

Introduction. Kienbock disease is a disorder of lunate bone vascularity that can lead to marked degeneration of the wrist, reduce grip strength and causes pain, getting to joint disability. The etiology of the avascular necrosis of the lunate is uncertain, but theories relate to ulnar variance, the variability of the bone vascularity and intraosseous pressures. Clinical symptoms are very variable, requiring a high index of suspicion for the diagnosis. Dr. Robert Kienbock an remarkable radiologist from Vienna (Austria), first described lunato-malacia in 1910 in his clinical series and initially felt that the cause of the collapse of the lunate was repetitive trauma to the lunate from work activities. This opinion was supported by Muller in 1920 who proposed the term occupational lunato-malacia. Stahl's classification, modified by Lichtmann in 1977, has historically been used to guide management. Despite this disease being described more than a century ago, the treatment for Kienbock disease still remains controversial.

Aim of the study. We present a review of Kienbock disease and the main objective is to report our personal experience of surgical treatment of this condition at The Clinical Hospital of Orthopedics and Traumatology from Chisinau.

Materials and methods. Our experience is based on the surgical treatment of 45 patients with Kienbock disease, aged between 19 and 59 years, who underwent various surgical treatment. At 19 patients was performed Graner procedure, scaphoid-trapezium-trapezoid arthrodesis in 10 cases, scapho-capitate arthrodesis in 8 cases, radio-lunate arthrodesis in 4 cases, removing the first row of carpal bones in 2 cases, by 1 cases with radio-scaphoid and capitato-lunate arthrodesis.

Results. Arthrodesis directed to obtain ankylosis of the carpal bones by losing the amplitude of movements but allows to achieve a stable joint, without pain and to restore gripping power. The advantage of the Graner procedure is restoring the carpal height and maintaining the load transmitted by the articular surface of the radius in the articular facets of the scaphoid and semilunar. Long-term results were followed up in 23 patients: good - 12, satisfactory - 9. Unsatisfactory outcomes were in 2 cases because of the absence of the ankylosis and presence of the pain.

Conclusions. While the exact cause of Kienbock disease is still poorly understood, several treatment options are available: revascularization, denervation, intraosseous decompression, osteotomy in ulnar variants, selective arthrodesis with or without excision of the lunate. From our experience, the most of patients have good long-term results.

Key words: Lunate, Kienbock disease, Graner procedure, arthrodesis.

128. THE MANAGEMENT OF THE POLYTRAUMA PATIENTS

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Background. Polytrauma meets the classification criteria for a global pandemic and it is a significant cause of mortality and morbidity despite global efforts to control its effects. Around 16000 people in the world die every day as a result of trauma (5,8 million people per year) and the forecast for 2020 is no better, the surveys show that this year there are expected around 8,4 million deaths. Management in polytrauma patients has been considerably changed in recent years, due to the rapid development of multi-fracturing techniques. Despite the implementation of good methods of diagnosis and treatment, there is no reduction in complications and invalidations from trauma, which is explained by the severity of this injuries. Without measures

to combat and improve treatment methods, they will lead to an increase in socio-economic harm over the next 10 years. More than 70% of all patients with major trauma need at least one orthopedic surgical procedure, and injuries of the extremities are associated with higher blood transfusion rates, prolonged hospitalization time and many other complications. The modern treatment concept of Damage control surgery of poly-trauma patients allows us an objective assessment and separation of urgent therapeutic measures according to the severity of the injuries. Thus, osteosynthesis of traumatized segments of the locomotor system must be performed according to this contemporary concept depending on the severity and complexity of the lesions, and by achieving this attitude of urgent medical care, the damage control surgery enables reduced mortality and the prevention of complications in polytrauma patients.

Case report. Patient X aged 63 years old got a trauma after she got involved as a pedestrian in a car accident. She was immediately transported to IMSP-IMU in emergency department, she being in a serious condition, hemodynamic unstable and without entrapment of the limbs and the application of the fence, which led to massive blood losses. The patient was examined in the red zone by the multidisciplinary team according to the principles ATLS, after a series of lab and radiology investigations the diagnose that was established was the following: Polytrauma. Associated traumatism. TCCI. Cerebral contusion. Bilateral lung contusion. Hemopneumothorax on the left. Open fracture of the distal end of the femoral bone, tibial plateau and of the fiber colt on the right. GA – type III C. Bimaleolar open-line fracture of the right ankle. GA – type II. Fracture of left-hand olecranon, after AO – 2U1B1. Trauma shock IIIrd grade. Acute polyorganic insufficiency. Sub-arachnoid hemorrhage. CGS – 5p MESS score – 10p. Patient at admission: TA- 70/45 mm/Hg, Hemoleucocogram : Erythrocytes – 3,3 (x106/ μ l); Hemoglobin – 92 g/L; VSH – 15 mm/h; Platelets - 170 (x109 μ L); Leukocytes – 6,6 (x109/ μ l). In biochemical examination: ALAT – 147 U/I; ASAT – 366 U/I; direct Bilirubin - 8 mkmol/l; indirect Bilirubin - 14 mkmol/l; total Bilirubin – 22 mkmol/l; Creatinine – 119 mkmol/l; urea – 6,6 mkmol/l; Glycine – 8,1 mkmol/l. The patient was urgently transferred to the operating room. The surgery team performed: thoracentesis in the intercostal space VI on the left with the application of the Bullau drain. The team of orthopedic traumatologists performed: The unfastening of the open fracture of both the bones of the left calf and the fixation to the external tiered apparatus. Left lower leg amputation at thigh level in 1/3 mid-distal. After these interventions, the patient was transferred to the reanimation room. More than 4 hours after the intervention, at the surgeons visit, he repeatedly indicates FAST USG, where liquid is detected in the abdomen. The patient was taken in the surgery room repeatedly by the surgical team, where they performed: Laparotomy. Ligaturation of the lymph duct in the abdominal portion with revision of the abdominal cavity organs. The patient being in a severe stable condition was transferred to The Reanimation room again. More than 48 hours after hospitalization, the overall state is getting worse. On the background of major cardiomimetic drugs, asystole cardiac arrest occurs at the patient. The CPR protocol has been initiated, but without success, and it resulted in the patient's biological death.

Conclusions. Polytrauma describes patients with lesions that involve multiple regions or cavities of the body that may compromise the integrity of the internal organs, extremities and soft tissues, and may result in their death in most of the cases. In multi-traumatized patients, rapid collaboration and effective multi-disciplinary team approach is needed, as negative effects occur immediately and may endanger the life of the patient, and the “Orthopedic injury Control” (DCO) allows us to use different types of fixatives in primary osteosynthesis in polytrauma patients.

Key words: Polytrauma, DCO, TA, TCCI, GA, ATLS.