

DAMAGED CARTILAGE

Overview

The ends of bones join up to form joints. The glenoid of the scapula joins the humeral head to form the glenohumeral joint. In the same way the clavicle joins up with the acromion process to form the acromioclavicular joint and in the elbow joint it is the distal humerus that joins with the radius head and the ulna proximal end to form the elbow joint.

Joint surfaces are covered with firm, smooth particular cartilage. Healthy cartilage absorbs shock, protects the underlying bone and allows for smooth movement with nearly no friction. Damage to the articular cartilage can occur through the different types of arthritis on a biological basis or through trauma that takes place over the joint on a mechanical basis.

Causes

Osteoarthritis and rheumatoid arthritis is two of the most common conditions that can damage cartilage. The impact of trauma over a joint can break loose pieces of cartilage with or without bone.

These types of injuries can take place during contact sports, accidents or fall from heights. The shock absorbing properties of the cartilage is exceeded and a tear type of injury takes place in the cartilage. This type of damage is usually limited to a specific area of the joint whereas arthritic type of lesions is wide spread damage to the articular cartilage.

Symptoms

It includes a vague, continuous pain and can progress to an acute pain, joint stiffness, swelling and limited range of motion.

Classification

Classification of cartilage damage is based on the degree of cartilage thinning, the appearance of the cartilage as well as the distribution of involvement of the cartilage.

Treatment

Treatment for non-arthritic cartilage damage depends on the area of the injury, the size thereof and the degree of injury. Analgesics, rest, anti-inflammatory medication and immobilisation is used in the early stages. Rehabilitation in the form of exercises to promote range of motion and strength around the joint is employed for the more chronic cases.

Removal of loose pieces of cartilage and surgically smoothing of unstable cartilage edges with a release of the joint capsule is some times performed in the later stages of the condition. In advanced cases the joint surfaces can be replaced.