

Department of Radiology Techniques

Radiological Position

The Second Stage

Semester 2



pelvis and hip Positions

Lecture 1

Assist. Lecturer

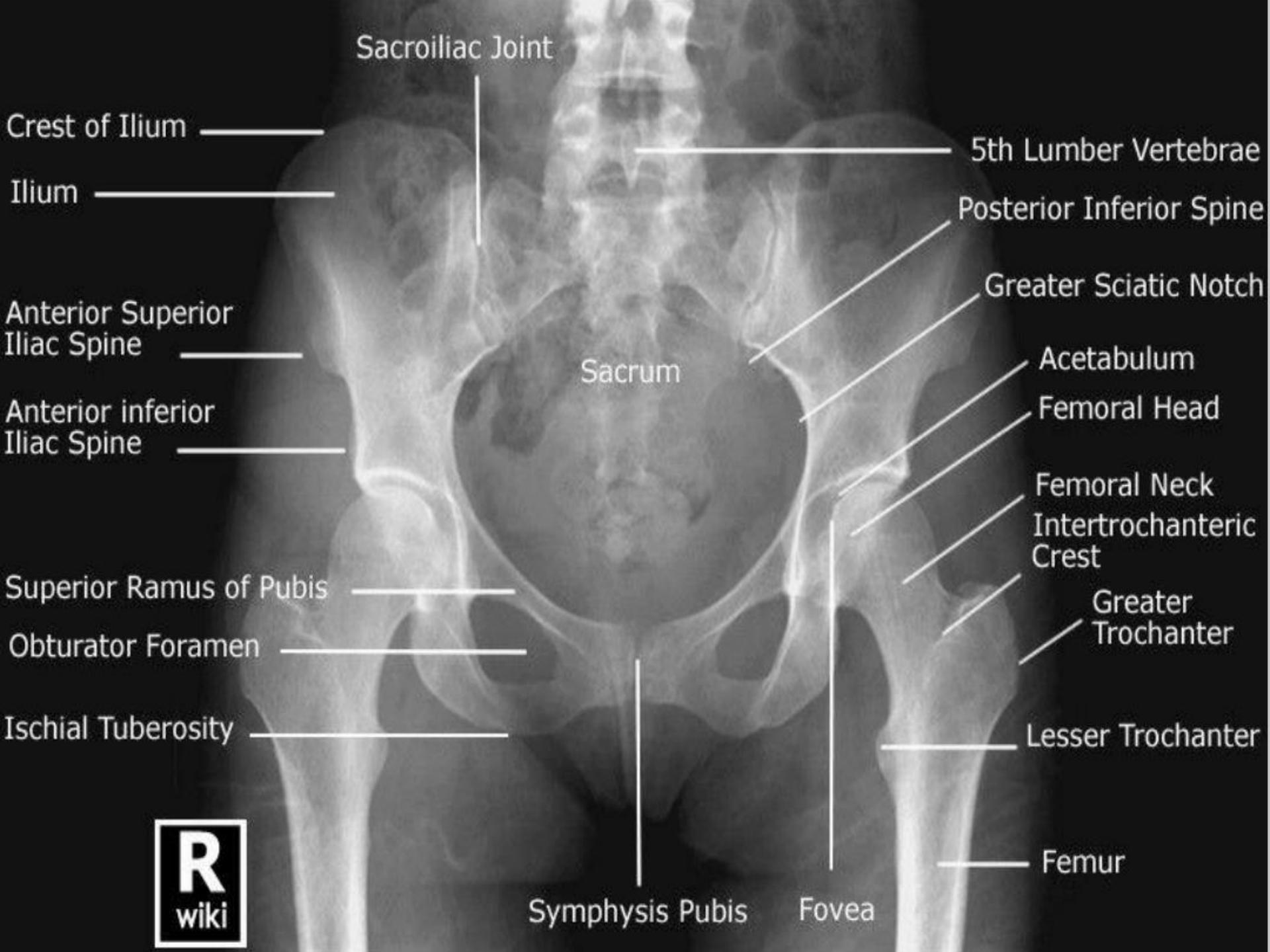
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Basic Positions of Pelvis and Hip

1- Anterior – Posterior

2- Lateral

Cassette In Bucky (14x17 Inch)



1- Anterior – Posterior (Pelvis and both hip)

