

ambiens muscle, as far as the upper border of the adductor magnus, where it terminates by dividing into the femoral and sciatic arteries.

From the crural artery the following branches are given off.

(1) *A branch,*

Which passes off from the crural before that artery leaves the abdomen, runs backwards along the external margin of the pelvic bone, and supplies the neighbouring structures. From this artery a subordinate branch of small size is given off. It passes inwards, and accompanies the obturator nerve through the foramen ovale.

(2) *The External Circumflex Artery*

Is given off from the crural artery so soon as the parent trunk reaches the inner side of the thigh. It passes outwards, and under cover of the sartorius divides into three or four branches which supply the extensor muscles of the knee joint, including the sartorius. These branches form an anastomotic chain of arteries which extends from the hip to the knee joint.

(3) *The Femoral Artery*

Arises from the crural trunk at the upper border of the adductor magnus. It rests against the adductor magnus, and extends along the inner side of the thigh as far as the knee joint, where it breaks up into its terminal twigs. Differing in its mode of origin, the femoral artery of the Penguins agrees with that of other birds in respect of its distribution.

(4) *The Sciatic Artery.*

This artery extends from the termination of the crural artery downwards to the back of the knee joint. Separating from the femoral artery opposite the upper border of the adductor magnus muscle, the sciatic artery passes at once from the inner to the outer side of the thigh. Having gained this region, it rests upon the outer surface of the adductor magnus, as far as the knee joint, where it divides into the anterior and posterior tibial arteries. As it lies along the outer side of the thigh it is concealed superficially by the biceps and adductor longus muscles.

In *Spheniscus demersus* the sciatic artery gives off a branch which passes along the back of the thigh close to the femur. It terminates at the outer side of the knee joint, by inosculating with the other branches in that region. This branch I failed to recognise in any other species of Penguin.

From the above description, it will be observed that in the Penguins the sciatic and femoral arteries, instead of coming off as separate branches from the abdominal aorta, as in the majority of birds, are branches of a single trunk, the crural artery, the origin of which corresponds to that of the femoral in the majority of birds. This somewhat