

Complex Supracondylar Fracture

Click on images to view larger radiographs and clinical pictures.

Introduction

This 11 year old boy was playing on the jungle gym when he fell off onto his outstretched left hand. He sustained a closed, isolated injury to the left elbow, and is neurovascularly intact:

Left Elbow Radiographs

Describe the injury in the radiographs above.

What are the long term complications of this injury ?

How would you treat this injury in the Emergency Room ?

How would you treat this injury definitively ?

Management

This injury is an intra-articular two-T type supracondylar fracture of the left distal humerus. There are six fragments. Extraarticular fracture fragments include the proximal humerus, lateral epicondyle, medial epicondyle (the latter two are minimally displaced). Intraarticular fracture fragments include a capitellar, trochlear, and medial condylar fragment, all of which are minimally displaced.

Because of the minimal displacement, a closed reduction and pinning was attempted and found to be successful. A pin was placed across the five distal fragments, and then this large articular fragment was fixed to the distal humerus via crossed K-wires.

Immediate Postop Radiographs:

Three Week Postop Radiographs: