

Femur position

Main positions :

- 1- (Anterio posterior) AP.
- 2- Lateral.

Area covered of AP position (Proximal femur):

- 1- Femoral head , neck ,shaft .
- 2- Acetabulum .

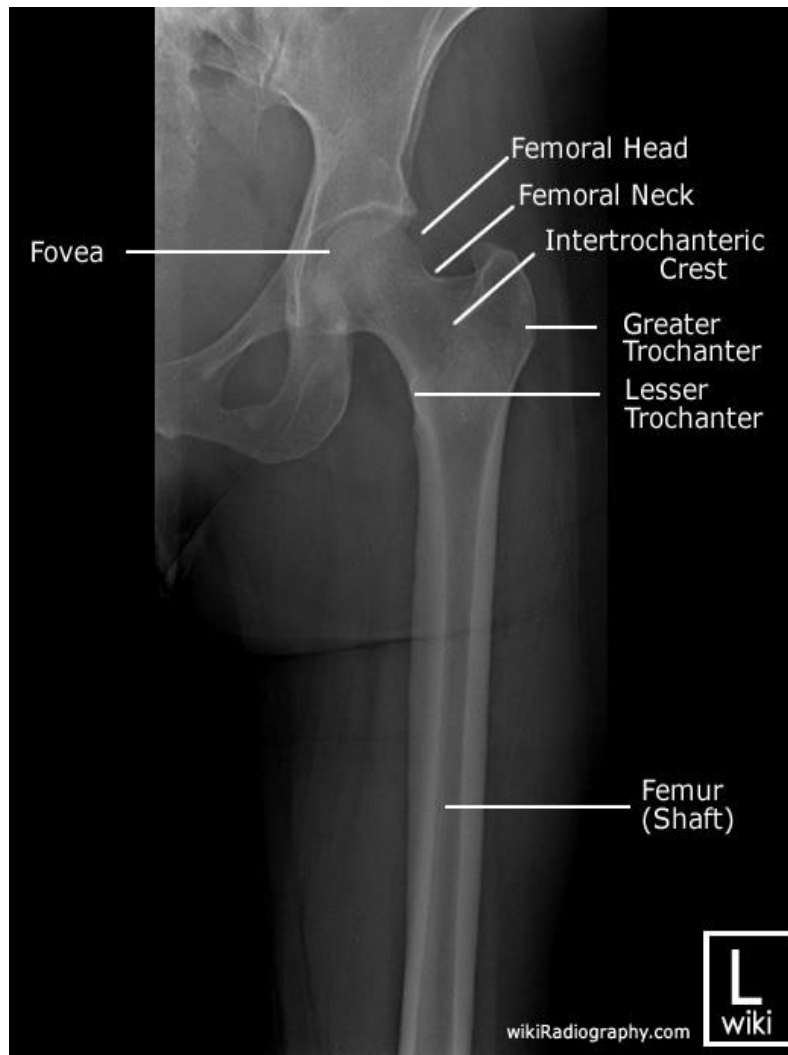
Pathology shown AP position (Proximal femur):

Fractures , tumours , infection .

AP position (Proximal femur):

- 1- Film size 6*15 , 12*15 or 14*17 inches.
- 2- Identification mark (right or Left) should be put on the upper corner of the cassette .
- 3- Kv : 60-65 , mAs : 12-15
- 4- The patient supine on the x-ray table (check there is no pelvic rotation do this by checking that the ASIS on each side are equal distance from the table top).
- 5- The leg **internally rotate 15 degree** to get the femur in true Ap position (this places the femoral neck in profile).
- 6- Position the upper edge of IR at the level of anterior superior iliac spine (ASIS).
- 7- Center ray (CR) :directed perpendicular to mid – femur .

Note : do not internally rotate if fracture is suspected.



Evaluation Criteria :

- 1- Acetabulum .
- 2- Femoral head and neck.
- 3- Greater and lesser trochanter.
- 4- Femoral shaft.

