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SURGICAL TACTICS FOR COMBINED INJURIES OF THE RETROPERITONEAL REGION IN CHILDREN

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Abstract. *Combined retroperitoneal injuries in children are a significant component of polytrauma and are accompanied by multiple internal organ damage, increasing the risk of life-threatening injury [1]. The kidneys are most frequently affected, while the adrenal glands, pancreas, and retroperitoneal tissue are less commonly affected [2]. Late diagnosis and delayed surgical intervention can lead to complications and chronic dysfunction, necessitating the optimization of surgical tactics and standardization of treatment approaches [3].*

Key words: *surgical tactics, treatment approaches, multiple internal organ damage, chronic dysfunction.*

Objective: to evaluate the types of surgical interventions, their clinical effectiveness, and to substantiate an algorithm for selecting a surgical procedure for combined retroperitoneal injuries in children.

Materials and Methods. The study included 64 children aged 1–16 years with combined retroperitoneal injuries, hospitalized in specialized pediatric surgery departments. Clinical assessment, monitoring of hemodynamic parameters, analysis of blood loss volume and urinary system function were performed. The following imaging methods were used: ultrasound examination of the abdominal organs and retroperitoneal space, multispiral CT with contrast, radiography for bone injuries and angiography for suspected vascular injuries. Laboratory examination included clinical and biochemical blood tests, urinalysis and a coagulogram [4]. Surgical interventions included organ-preserving operations (suturing of kidney ruptures, resection of damaged areas, drainage of the retroperitoneal space) and radical interventions (nephrectomy, removal of non-viable tissue, vascular reconstruction). An algorithm for choosing tactics based on the degree of injury according to the AAST classification, hemodynamic stability and imaging data was developed.

Results. Surgical intervention was required in 22 children (34.3%). The most common procedure was lumbotomy with suturing of the renal rupture (21.9%). Organ-preserving surgeries preserved renal function in 82.5% of children, and the use of a surgical strategy algorithm avoided unnecessary surgeries in 65.7% of cases. Early complications were noted in 9.3%, and late functional impairment in 6.2% of patients.

Conclusions. A personalized approach using modern imaging techniques and surgical strategy selection algorithms optimizes surgical tactics, increases the proportion of organ-preserving interventions, reduces the incidence of complications, and ensures the preservation of renal function in children with concomitant retroperitoneal injuries.

Literature.

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