Position of Patient

- *The patient lies supine and symmetrical on the X-ray table.*
- *The limbs are slightly abducted and internally rotated 15 degree to bring the femoral necks parallel to the cassette.*
- *Sandbags and pads are placed against the ankle region to help maintain this position.*
- *Cassette In-Bucky (14x17 Inch)*

Direction and centering of the X-ray beam

- *The center of the cassette is placed midway between the upper border of the symphysis pubis and anterior superior iliac spine.*



Antero-posterior projection of the whole pelvis, with internal rotation of the femora



Neutral



Internal rotation



External rotation



Lesser trochanters visible



Femoral neck parallel to cassette, lesser trochanters not visible



Lesser trochanter clearly visible



Antero-posterior radiograph of both hips
and upper femora showing bilateral prostheses



Antero-posterior radiograph showing fracture
of the neck of the left femur

Basic Positions of Single Hip

1- Anterior – Posterior

2- Lateral

Cassette In Bucky (10x12 Inch)

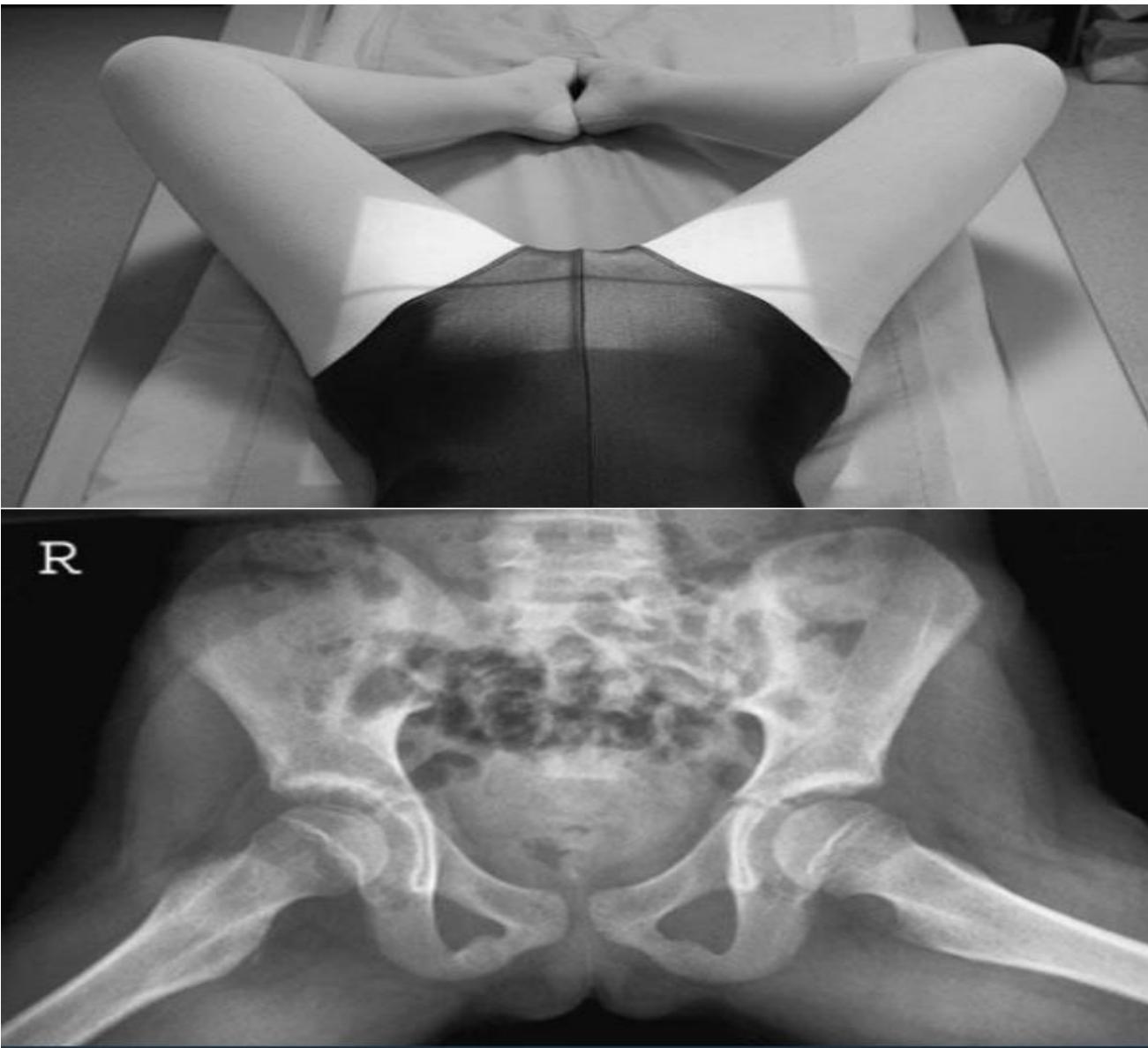
Lateral – both hips ('frog's legs position')

