

Department of Radiology Techniques

Radiological Position

The Second Stage

Semester 2



Sacro-iliac joints Position

Lecture 9

Assist. Lecturer

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Positions of Sacro -iliac joints

1- Posterior-anterior

2- Antero-posterior

3- Posterior oblique OR Antero-posterior oblique

Cassette In – Bucky (10x12 Inch)

1- Posterior-anterior

Position of patient and cassette

- The patient lies prone, with the median sagittal plane perpendicular to the tabletop.*
- The posterior superior iliac spines should be equidistant from the tabletop to avoid rotation.*
- The midline of the patient should coincide with the centered primary beam and the table Bucky mechanism.*
- The forearms are raised and placed on the pillow.*
- A (10x12 Inch) cassette is placed transversely in the Bucky tray and positioned so that the central ray passes through the center of the cassette .*

Direction and centering of the X-ray beam

- *Centre in the midline at the level of the posterior superior iliac spines.*
- *The central ray is angled 5–15 degrees caudally from the vertical, depending on the sex of the patient. The female requires greater caudal angulation of the beam.*
- *The primary beam is collimated to the area of interest.*



Normal postero-anterior projection of sacro-iliac joints

2- Antero-posterior

Position of patient and cassette

- The patient lies supine and symmetrical on the X-ray table, with the median sagittal plane perpendicular.*
- The midline of the patient must coincide with the centered primary beam and the table Bucky mechanism.*
- To avoid rotation, the anterior superior iliac spines must be equidistant from the tabletop.*
- A (10x12 Inch) cassette is placed transversely in the Bucky tray, centered at a level to coincide with the central ray.*
- The shoulders are raised over a pillow to eliminate the lumbar arch.*
- The knees should be flexed over foam pads for comfort.*

Direction and centering of the X-ray beam

- *Centre in the midline at a level midway between the anterior superior iliac spines and the superior border of the symphysis pubis.*
- *The central ray is directed between 5 and 15 degrees cranially, depending on the sex of the patient . The female requires greater caudal angulation of beam.*
- *The primary beam is collimated to the area of interest.*



Normal antero-posterior projection of sacro-iliac joints

3- Posterior - Oblique OR Antero-Posterior oblique

Both sides are examined for comparison.

Position of patient and cassette

- The patient lies supine on the table.*
- From this position, the patient is rotated 15–25 degrees on to the side not being examined.*
- The anterior superior iliac spine on the raised side should lie just lateral to the posterior superior iliac spine.*
- The raised side is supported with non-opaque pads placed under the trunk and the raised thigh.*
- Pads may be placed between the knees for comfort.*

Direction and centering of the X-ray beam

- Centre 2.5 cm medial to the anterior superior iliac spine on the raised side (the side under examination), with the central ray perpendicular to the cassette.*

Note

If it is necessary to demonstrate the inferior part of the joint more clearly, the central ray is angled 15 degrees cranially and centered 2.5 cm medial to and 5 cm inferior to the anterior superior iliac spine on the side under examination (raised side).



Thanks

