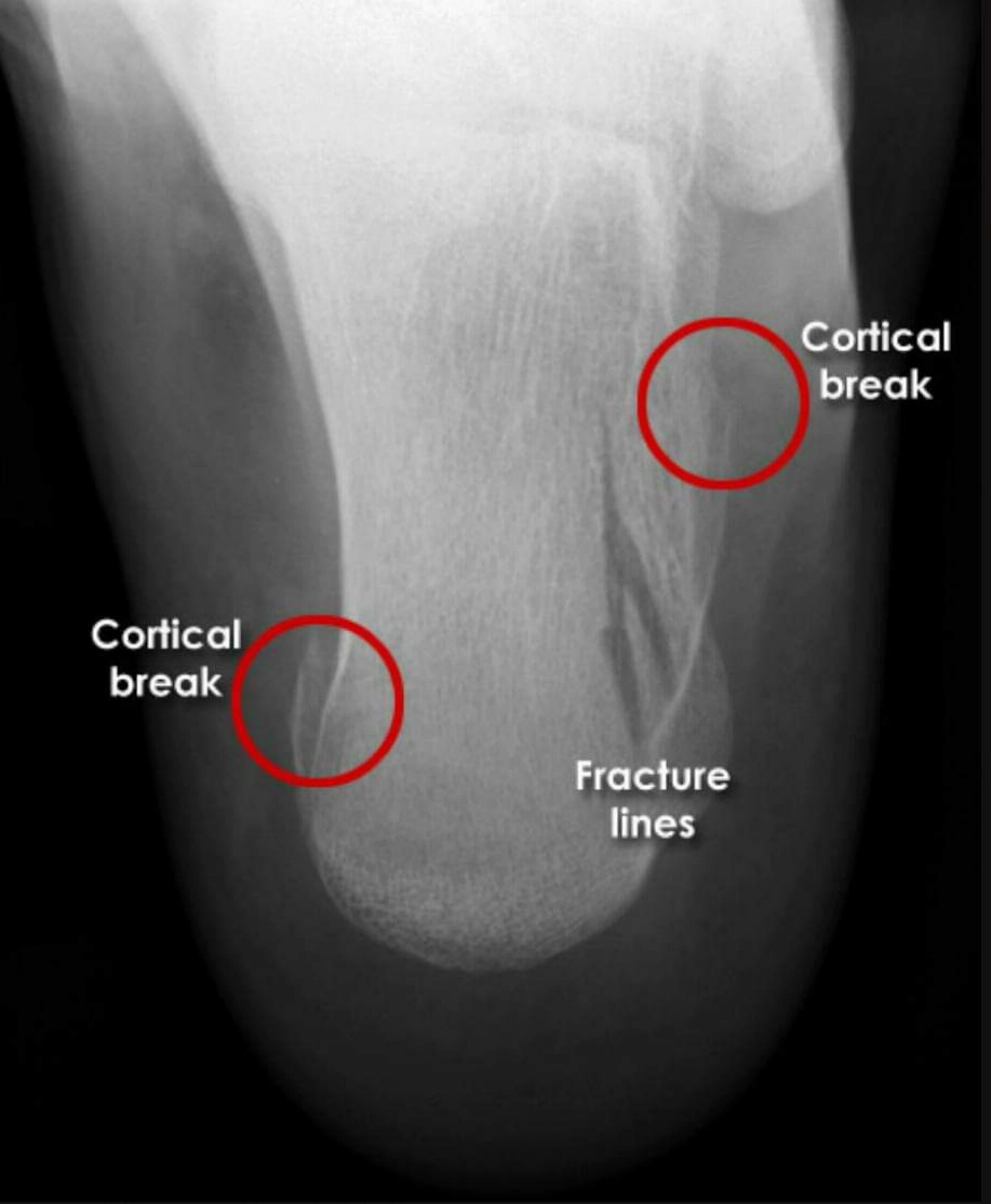
- ◆ Not all fractures of the calcaneus result in reduction of Bohler's angle



An axial CT scan of the calcaneus (heel bone) in grayscale. The image shows the complex, curved structure of the calcaneal body and its processes. A distinct linear fracture line is visible, running through the middle of the calcaneal body, which is characteristic of a normal Bohler's angle fracture.

Calcaneus fracture - Normal Bohler's angle - Axial

- ◆ (Same patient as image above)
- ◆ In this case the axial image was more informative and shows clear evidence of a fracture



Cortical
break

Cortical
break

Fracture
lines



Calcaneus fracture mimics - Lateral

- ◆ The os trigonum is a common accessory ossicle
- ◆ The calcaneus apophysis is not yet fused
- ◆ Neither of these entities should be mistaken for a fracture

A black and white photograph showing the posterior (dorsal) aspect of a human sacrum. The sacrum is a large, triangular bone formed by the fusion of five sacral vertebrae. Key features visible include the median sacral crest, the sacral hiatus at the bottom, and various sacral foramina. Two anatomical structures are labeled: 'Os trigonum' points to a small, separate ossification center located on the dorsal surface of the sacrum, just above the sacral hiatus. 'Calcaneus apophysis' points to a prominent, curved process extending downwards from the lateral side of the sacrum.