Position of patient and cassette

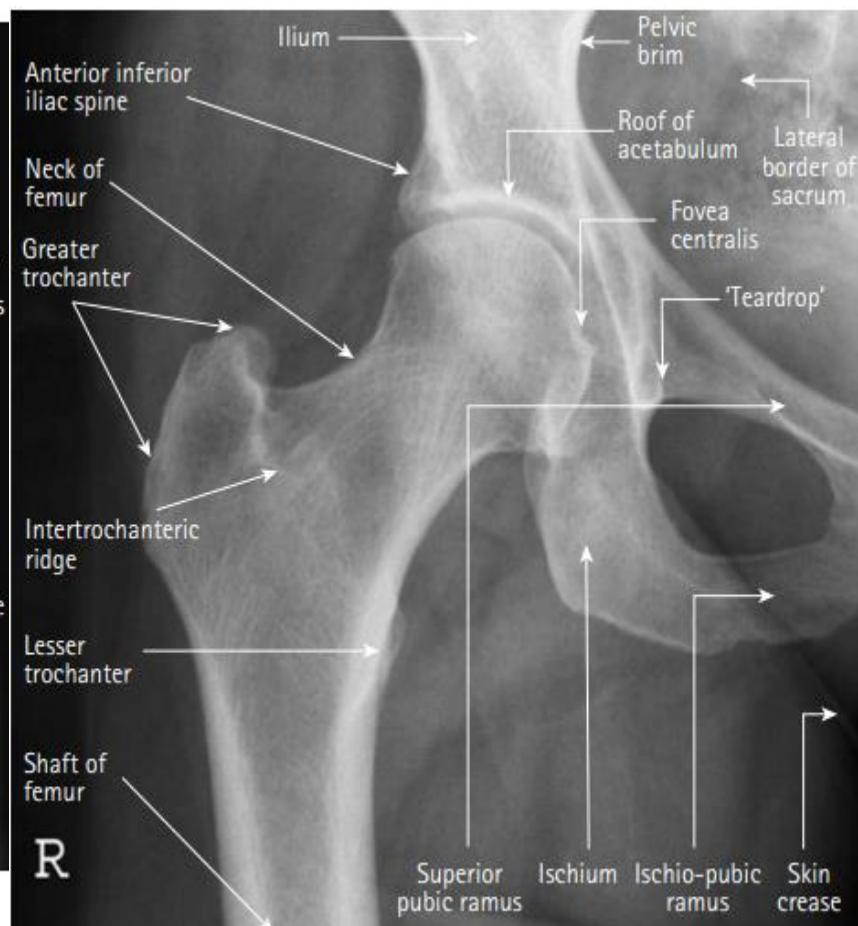
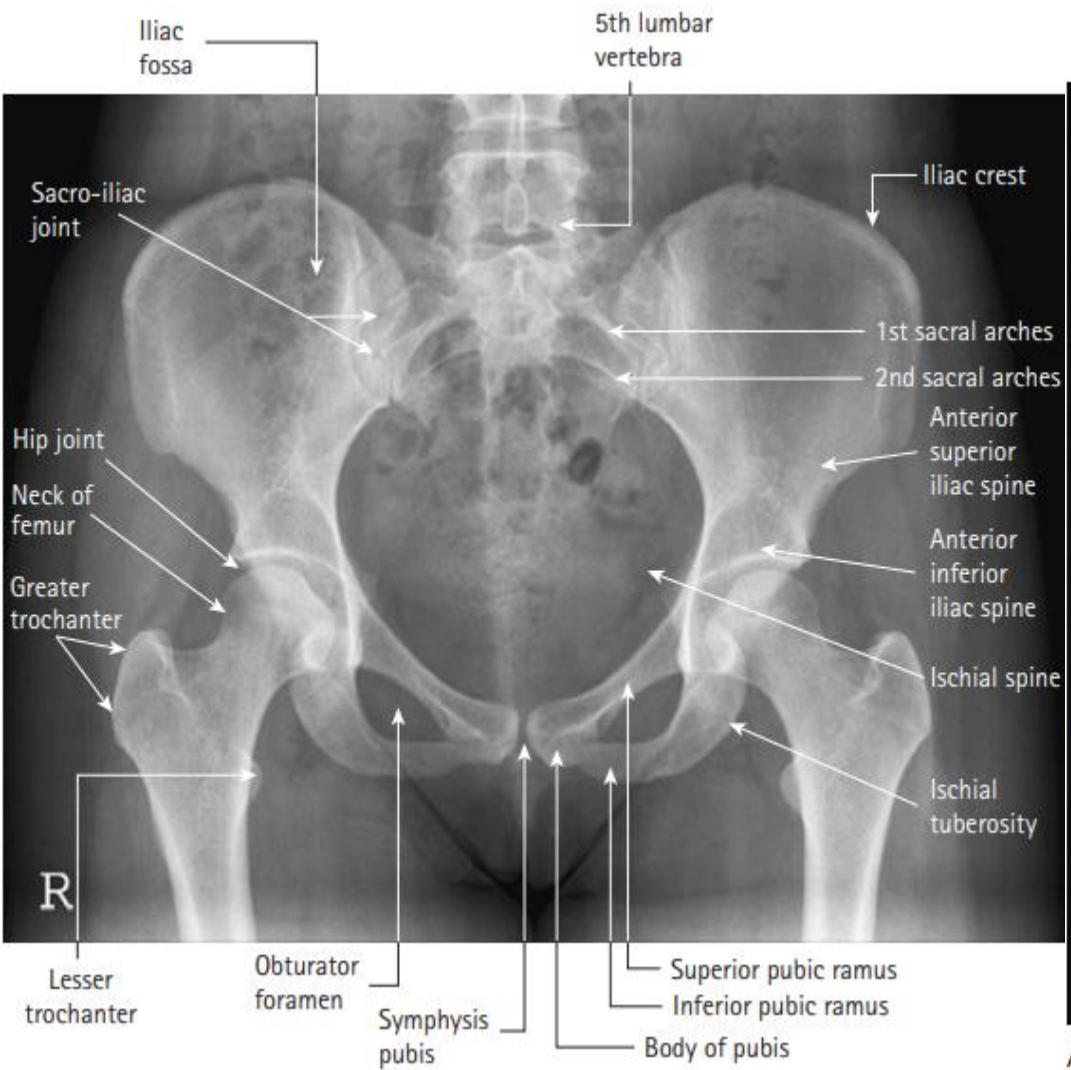
- *The hips and knees are flexed and the limbs rotated laterally through approximately 60 degrees. This movement separates the knees and brings the plantar aspect of the feet in contact with each other.*
- *The limbs are supported in this position by pads and sandbags.*
- *Cassette In-Bucky (14x17 Inch)*

