

# Fractures of the humerus

## Classification

1. Fractures of the humeral head (AO 11 + Neer klasifikation type I-IV),
2. fractures of the diaphysis of the humerus (AO 12) – abduction, adduction,
3. fractures of the distal end of the humerus (AO 13) – supracondylar (flexion + extension), intercondylar.

## Complications

### ▪ Nerve injury:

*nervus axillaris* – fractures of the neck,

*nervus radialis* – fractures of the diaphysis,

*nervus ulnaris* – fractures of the ulnar epicondyle.

### ▪ Injuries to blood vessels:

*a. circumflexa humeri ant. et post.* –fractures of the neck,

*a. brachialis* – fractures of the diaphysis and supracondylar fractures.

## Treatment

- Conservative (hanging cast, Desault, abduction splint, circular brace) for non-dislocated or dislocated after reposition;
- of the surgical options are preferred:
  - neck and humeral head splint (PHILOS), spike (PHN),
  - diaphysis of the humerus - intramedullary nail secured, possibly splint,
  - distal humerus - supracondylar fractures with two crossed K-wires, intercondylar fractures with splints.

## References

### Source

- PASTOR, Jan. *Langenbeck's medical web page* [online]. [cit. 2022-17-12]. <<http://langenbeck.webs.com>>.



Fracture of the diaphysis of the humerus (X-ray).



Supracondylar fracture of the humerus (X-ray). H = humerus, R = radius, U = ulna; fracture indicated by arrow.