

13. SURGICAL TREATMENT FOR TERRIBLE TRIAD INJURIES OF THE ELBOW.

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Introduction. Elbow dislocation with both radial head and coronoid fractures has been referred to as the terrible triad injury . It represents a pattern of complex elbow instability that has been associated with a poor prognosis. Persistent elbow instability after injury often results in pain, poor function, progressive joint degeneration. To prevent persistent instability after these injuries, the surgeon must decide which structures require surgical repair and how to best deal with each of these. The current standard surgical protocols for treating terrible triad injury include fixation of the coronoid fracture, repair or replacement of the radial head, and repair of the lateral ligament complex, reserving medial collateral ligament repair and application of hinged external fixation for patients with residual instability. However, surgical treatment for terrible triad injuries of the elbow remains challenging, and specifically, there is controversy of whether the radial head injury should be surgically repaired or replaced with a prosthesis.

Case presentation. Patient Y, 22, suffered a fall from a bicycle with support on his right upper limb. The patient is urgently referred to the emergency department of the Emergency Medicine Institute. Clinical examination shows deformity of the right elbow joint, severe pain on palpation and attempts to mobilize the joint. Radiographic and CT Imaging examination established the diagnosis: Posterolateral dislocation of the bones of the right forearm. Masson III radial bone head fracture and Regan type II coronoid process fracture. The patient underwent surgery urgently. The following were performed: closed reduction of forearm bone dislocation, cemented arthroplasty of the radial head, osteosynthesis of the coronoid process with a screw, suturing of the lateral collateral ligament of the elbow. The patient followed the postoperative regimen. At one year he presented for a follow up. The postoperative functional results were as follows: Flexion/Extension - 140/10, Pronation/Supination - 85/80; DASH score -2.5; MEPS score - 100 p.

Discussion. A very good functional result was obtained. There were no postoperative complications. The patient returned in full volume to his daily activity.

Conclusion. The current diagnostic and therapeutic protocols allow obtaining satisfactory clinical outcomes in the majority of cases. The strict application of current algorithms by an expert elbow surgeon appears to improve clinical results by reducing the influence of other avoidable negative prognostic factors well known in current literature, such as the incomplete recognition of injuries, delayed treatment, inadequate treatment of bony and ligamentous injuries, prolonged immobilization and, last but not least, the surgeon's inexperience.