

### 31. THE IMPACT OF DELAYED DIAGNOSIS IN RETROPERITONEAL DUODENAL TRAUMA



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**Introduction.** The issue of diagnosing traumatic retroperitoneal duodenal injuries is current and quite significant, considering the vague clinical signs, the ensuing complications, and the associated postoperative mortality.

**Aim of study.** Studying the diagnosis of evolutionary peculiarities of traumatic retroperitoneal lesions of the duodenum by analyzing the methods used for establishing the clinical diagnosis.

**Methods and materials.** This retrospective study comprises the examination of medical files from 29 patients with retroperitoneal duodenal trauma who were hospitalized at the Institute of Emergency Medicine between 1992-2017. Ratio: M:W- 25:4, age 18-70 years. Among these patients, 18 (62.06%) presented with polytrauma, while 11 (37.9%) had isolated abdominal trauma. Trauma mechanisms included road accidents in 10 cases (34.48%), falls from height in 3 cases (10.34%), physical assaults in 5 cases (17.24%), injuries due to foreign bodies in 1 case (3.44%), knife wounds in 7 cases (24.13%), firearm injuries in 2 cases (6.89%), waterjet-related trauma in 1 case (3.44%), and injuries necessitating interhospital transfer in 9 cases (31.03%). Regarding hospital admission, 25 patients (86.2%) were hospitalized within 6 hours, 4 patients (13.79%) after 48 hours, and 11 patients (37.93%) were admitted after 72 hours with signs of intoxication. Hemodynamic stability was noted in 15 patients (51.7%), while 14 patients (48.27%) presented with hemodynamic instability. Diagnostic evaluations were performed in 22 of the patients (75.8%).

**Results.** Clinical diagnostics were tailored to each case, including abdominal X-rays in 10 patients (detecting pneumoperitoneum and retroperitoneal abnormalities), USG in 14 patients (free fluid in 10), and CT scans in 7 patients (revealing one duodenal lesion, free fluid in 4, pneumoperitoneum in 3, retroperitoneal changes in 4, and one retroperitoneal hematoma). Diagnostic laparoscopy in 5 patients identified conditions like hemoperitoneum (2 cases), peritonitis (2 cases), and duodenal lesions (1 case). Intraoperatively, duodenal lesion locations were determined: D1 in 7 cases (13.7%), D2 in 13 (41.82%), D3 in 10 (34.48%), and D4 in 2 (8.33%). The mortality rate was 55.17%.

**Conclusion.** This comprehensive analysis underscores the criticality of tailored diagnostic approaches in managing traumatic retroperitoneal duodenal injuries, highlighting a notable mortality rate of 55.17% that emphasizes the urgent need for early detection and intervention in these complex cases.