

2. BENNETT FRACTURE-DISLOCATION. DIAGNOSIS AND TREATMENT

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Introduction. The metacarpal bone fractures-dislocations bones an around 4% of hand injuries (by Liverneaux et al. 2015)

Case presentation. A 37-year-old man supported an accident at work by falling down on the hand 4 weeks ago. At the local polyclinic was examined by an trauma doctor (clinical exam and x-ray investigation in 2 orthoplans). Was determined to be a contusion of carpal joint with applying a cast for 3 weeks. After this period, the patient has started rehabilitation and after 1 day, the patient presents thumb pain. He had pain with limitation of range of movement in abduction/adduction, flexion/extension. Computer tomography was made and showed displacement of the baze of the first metacarpal bone with a fragment at trapezo-metacarpal joint. The surgery option was proposed to the patient. The risks and benefits of the surgical treatment were presented to the patient, and accepted by him through signing the informed agreement. Before start the surgery was made with locoregional anesthesia, with delimitation of steril zone, by marked zone in the projection extensor pollicis brevis tendon and protect the cutaneous branch of the radial nerve, was made a dorsal skin incision of 2 cm - over the base of the thumb capsule-tomia, was determine articular surface of metacarpal base and trapez with a fragment. By longitudinal traction, pronation and pressure at the thumb metacarpal base was obtained, after this internal fixation with k-wires in „X”. X-rays confirm the successful osteosintesis of metacarpal fragments. Operative wound was closed step by step of anatomical topography. Postoperative period has a simple evolution. The patient had a well-padded gypsum splint forearm-thumb in abduction immobilisation for 6 weeks.

Discussion. Bennett injury is a fracture of the internal angle of the base of the first metacarpal at which the palmar ligament of the trapezius-metacarpal joint is inserted, this fragment remains unmoved, the rest of the metacarpal being pulled up and back by the long abductor that is inserted on the external fragment of the base, thus achieving a dorso-radial dislocation fracture in the teapezo-metacarpal joint, as well as the thenar muscles. So at the start this fracture is unstable and is indication for surgery(by Antonescu 2006; El-Hadidy et al. 2019)

Conclusion. Bennett injury can even overlook an experienced traumatologist. This case, which is relatively rare in hand injuries, argues for the need to consult a hand surgeon, because not being treated in time the given injuries lead to deformed osteoarthritis of the thumb joint by disabling consequences for the patient.