

RADIOGRAPHIC ANATOMY

JAMES McINNES
F.S.R., T.E., F.R.P.S.

*Editor of the Ninth Edition of Clark's
Positioning in Radiography*

WILLIAM HEINEMANN MEDICAL BOOKS LIMITED

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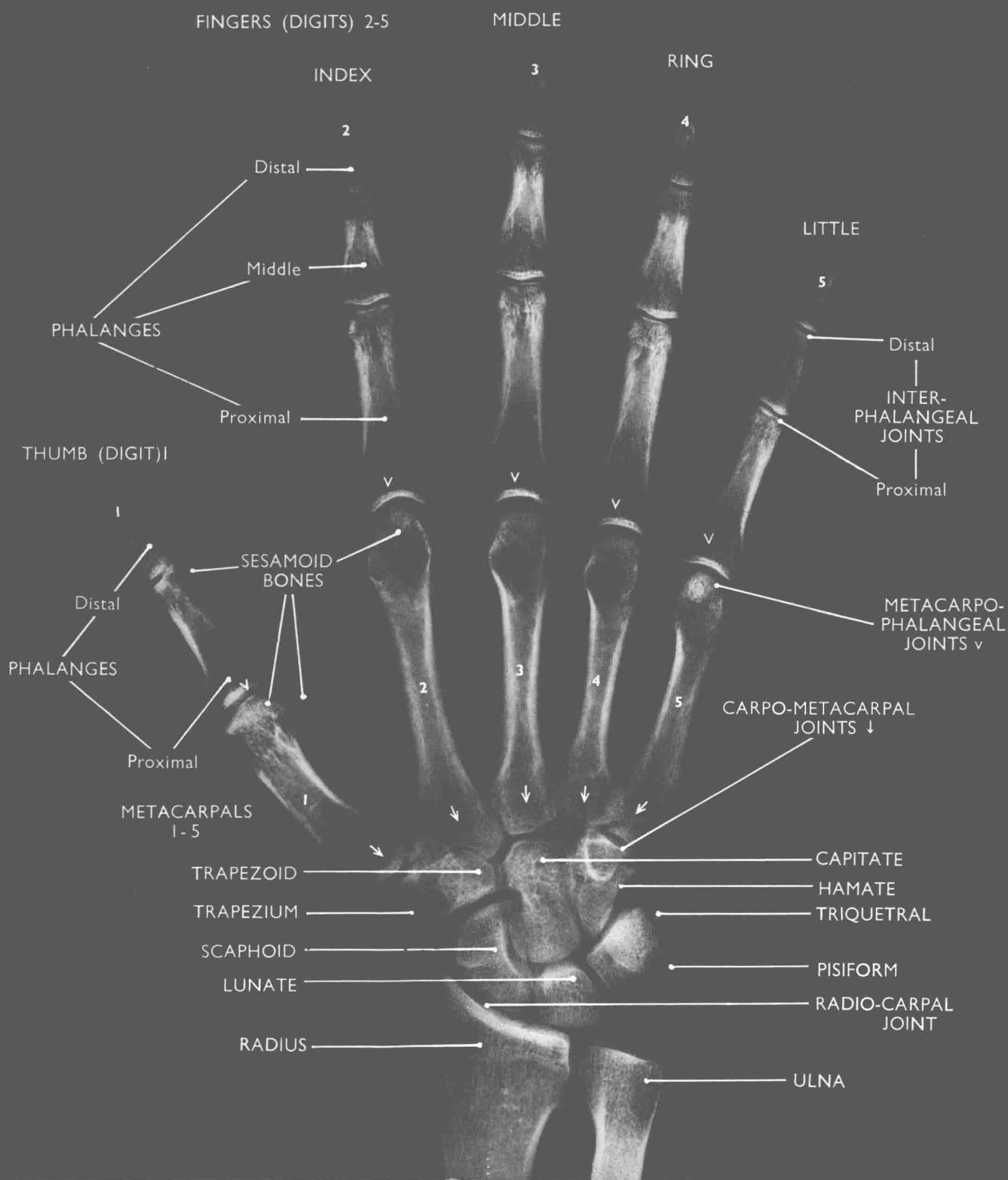
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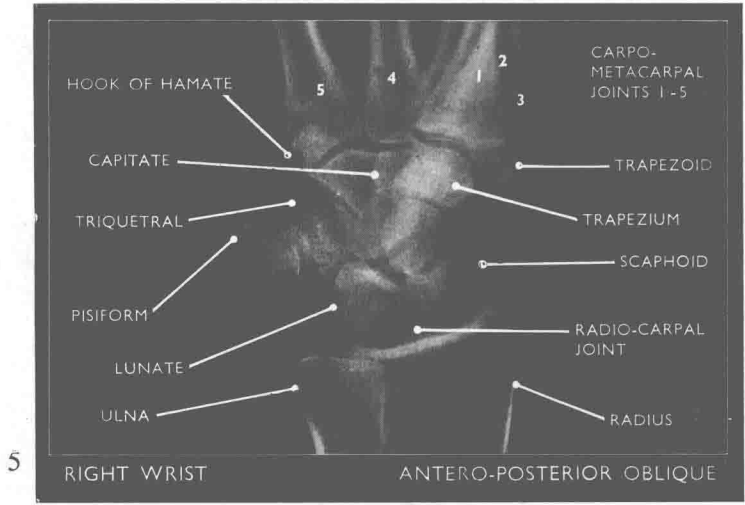
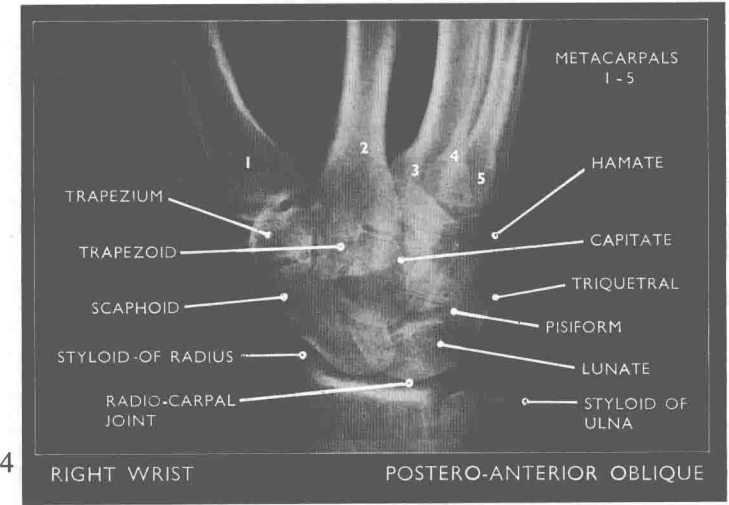
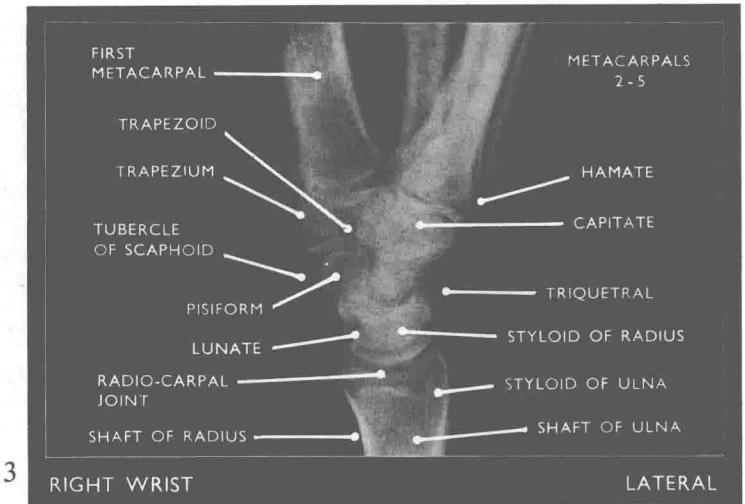
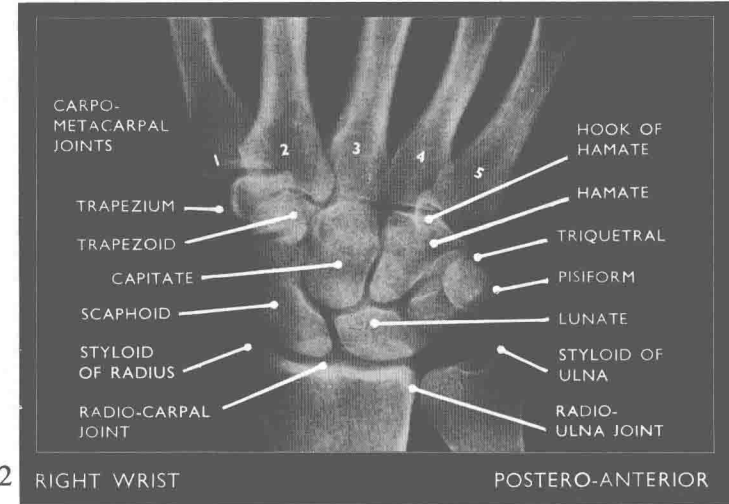
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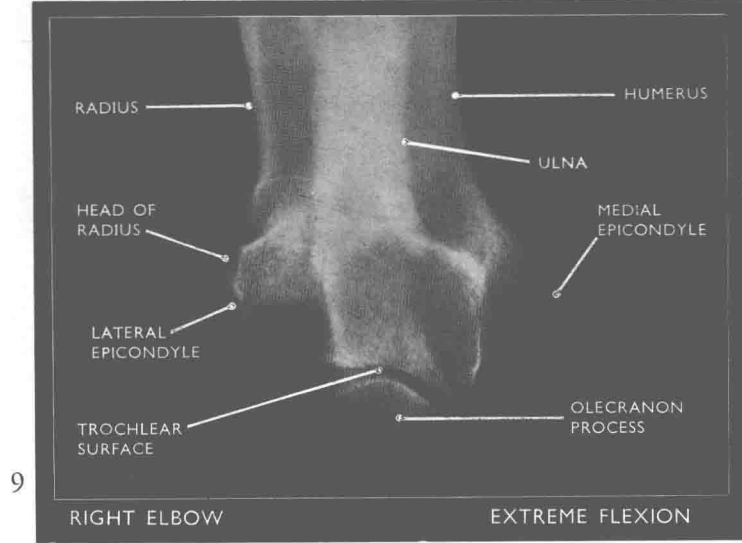
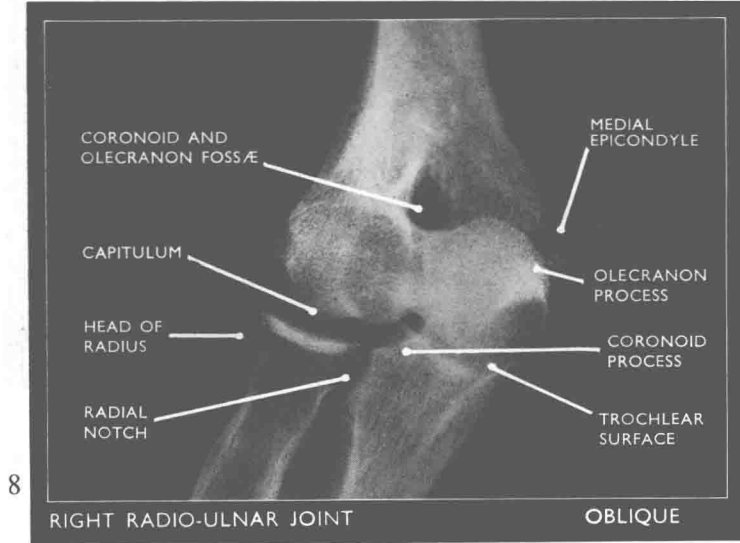
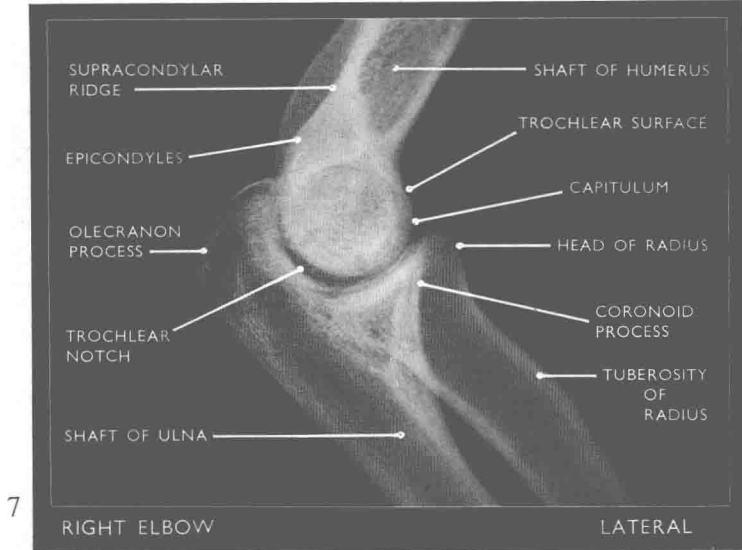
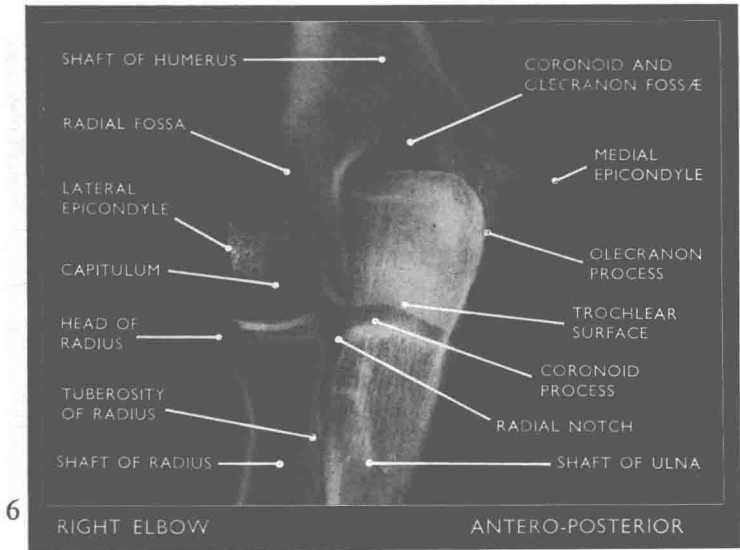
UPPER LIMB, WRIST JOINT



