

The *Brachialis anticus* is situated on the outer surface of the humerus, and arises from its external surface behind the deltoid ridge, and by a bundle of fibres from the lower end of this ridge. It sweeps over the anterior border of the humerus; the posterior two-thirds of the muscle near its insertion goes between the humerus and the tendon of the biceps, and is inserted into the anterior border of the ulna below the coronoid process; the bundle of fibres from below the deltoid ridge ends by forming the anterior third of the belly of this muscle, and is finally inserted into the bicipital tuberosity of the radius, outside the tendon of the biceps.

In *Arctocephalus gazella* it is in two parts. The inner part arises from the deltoid ridge between its two lips, having the tendons of insertion of the pectoral and sterno-cleido-mastoid on the inner lip, and the cephalo-humeral and deltoid on the outer. It extends as high as the epiphysial line of the great tuber, and down to the junction of the outer lip with the inner. The outer part arises from the external surface of the humerus; and from the capsule of the shoulder-joint, which is behind the outer lip of the deltoid ridge, and in front of the external border of the shaft. The fibres of the inner part springing highest from the deltoid ridge of the humerus remain anterior to the insertion; the lowest are posterior. It is riband-shaped, with its anterior edge in the same plane as the anterior border of the radius; it passes between the biceps and the outer part to be inserted by a tendon which splits in two, behind the tendon of the biceps. The outer division of the tendon is attached to the capsule of the joint over the inner surface of the head of the radius, and into the tubercle of the radius on the outer side of the tendon of the biceps. The inner division of the tendon of the inner part goes behind the tendon of the biceps, and is inserted into the anterior border of the ulna below the lesser sigmoid cavity opposite the radial tuberosity. The outer part, with the exception of a small triangular portion at the upper end of the origin, is covered by the supinator longus; and the deltoid fills in this triangle. In front of the elbow-joint it crosses from the external surface of the humerus to the internal surface of the radius, and in doing this twists, so that the anterior fibres from the shaft are external and the posterior internal. It is inserted by muscular fibres into the inner surface of the capsule, over the head of the radius, higher up than the inner part; and by a tendon into the ulna outside the tendon of the inner part.

The few fibres taking origin from the lower end of the deltoid ridge in the Phocinæ, the anterior surface of it in *Arctocephalus*, and to its inner side in *Trichechus*, may be considered as the equivalent of the fibres from the surface internal to the deltoid ridge in man.

The deltoid impression of the human bone is only for the deltoid muscle. In the Seals it is an eminence, and acts like an additional surface, making compensation for the smallness of the humerus. In these animals it is a downward continuation of the great tuberosity, and is planted upon a thick vertical wall of bone in the Phocinæ and a thin translucent one in the *Arctocephali*. The inner edge of the surface in both is flush with the inner side of the vertical plate and has a straight edge; but on the outer side it overhangs the outer surface of the shaft, and has a slight projection near the middle of its surface in the Phocinæ, and in the *Arctocephali* a gradual expansion from the middle to its inferior extremity (Pl. VII. fig. 3). Roughly the eminence in the Phocinæ is rectangular, and in the *Arctocephali* triangular with the base downwards. The surface in the Phocinæ gives origin to a few fibres of the brachialis anticus and insertion for the supra- and infraspinati, teres minor, cephalo-humeral, atlanto-humeral, trapezius (anterior part), pectoral, and deltoid. This surface in *Arctocephali* gives origin to the brachialis (inner part), and insertion to the supraspinatus (anterior and posterior parts), infraspinatus, pectoral, cephalo-humeral, sterno-cleido-mastoid, and