

HUMERUS FRACTURE

Overview

The humerus is the long bone of the arm that is the bony link between the shoulder and the elbow. Fractures of the humerus in the vicinity of the shoulder is called proximal humeral fractures and involves the humeral head, the anatomical neck, the surgical neck and the areas in between which is called the tuberosities. Proximal humeral fractures are of the more common fractures in the human body.

Causes

In elderly persons proximal humeral fractures are more common. Weakening of the bone due to osteoporosis increases the possibility of fractures of the proximal humerus during a fall especially when the person lands on an outstretched arm or directly on the shoulder. Other humeral fractures might occur during direct impact over the arm for instance during a collision like in a motor vehicle accident.

Symptoms

These fractures are often severely painful and cause a lot of swelling and bruising around the fracture. In severe cases deformity is present around the fracture area and movement of the arm is usually severely limited due to pain.

Classification

Fracture classification involves the location, the amount of comminution, which parts of the involved bone or joint is fractured and associated injury of soft tissue structures. It also takes into account whether dislocation of the joint is present or not.

Treatment

The decision of what to do with proximal humerus fractures depends on where it has taken place, whether it is displaced and whether rotator cuff attachment is involved in the fracture. Undisplaced fractures can be treated with a sling and early range of motion exercises while the bone is busy healing. Severely displaced fractures might need surgery which involves the careful rejoining and fixation of the fragments with instrumentation. In some cases a part of the bone has to be removed and replaced with a prosthesis. The attachments of the rotator cuff are very important and usually a lot of attention is given to the careful fixation of these parts in order to restore shoulder movement in the long run as good as possible.