3. The Genicular Arteries (Specimen S 142 A)

The causes of thrombosis of the popliteal artery might be associated with three separate factors. First, the artery is held relatively immobile against the back of the knee by the short middle genicular artery (in this specimen there are two). Second, fibrous bands often hold the artery fixed to the oblique posterior ligament of Winslow. Third, the artery may have, as here, an unusual course.

In this specimen the popliteal artery bifurcates at the upper border of the popliteus muscle and the anterior tibial artery runs down between the popliteus and the tibia. The
Specimen S 142 A
Specimen S 142 A
whole popliteal artery may do this; indeed, in the embryo it does so, constituting the axial artery to the leg. The opening up of an anastomotic channel on the posterior surface of the muscle, forming the definitive adult popliteal artery, is a later foetal event. Persistence of the foetal form is not uncommon; it would be interesting to know how often this is associated with thrombosis or other arterial phenomena in the leg. A vessel lying between popliteus muscle and the tibia would be expected to be compressed or irritated during contraction of the muscle.

The inferior lateral genicular artery lies beneath the lateral ligament of the knee and passes thence horizontally forwards, lying on the lateral meniscus, where it may be visible on the lateral profile of a soft antero-posterior radiograph of the knee.

The medial ligament of the knee is separated from the medial condyle of the tibia by the tendon of semimembranosus and from the upper end of the shaft of the tibia by the inferior medial genicular artery, veins and nerve. The medial ligament is attached to the tibia a hand’s breadth below the level of the joint.

The branch of the popliteal artery to the two heads of the gastrocnemius is a very constant vessel.

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