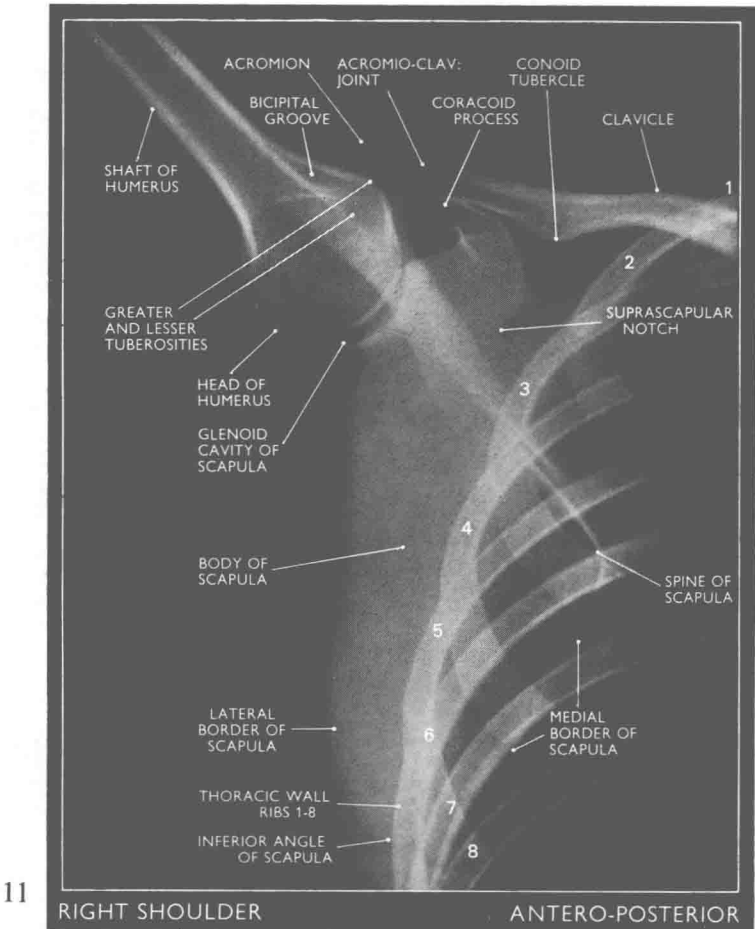
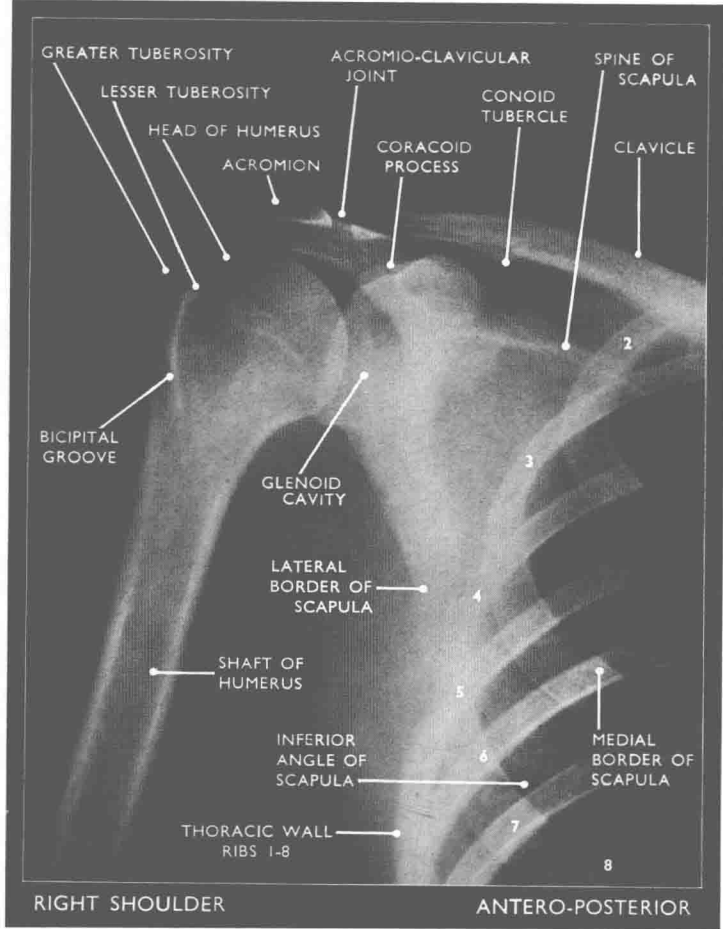
The names of the carpal bones, proximal and distal, with the more commonly used of the older terms shown in brackets, are:

