

Fractures of the forearm

- They are formed by the mechanism:
 - **direct** – only one bone can be injured;
 - **indirect** – always injured both bones or Monteggia and Galeazzi.
- Dislocation of the radius according to the height of the fracture:
 - in the upper third – the pull of the supinator and biceps;
 - in the lower third – pronator pull.

Classification

1. Fractures of the proximal radius – head fractures (Mason I–III), neck fractures;
2. fractures of the proximal ulna – fractures of the olecranon (Colton I–III), fracture of the proc. coronoid (st. 1–3);
3. fractures of the diaphysis of the radius and ulna:
 - compound fractures of the radius and ulna;
 - isolated fractures of the radius and ulna;
 - Monteggia's fracture;
 - Galeazzi's fracture;
4. fractures of the distal radius:
 - extra-articular:
 - without dislocation;
 - with extension dislocation (Colles fracture);
 - with flexion dislocation (Smith's fracture);
 - partially intra-articular:
 - sagittal break-off;
 - dorsal break-off (Barton I);
 - break-off of ventral edge (Barton II);
 - intra-articular comminutive (Melon).



Complications

- Pakloub;
- compartment syndrom;
- Volkmann ischemic contraction;
- synostosis between radius and ulna.

Treatment

Conservative

- Possibly for non-dislocated fractures of both bones (circular cast fixation from mid-arm to metacarpal heads, elbow in 90° flexion, forearm in supination for fractures in the upper half, pronation in the lower half, for 12-16 weeks).
- For isolated fractures of one forearm bone, plaster fixation is required for 8 weeks - for non-dislocated fractures of the ulna and the upper two thirds of the radius (in supination), fractures of the lower third of the radius are indicated for surgical treatment.
- For fractures of the distal radius (Colles, Smith), plaster fixation for 6 weeks - from the heads of the metacarpals to the elbow, with the wrist in ulnar adduction and flexion (Colles) or extension (Smith).

Operational

- Recommended for isolated fractures (the second, unbroken bone then acts as a spacer and leads to the creation of a joint), Galeazzi and Monteggia fractures are also indicated, as well as all displaced and open fractures.
- Self-compression splints and intramedullary nail fixation are mainly used, for open and comminuted fractures external fixation, for distal forearm fractures splints, K-wires, screws, external fixation.

Links

related articles

- Ulna
- Radius

Source

- PASTOR, Jan. *Langenbeck's medical web page* [online]. [cit. 2010]. <<http://langenbeck.webs.com>>.

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