Os trigonum

Calcaneus
apophysis



Foot - Lisfranc injury

- ◆ This image shows a gap between the bases of the first and second metatarsals (MT); the second metatarsal is no longer correctly aligned with the intermediate cuneiform bone
- ◆ This is a significant finding which indicates disruption of the Lisfranc ligament
- ◆ Careful assessment of alignment is always required in suspected midfoot injury
- ◆ If the initial X-ray is normal then repeat images with weight-bearing or CT may be required

1st
MT

2nd
MT

2nd MT
medial → Gap
edge

Intermediate →
cuneiform edge



Foot - Lisfranc injury

- ◆ Injury to the Lisfranc ligament is often accompanied by subtle fragmentation of the adjacent bones





DP



Oblique

Foot - Metatarsal fracture

- ◆ 2 good views are required to look for suspected metatarsal bone fractures





Foot - 5th Metatarsal base fracture

- ◆ The base of the 5th metatarsal is a common site for a fracture



Growth
plates

Fracture

DP



Growth
plates

Articular
surface

Oblique



Foot - 5th Metatarsal base fracture

- ◆ If a 5th metatarsal fracture is suspected then dedicated views of the foot are required - as in the images above
- ◆ Occasionally this injury is seen on a lateral ankle image when ankle injury is suspected clinically

No ankle
fracture

Base of 5th
metatarsal fracture



Foot - Metatarsal stress fracture

- ◆ Stress injury results from repeated loading in a normal bone
- ◆ X-rays are often normal at time of onset of symptoms, but occasionally a subtle undisplaced fracture is seen - as in this image



Fracture



Foot - Metatarsal stress fracture

- ◆ Callus formation or 'periosteal reaction' is seen after a few weeks - as highlighted here
- ◆ If stress fracture is suspected and the initial X-ray is normal then clinical follow up should be arranged with repeat imaging if appropriate





Foot - MTPJ dislocation - DP and Oblique

- ◆ The Dorso-Plantar (DP) view clearly shows dislocation of the proximal phalanx of the big toe at the MTPJ (metatarsophalangeal joint)
- ◆ The oblique view only shows subtle widening of the joint
- ◆ Sesamoids should not be mistaken for fracture fragments

DP

Oblique



Dislocation



Normal



Foot - MTPJ dislocation - DP x2

- ◆ (Same patient as image below)
- ◆ Rather than widening of joint space the image on the left shows overlapping bone at the MTPJ due to dislocation
- ◆ The image on the right shows appearances once the bones have been returned to their correct position

Dislocation



Normal



Dislocation



Normal



Foot - MTPJ dislocation - Lateral x2

- ◆ (Same patient as image above)
- ◆ These images compare the position of the bones at time of dislocation and following relocation

Dislocation



Normal





Foot - Mid-foot dislocation

- ◆ High force trauma to the foot may result in dislocation of hindfoot or midfoot bones

An anterior-posterior radiograph of the right foot. The talus bone is labeled 'Talus' in white text. The navicular bone is labeled 'Navicular normal position' in white text, with a white arrow pointing to its normal alignment. The medial cuneiform bone is labeled 'Medial cuneiform' in white text, with a white arrow pointing to its position.

Medial
cuneiform

Talus

Navicular
normal position

Foot - Glass foreign body - DP

- ◆ It is not possible to establish the location of a foreign body without reference to at least 2 images
- ◆ On this image alone it is not possible to determine if this glass foreign body is located on the dorsal or plantar side of the foot





Radiographic marker |

Foot - Glass foreign body - Lateral

- ◆ Use of a second image shows the foreign body is within plantar-side soft tissues
- ◆ Note the radiographic marker which has been used to show the point of breach in the skin



Radiographic marker

Lateral



Axial



Metal foreign body

- ◆ Dense material such as metal and glass show up easily with X-rays
- ◆ Other foreign bodies such as wood may not be dense enough to be visible - in which case use of ultrasound can help determine location

Marker ↴

Lateral

Axial

Metallic
foreign body

The image consists of two side-by-side X-ray photographs of a knee joint. The left image is labeled 'Lateral' and the right image is labeled 'Axial'. Both images show the femur (thigh bone) and tibia (shin bone). A bright, metallic object is visible within the joint space in both images. In the lateral view, a white line points from the bottom-left towards this metallic object. In the axial view, a white line points from the bottom-right towards the same metallic object. The text 'Metallic foreign body' is centered at the bottom of the image, with one line pointing to each of the two X-ray images.

Marker |



DP



Oblique

Foot - Phalangeal fracture

- ◆ Fractures of the phalangeal bones are usually well demonstrated with X-ray
- ◆ Make sure you look closely at all images provided





Flake fractures

- ◆ Small flakes of bone are a common finding following trauma
- ◆ The significance of these injuries depends on their anatomical location
- ◆ The fracture of 5th metatarsal base shown here is at the insertion point of the peroneus brevis tendon and is therefore potentially more significant than the fracture of the cuboid bone

5th
metatarsal
base

Cortical flake
fractures

Cuboid