Area covered of AP position (Distal femur):

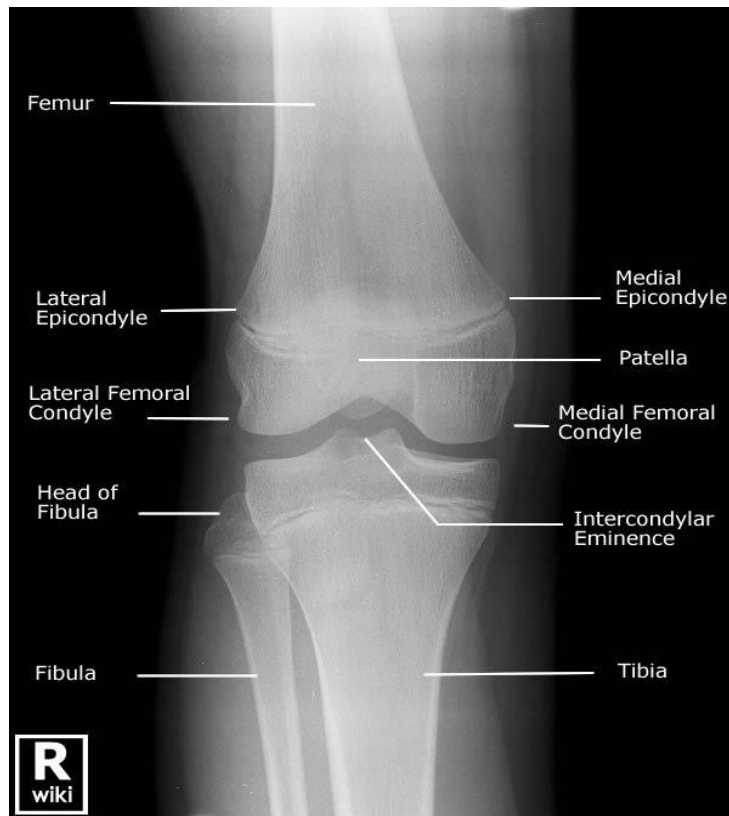
- 1- Femoral condyles and epicondyles .
- 2- Knee joint.
- 3- Proximal tibia and fibula .

Pathology shown AP position (Distal femur): Fracture , lesions.

AP position (Distal femur):

- 1- Film size 6*15 , 12*15 or 14*17 inches.
- 2- Identification mark (right or Left) should be put on the upper corner of the cassette .
- 3- Kv : 60-65 , mAs : 12-15
- 4- The patient supine on the x-ray .
- 5- Knee fully extended .
- 6- The knee internally rotate **about 5 degree until** it is in true Ap position.
- 7- Position the lower edge of IR 5 cm (2 inche) below the knee joint.
- 8- Center ray (CR) :directed perpendicular to mid – femer .

Note : do not rotate leg if fracture is suspected



Evaluation Criteria :

- 1- Femoral shaft.
- 2- Medial and lateral epicondyles.
- 3- Medial and lateral condyles.
- 4- Patella.
- 5- Intercondyle notch of femur.
- 6- Proximal end of tibia (medial and lateral condyles , intercondyle eminence).

Area covered of Lateral position (Proximal femur):

- 1- Femoral head , neck ,shaft .
- 2- Greater and lesser trochanters.
- 3- Hip joint.

Pathology shown lateral position (Proximal femur):

Fractures , lesions.

Lateral position (Proximal femur):

- 1- Film size 6*15 , 12*15 or 14*17 inches.
- 2- Identification mark (right or Left) should be put on the upper corner of the cassette .
- 3-Kv : 60-65 , mAs : 12-15 .
- 4-The patient in lateral position on the x-ray table .
- 5-Unaffected limb behind affected side and supported on sand bags.
- 7- Align the upper edge of the IR to the level of the ASIS.
- 8- Center ray (CR) :directed perpendicular to mid – femur.

Evaluation Criteria :

- 1- Femoral head , neck ,shaft .
- 2- Greater and lesser trochanters.
- 3- Ischial tuberosity.

Area covered of Lateral position (Distal femur):

- 1- Femoral shaft .
- 2- Patella.
- 3- Proximal tibia and fibula.
- 4- Knee joint.

Pathology shown lateral position (Distal femur):

Fractures , lesions.

Lateral position (Distal femur):

- 1- Film size 6*15 , 12*15 or 14*17 inches.
- 2- Identification mark (right or Left) should be put on the upper corner of the cassette .
- 3-Kv : 60-65 , mAs : 12-15 .
- 4-From supine position roll the patient onto the affected side until the pelvis is lateral.
- 5-The femoral epicondyle should be perpendicular to the IR .
- 6-**Flex knee about 45 degree .**
- 8- Align the lower edge of the IR about 5 cm (2 inch) below the knee joint.
- 9- Center ray (CR) :directed perpendicular to mid – femur.

Evaluation Criteria :

- 1- Femoral shaft.
- 2- Patella.
- 3- Lateral and medial femoral condyle overlapping.
- 4- Lateral and medial femoral epicondyle overlapping.
- 5- Proximal end of tibia.