Scaphoid (Navicular)	Lunate (Semilunar)	Triquetral (Triquetrum) (Cuneiform)	Pisiform
Trapezium	Trapezoid	Capitate (Os Magnum)	Hamate (Unciform)

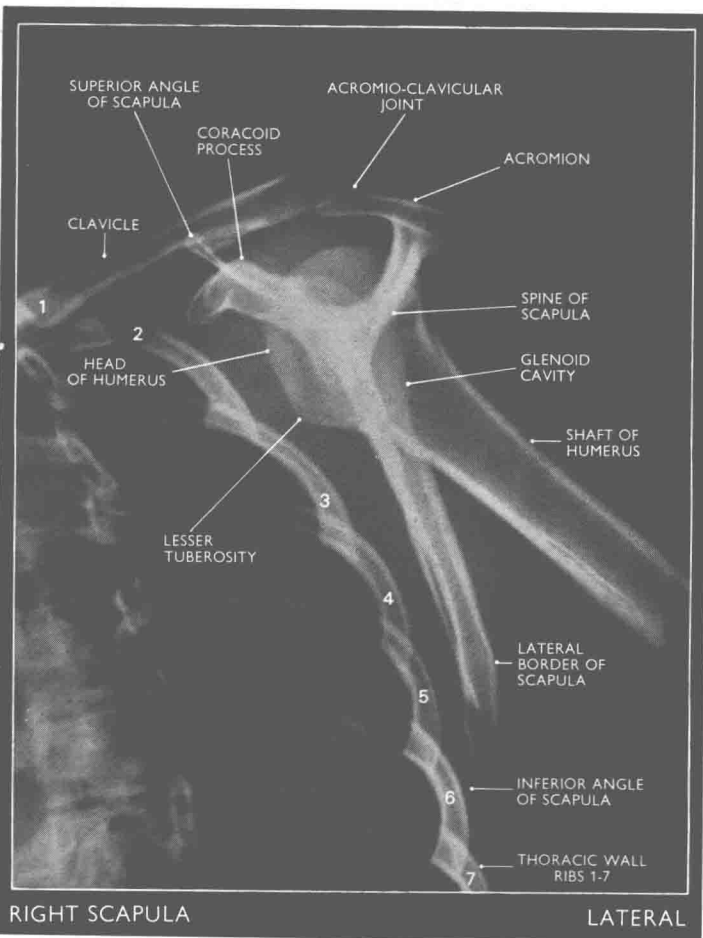
UPPER LIMB, ELBOW JOINT



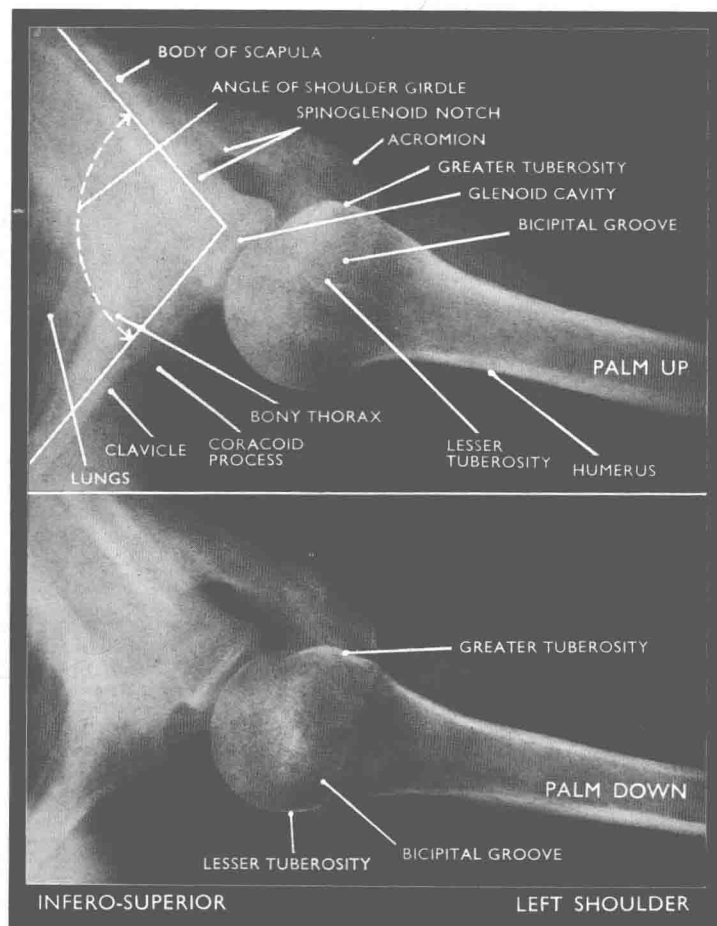
HUMERUS AND SHOULDER GIRDLE



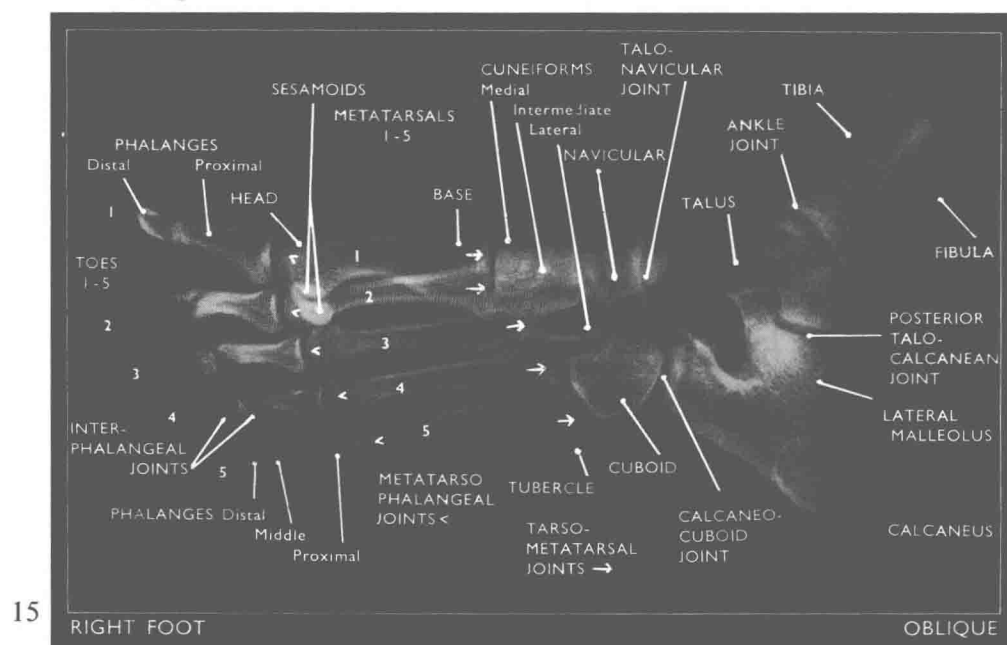
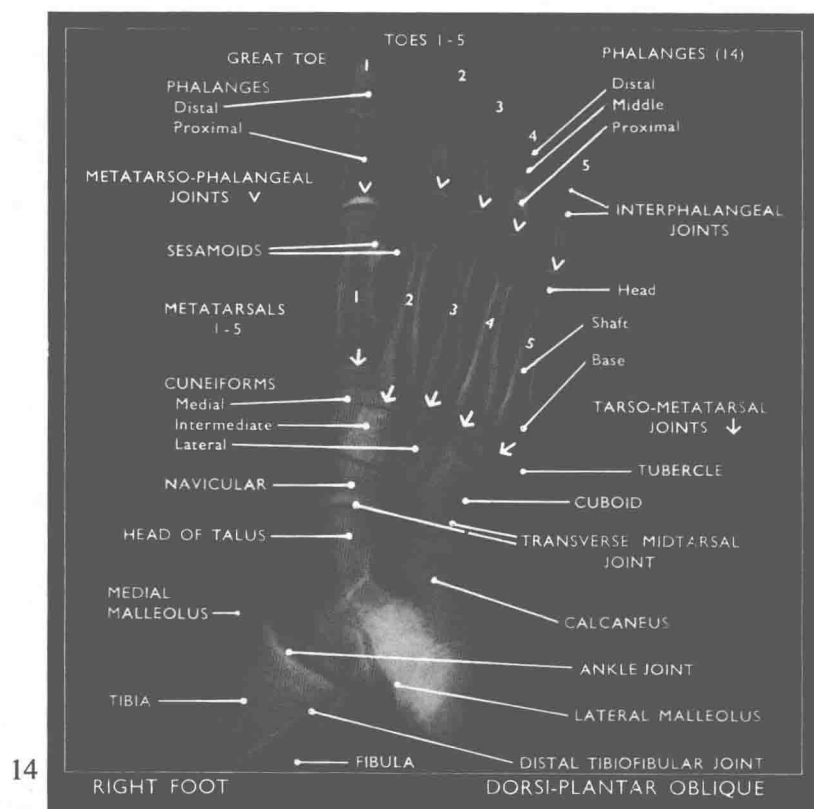
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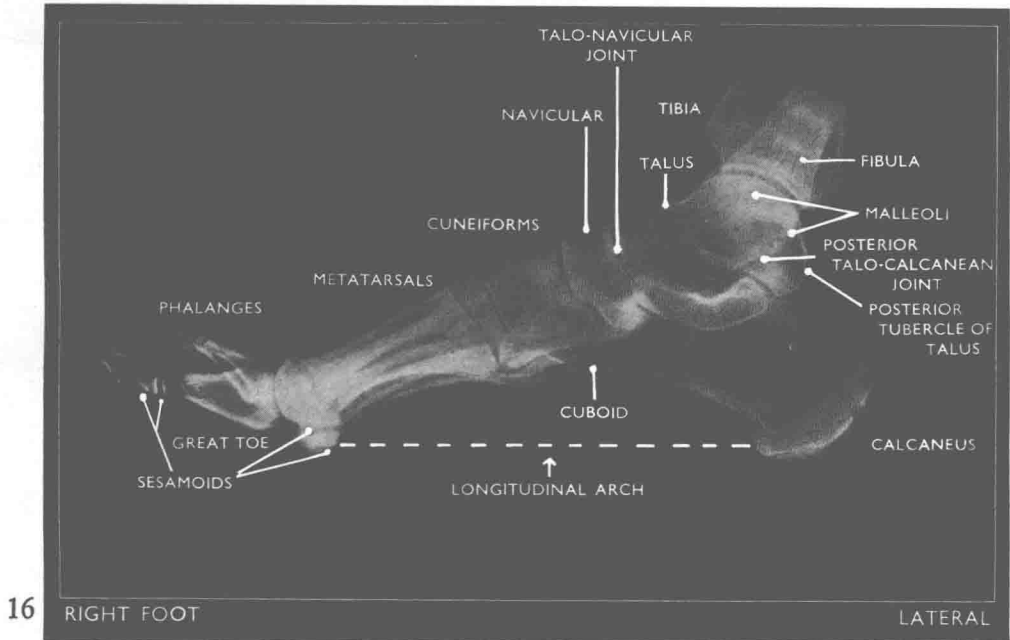


LOWER LIMB, FOOT



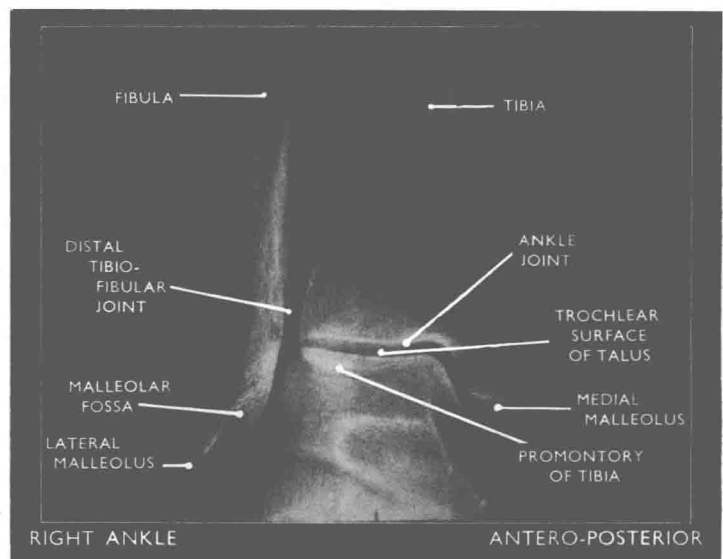
As there may be some confusion with regard to the naming of the tarsal bones, the most commonly used terms are given below with the older terms in brackets.

