CLINICAL SIGNIFICANCE OF THE EFFECTIVENESS AND PROGNOSTIC FACTORS OF THE LAPAROSCOPIC "THREE-STITCH" GRAHAM PATCH TECHNIQUE IN PERFORATED DUODENAL ULCERS

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Review of Literature. Perforated duodenal ulcer (PDU) remains one of the most frequently encountered and life-threatening surgical emergencies in gastrointestinal practice. In recent years, laparoscopic approaches have gained significant traction as modern, minimally invasive, and effective solutions for the management of this condition. Among these, the "three-stitch" Graham patch technique has become widely adopted due to its ability to provide secure closure of the perforation, reduce intraoperative trauma, and accelerate postoperative recovery.

This technique involves mechanically covering the perforated site with omental or hepatic tissue and securing it with three interrupted or continuous sutures, typically using prolene. The high tensile strength of these sutures ensures durable closure and significantly reduces the risk of recurrence or leakage. Compared to traditional open laparotomy, this laparoscopic method minimizes surgical trauma, reduces blood loss, and facilitates faster patient mobilization and recovery.

Clinical observations and studies indicate that the development of postoperative complications is strongly influenced by the patient's preoperative condition, time delay before surgery, and risk stratification through scoring systems. The **Boey** and **PULP** scoring systems are particularly useful in predicting the risk of mortality and severe complications. Meanwhile, the **ASA** (American Society of Anesthesiologists) classification helps assess anesthetic risk, especially in patients with severe systemic comorbidities.

According to recent international and local literature, the laparoscopic "three-stitch" Graham patch technique demonstrates a mortality rate of approximately 1–4% and an overall complication rate of 10–20%. Accurate preoperative assessment, timely surgical intervention, and correct application of prognostic scoring systems are crucial for achieving successful outcomes.

Conclusion. The laparoscopic "three-stitch" Graham patch technique has proven to be an effective, safe, and clinically appropriate method for treating perforated

duodenal ulcers. Its minimally invasive nature and shorter recovery time offer clear advantages. The use of prognostic scoring systems such as Boey, PULP, and ASA allows for precise assessment of patient condition, early prediction of complications, and the implementation of timely preventive measures. This approach undoubtedly contributes to improved treatment outcomes, reduced mortality, and enhanced quality of life for patients.

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