

one inch anterior to the posterior angle. In the *Arctocephali* the ridge extends from the glenoid to the posterior angle, and is distinct; but the surface between it and the axillary border is limited. In the Phocinæ and *Arctocephali* the long head of the triceps and the dorsi-epitrochlear arise from the ridge; from the large surface in the Phocinæ posterior to the ridge only the teres major springs; as the corresponding surface for the same in *Arctocephalus* is limited, it has a linear origin one inch in length at the posterior angle. The insertion of the teres major is enormous, for it takes up about one-third of the length of the shaft. Professor Humphry and I do not find it going to the tuber major like Professor Lucae. The difference between *Arctocephalus* and *Otaria* is in the insertion; in the latter it goes to the internal condyloid ridge with the dorsi-epitrochlear and first head of the triceps. In the *Trichechus* it is similar to *Arctocephalus*. The mode of junction of the teres major and latissimus dorsi is interesting; over the posterior border of the teres tendon the inner part of the latissimus dorsi expands upon and is interwoven with the fascia over the dorsal surface of the teres, and the two thus associated go on to the humerus, the tendon of the latissimus lying next the bone. In the Phocinæ it is supplied by the subscapular, in *Arctocephalus* by the circumflex. In all the specimens it draws the humerus downwards, inwards, and backwards.

The ANTERIOR BRACHIAL REGION in the Phocinæ and *Arctocephalus* is composed of the biceps and brachialis anticus. The coraco-brachialis is wanting.

The *Biceps* is a short muscular band lying on the internal surface of the humerus. It *arises* from within the capsule of the shoulder-joint by a strong short tendon from the rudimentary coracoid or beak above the glenoid cavity; and passes out of the capsule below the transverse ligament stretching from the greater to the two lesser tuberosities. It descends between the two tubers, and fills the bed of the wide bicipital groove; after dipping between the brachialis anticus and the pronator radii teres, it forms a tendon which is *inserted* into the radial tuberosity on the posterior border of the shaft. The external side becomes anterior at its attachment.

In *Arctocephalus*, besides the one tendinous head, it *arises* from the edge of the glenoid cavity on both sides of the beak, and is closely united with the under surface of the anterior part of the capsule above the head of the humerus. The tendon emerges from the capsule between the greater and lesser tuberosities, and passes below the tendon of the first part of the supraspinatus, and under the transverse ligament as in *Phoca*. It then continues down the humerus as a flat muscular band, partly tendinous on its under surface, filling the bed of the enormous bicipital groove. It dips between the pronator radii teres and the inner part of the brachialis anticus, to reach the bicipital tuberosity of the radius into which it is *inserted*. The external side is also anterior at the attachment into the radius.

The coracoid is separate in young Seals from the glenoid, and in them is found to form a considerable part of the glenoid cavity. If in the adult the coracoid were taken from the ovoid-shaped glenoid it would make a decided break in its shape. When the cartilage is attached to the glenoid it also covers a part of the coracoid. The glenoid and coracoid were inside the capsular ligament of the joint in the Seals dissected, and it is the coracoid that principally gives origin to the biceps.

In the Phocinæ it is supplied on the anterior lower surface by a small branch of the median nerve, and on the posterior surface by the external cutaneous. In *Arctocephalus* it is supplied by the musculo-cutaneous nerve. In all the specimens it flexes the forearm, and when the manus is in pronation it will turn it outwards.