Talus	Calcaneus	Navicular	Cuboid
(Astragalus)	(Calcaneum)	(Scaphoid)	
	(Os Calcis)		
Cuneiforms—Medial	Intermediate	Lateral	
(Internal)	(Middle)	(External)	

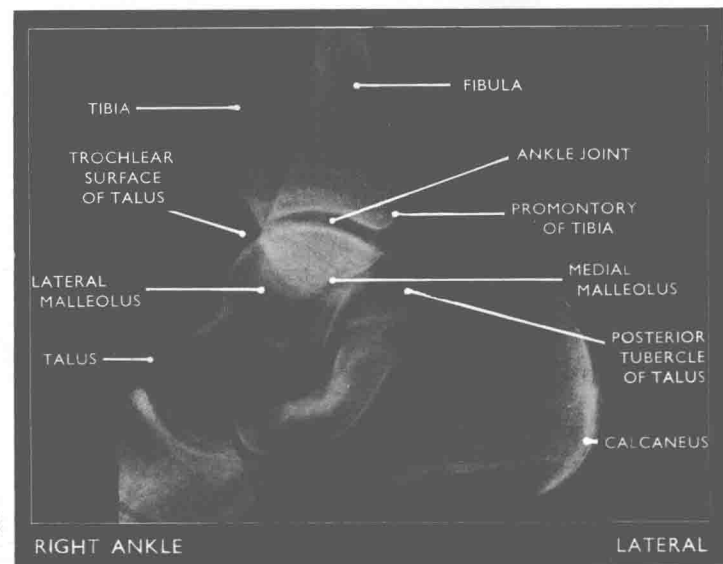


ANKLE JOINT

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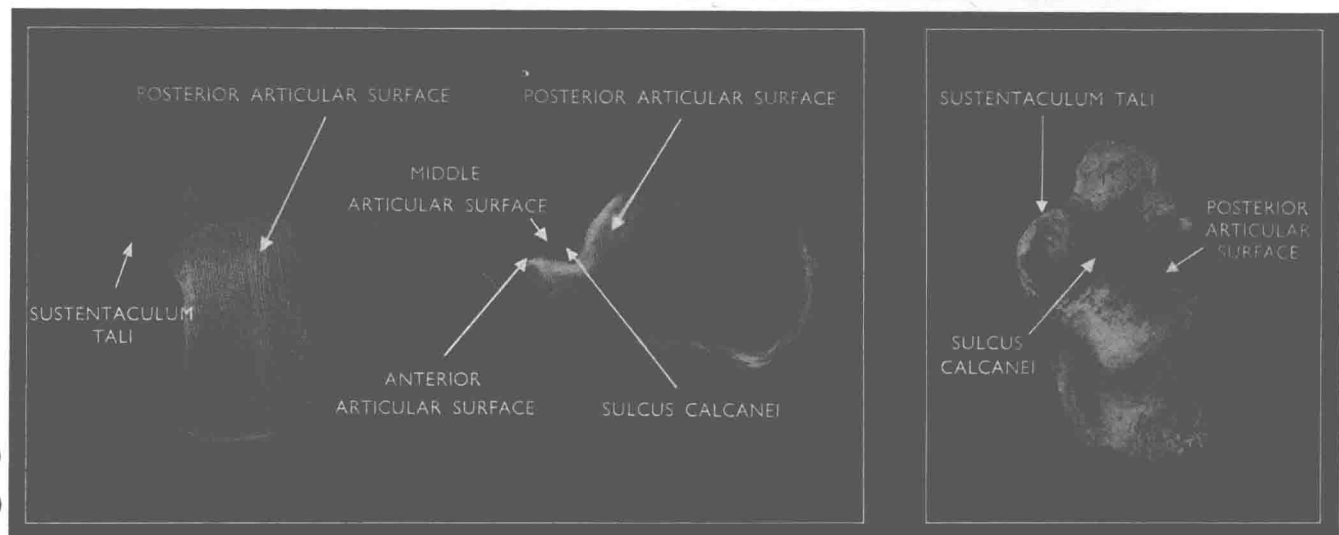


