

Radiographic positioning of patella

Radiological and sonographic technologies department

2 nd stage



Assist. Lecturer
Fadhil Aad Leftah Al-Zurfi
Ali Hani Kareem
Salman Mohammed

Postero-anterior position of patella

➤ Position of patient and image receptor

- Film size is 8 x 10 inches length-wise.
- Image receptor placed out Bucky.
- The patient lies prone on the table, with the knee slightly flexed (Figure 1-a).
- The pillow placed under the ankle for support.
- The limb rotated to centralize the patella.
- The central ray is directed midway between the upper borders of the tibial condyles



Figure 1-a: Postero-anterior position for patella



Figure 1-b: Normal postero-anterior radiograph of patella.

Skyline (Infero-superior) position of patella

➤ Position of patient and image receptor

- Film size is 8 x 10 inches length-wise.
- Image receptor placed out Bucky.
- The patient sits on the X-ray table.
- The knee flexed 30–45° and supported on a pad placed below the knee (see Figure 2-a).
- The image receptor held by the patient against the anterior distal femur
- The X-ray tube lowered into the horizontal orientation.
- The central ray angled a 5–10° cranially from horizontal toward patella and femoral condyles.



Figure 2-a: Patient positioning for infero-superior radiograph of the knee.

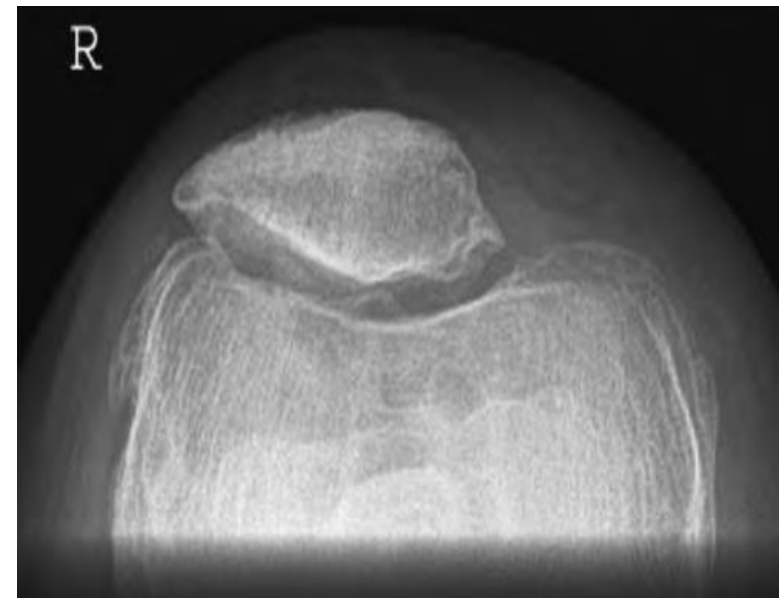


Figure 2-b: Infero-superior radiograph demonstrating good position, showing osteophytosis affecting the retro-patellar joint.

Infero-superior position of patella - prone

- This projection has the advantage in that the primary beam is not directed towards the gonads.
- **Position of patient and image receptor**
 - Film size is 8 x 10 inches length-wise.
 - Image receptor placed out Bucky.
 - The patient lies prone on the X-ray table.
 - The image receptor placed under the knee joint.
 - The knee flexed through 90° (see Figure 3-a).
 - A bandage placed around the ankle and either tethered to a vertical support or held by the patient may prevent unnecessary move

The central ray is angled 15° toward knee joint and directed to the patella



Figure 3-a: Patient positioning for infero-superior prone projection.

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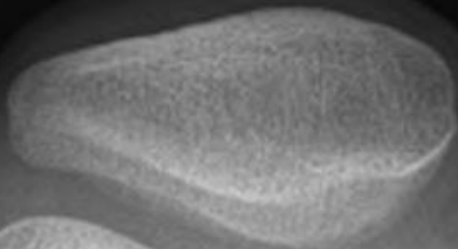


Figure 3-b: Normal infero-posterior radiograph of patella – patient prone.

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Figure 3-c: image of knee showing degenerative changes and bony fragment (arrows).

An overhead view of a person's hand holding a fountain pen over an open notebook. The notebook is open to two blank, cream-colored pages. On the left page, the words "Thank you" are written in a fluid, black cursive script. The hand, positioned in the lower right, holds a fountain pen with a dark, vertically-ribbed barrel and gold-colored accents. The pen is held in a tripod grip, with the nib pointing towards the right page. The entire scene is set on a dark brown wooden surface with a prominent grain. In the upper center, a fountain pen cap with a matching dark, vertically-ribbed barrel and gold-colored bands lies horizontally. At the top of the frame, a portion of a teal-colored decorative box with intricate carvings is visible.

Thank
you