

SHOULDER ANATOMY

Glenohumeral joint

The shoulder, also called the glenohumeral joint, is a ball and socket joint that has the ability to allow rotation of the arm through a wide range of motion, more than any other joint in the body. The rounded ball shaped humerus head fits in the cup shaped glenoid fossa of the scapula. The glenoid covers only a small portion of the humerus head and is deepened by the fibro-cartilaginous labrum to which the capsule and conjoint ligaments of the glenohumeral joint attach. These structures keep the humeral head in place on the socket.

The joint capsule that surrounds the joint is lined with synovial membrane. This synovial membrane secretes synovial fluid which lubricates the joint, absorbs shock and also feeds the cartilage.

Four rotator cuff muscles and their tendons, namely the supraspinatus, infraspinatus, subscapularis and teres major attaches the humerus to the scapula and stabilise the shoulder while it also allows the shoulder to rotate.

Scapulohumeral joint

The scapula, of which the glenoid forms a part, is attached to the thorax wall with different groups of muscles. These muscles allow a wide range of motion of the scapula in relation to the thorax and also stabilises the scapula on the thorax. It also has a shock absorbing function and is responsible for positioning the glenoid in relation to the humerus during movements and changes of position of the arm.

Acromioclavicular joint

The acromioclavicular joint joins the scapula to the clavicle. It is a small, gliding type of joint that is fixed to the scapula by 2 groups of ligaments.

The clavicle is in turn attached to the sternum by the sterno clavicular joint and its stabilising ligaments. The clavicle is thereby the only bony attachment of the arm to the trunk.