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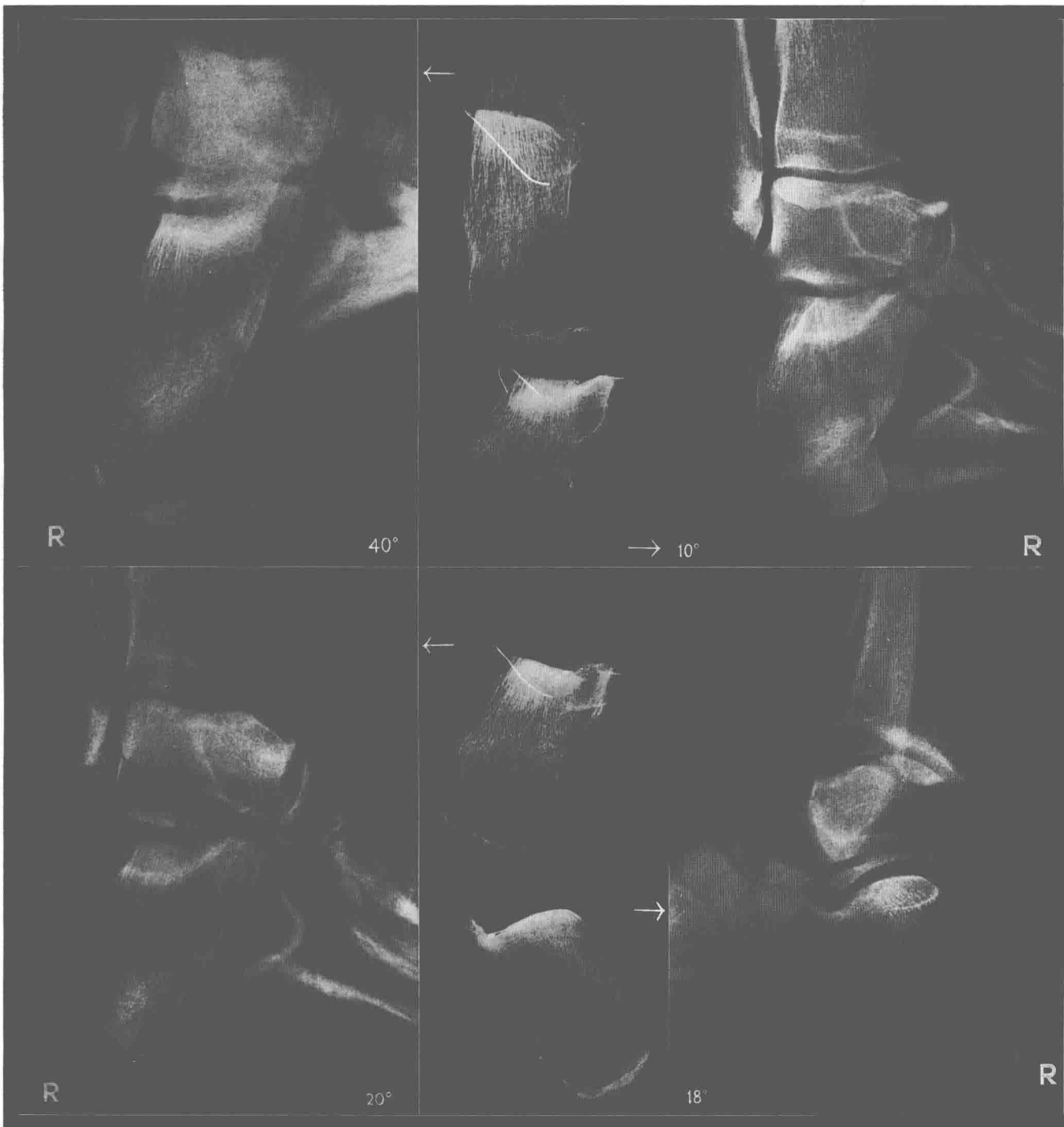
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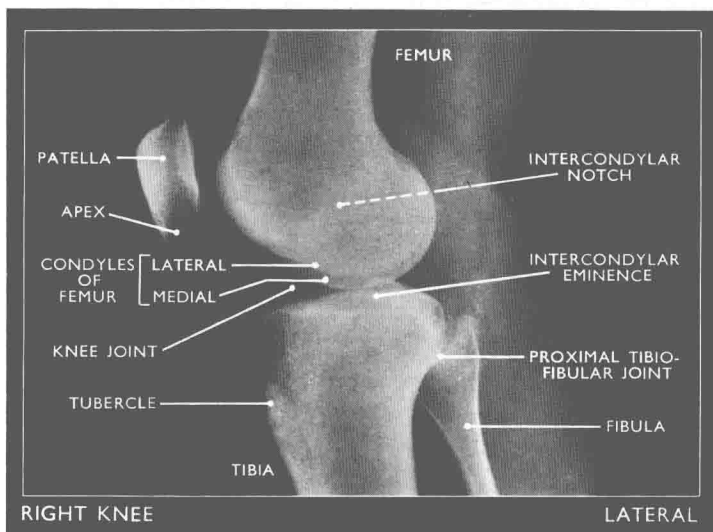
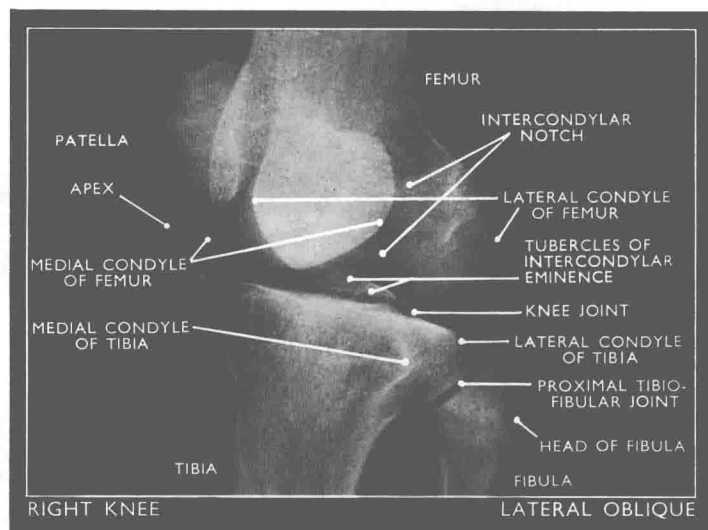
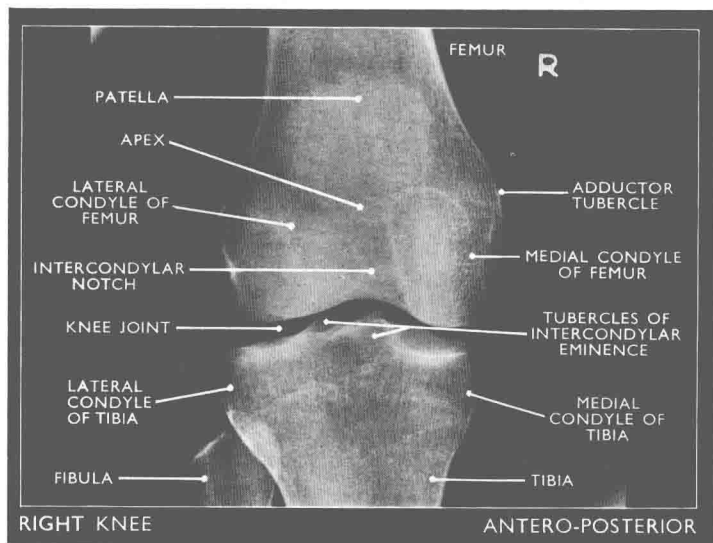
TALO-CALCANEAN JOINTS

