

Fractures of the proximal radius

- A fracture of the radial head is most commonly caused by a fall on the hand with the forearm extended in a pronated position.
- The radial head strikes the humerus and fractures (the same mechanism can lead to a fracture of the capitulum humeri).
- Wedge fractures, splinter fractures of the capitulum and fractures of the radius (almost always fracture of the radius in children) are typical.

Classification according to Mason

Type I

- Non-dislocated or minimally dislocated radial head or neck, forearm rotation limited by pain.

Type II

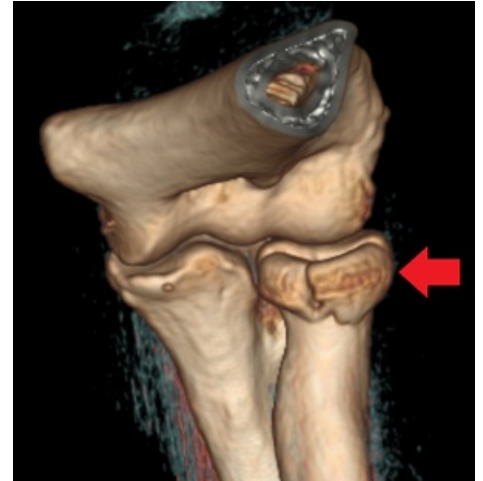
- Dislocated fractures of the radial head or neck, motion limited mechanically.

Type III

- Comminuted fractures of the humeral head or neck.

Clinical signs and diagnosis

- Pain and swelling in the elbow region, palpation of the radial head, functional or morphological limitation of mobility (pronation - supination), haemarthrosis on puncture of the elbow joint, pain in the distal radio-ulnar joint (Essex-Lopresti fracture) on rupture of the interosseous membrane.
- X-ray in 2 projections, eventually CT is performed.



Fracture of the radial head - 3D CT reconstruction

Treatment

Type I

- Cast fixation for 2-3 weeks with early functional treatment.

Type II

- Open repositions and internal fixation, smaller fragments (up to 1/3 of the head circumference) extirpated.

Type III

- Not reconstructable, extirpation of the capitellum improves mobility but impairs elbow stability, with associated distal radio-ulnar injury (Essex-Lopresti), replacement of the capitellum with a prosthesis is necessary.

Links

Related articles

- Fractures of the forearm
- Radius
- Ulna

Source

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