Direction and centering of the X-ray beam

- *Centre in the midline at the level of the femoral head.*



Normal radiograph showing both hips in lateral projection (frog legs)



Antero-posterior projection of hip

Antero-posterior – single hip (basic)

Position of patient and cassette

- *The patient lies supine and symmetrical on the X-ray table*
- *To avoid pelvic rotation, the anterior superior iliac spines must be equidistant from the tabletop.*
- *The affected limb is internally rotated to bring the neck of the femur parallel to the tabletop, and is then supported by sandbags.*
- *Cassette In-Bucky (10x12 Inch)*

Direction and centering of the X-ray beam

- *Centre to the head of femur.*



Antero-posterior radiograph of single hip



Antero-posterior radiograph of single hip showing pin and plate *in situ*

Lateral single hip

Position of Patient

- *The patient lies supine on the X-ray table, with the legs extended.*
- *The patient rotates through 45 degrees on to the affected side, with the hip abducted 45 degrees and flexed 45 degrees, and is supported in this position by non-opaque pads.*
- *The knee is flexed to bring the lateral aspect of the thigh into contact with the tabletop..*
- *A (10 x 12 inch) cassette is used in Bucky.*

Direction and centering of the X-ray beam

- *Centre to the head of femur.*



Lateral projection of hip showing fracture of neck femur



oblique projection showing position of Garden screws

thanks