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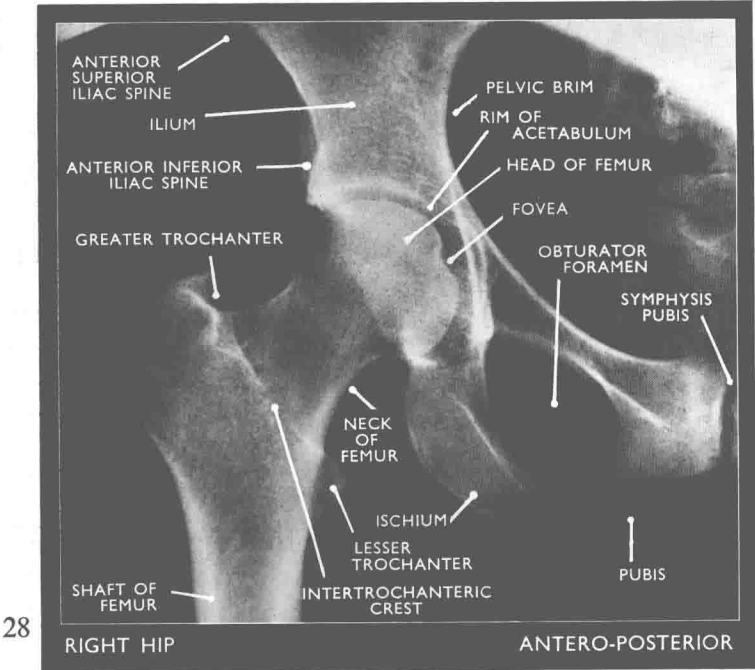
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KNEE JOINT

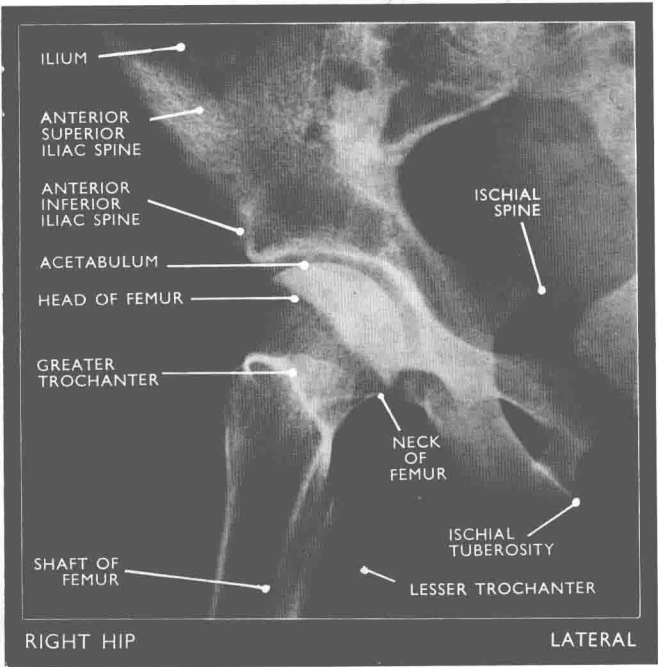


The hip joint is a ball and socket joint in which the smooth, almost spherical head of the femur articulates with the acetabulum which is formed by the three parts of the innominate or hip bone on the lateral aspect of the pelvis. The proximal extremity of the femur consists of head, elongated neck, and greater and lesser trochanters.

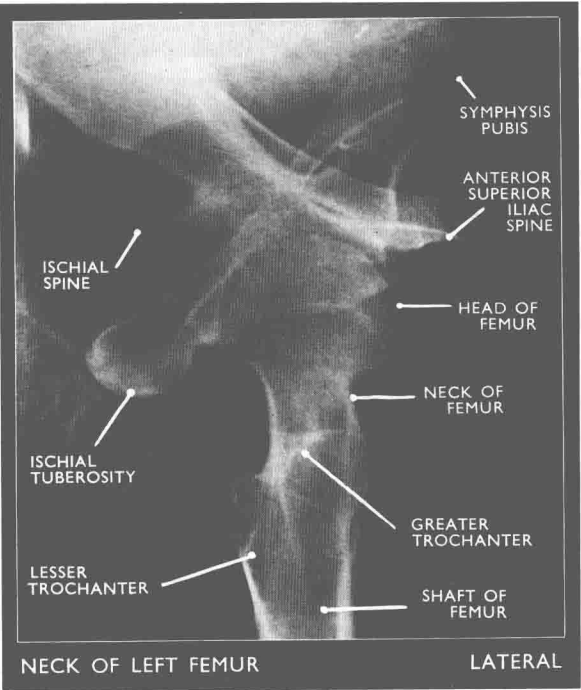
HIP JOINT



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PELVIC GIRDLE

The pelvis, formed by the innominate or hip bones and the sacrum, provides a protective girdle for the pelvic organs at the base of the vertebral column. The innominate bones, consisting of the iliac, ischial and pubic portions, join laterally to form the acetabulum whence, through the medium of the hip joints, the pelvis supports the lower limbs. The innominate bones articulate anteriorly at the symphysis pubis and, posteriorly, the sacrum is wedged between the ilia to form the sacro-iliac joints.

There are several bony prominences in the pelvic region which serve as important landmarks in radiography. These, in order of importance, are the symphysis pubis, particularly the upper border, the anterior superior iliac spines, the iliac crests, the posterior superior iliac spines, the lower sacrum and coccyx, and the ischial tuberosities.

POSTURE

When the subject is in the *erect* position the symphysis pubis and the anterior superior iliac spines are in the same vertical plane (31).

When the subject is in the *sitting* position the pelvic brim (symphysis to lumbo-sacral articulation) is approximately horizontal; considerable movement of the vertebral column may occur without altering the position of the pelvis (32).

When the subject is *supine* (33), the pelvic brim is tilted in accordance with the degree of angulation at the lumbo-sacral articulation, and this gives rise to considerable variation in the radiographic appearance of the pelvis.

