

The Structures Surrounding the Joint, from without, inwards, are: The skin, supplied by the supra-acromial and circumflex nerves; next, the superficial and deep fasciæ, the latter blending with the fascia covering the infra-spinatus and the pectoralis major; then the deltoid, while, beneath this muscle and between it and the capsule of the joint, is a thin though strong layer of areolar tissue. To facilitate the movements of the deltoid over the head of the humerus, a synovial bursa is found in the substance of this areolar tissue, and is situated, therefore, between the capsule of the joint and the under surface of the deltoid muscle. This, termed the *sub-acromial bursa*, is somewhat lozenge-shaped, one extremity extending down the outer surface of the joint to about the level of the lower facet of the greater tuberosity; the other, upwards and inwards, beneath the inferior surface of the acromion, to a point about one inch from the free margin of that process. The *muscles* intimately connected with the joint are: Above, the supra-spinatus; behind, the infra-spinatus and the teres minor; in front, the subscapularis; below, the triceps and, within the joint, the biceps. These, with the exception of the biceps, are all attached to the capsular ligament by their under surfaces, and act as elastic ligaments for the joint, while, at the same time, they prevent the capsule and synovial membrane from being "tucked" in between the bones in the different movements of the joint.

The other muscles not directly connected with the articulation but of importance because of their action on it, are: The deltoid, the coraco-brachialis, latissimus dorsi, teres major, and the pectoralis major.

Actions of the Muscles controlling the shoulder joint: 1. The *supra-spinatus*, arising from the internal two-thirds of the supra-spinous fossa, and inserted into