152. FEATURES OF SCAPULAR FRACTURES IN POLYTRAUMA PATIENTS

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Introduction. Scapular fractures are rare, accounting for a small proportion of all fractures. However, in high-energy trauma, typically polytrauma, their incidence increases. In patients with severe general conditions, these injuries are often overlooked during initial assessment due to priority given to life-threatening traumas. Scapular fractures in polytrauma frequently occur in combination with injuries to the ribs, clavicle, and spine that require a comprehensive diagnostic and therapeutic approach.

Aim of study. To analyse the clinical and diagnostic features of scapular fractures in polytrauma patients and to determine optimal treatment strategies depending on the type and severity of the injury.

Methods and materials. A retrospective analysis was conducted on 28 cases of scapular fractures in trauma patients treated at the Emergency Medicine Institute, Chisinau. The study included 15 men and 13 women, with a mean age of 52.9 years.

Results. The primary mechanism of the injuries was high-energy trauma. Fractures were classified according to the AO classification and anatomical criteria. The majority were scapular body fractures (14 cases), followed by glenoid cavity fractures (6), displaced neck fractures (6), and isolated cases of spine and acromion fractures (1 each). Associated injuries were found in 61% of patients, including fractures of the ribs, clavicle, spine, traumatic brain injury, and shoulder dislocation. Diagnostic evaluation included clinical examination, radiography, ultrasound, and computed tomography, which allowed detailed assessment of intra-articular injuries. Initial management included regional anesthesia and immobilization using a Desault bandage. Surgical intervention was indicated for displaced intra-articular fractures, shoulder girdle instability, or failure of conservative treatment. In the acute period, patients predominantly presented with severe pain and limited chest excursion due to associated injuries. Regional anesthesia helped to reduce pain and improve respiratory function. Conservative treatment was sufficient for most scapular body fractures. Surgical intervention was performed in 8 cases, including open reduction and internal fixation (ORIF) using plates or Kirschner wires. In cases of “floating shoulder”, additional clavicle fixation was performed. Long-term follow-up showed restoration of full shoulder joint mobility without neurovascular complications.

Conclusions. Scapular fractures in polytrauma present diagnostic challenges and are often associated with concomitant injuries. Treatment depends on the patient’s overall condition, fracture type, and shoulder girdle stability. Surgery is indicated in selected cases, mainly in displaced intra-articular fractures and “floating shoulder”. Early stabilization with ORIF improves functional outcomes and reduces rehabilitation time and treatment costs.

Keywords. Scapular fractures, polytrauma, trauma surgery.

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