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## **Endoscopic Treatment of Esophageal Injuries Using Vacuum Therapy**

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**Abstract**: Background: Despite the advances made in modern surgery, the treatment of patients with esophageal injuries remains one of the most topical and complex issues. In recent years, high-technology minimally invasive methods, such as endoscopic vacuum therapy (EVT) in the treatment of esophageal injuries. The effectiveness of EVT has been sufficiently studied in case of failure of esophageal anastomoses, however the application of this method in case of mechanical esophageal injuries is limited by a small series of observations, indicating the necessity of additional study. Aim: The aim was to analyzed of own experience in the use of endoscopic vacuum therapy (EVT) in a comprehensive examination of patients with esophageal injuries. Methods: We analyzed the results of treatment of 24 patients with mechanical injuries of the esophagus for the period 2019-2021. Complex treatment of patients included the use of minimally invasive technologies, including percutaneous endoscopic gastrostomy (PEG), EVT and video-assisted thoracoscopic debridement. Evaluation of the effectiveness of treatment was carried out using multislice computed tomography (MSCT), endoscopy and laboratory tests. The duration of inpatient treatment and the duration of EVT, the number of system replacements, complications and mortality were taken into account. Result: EVT in patients with mechanical injuries of the esophagus allowed to achieve epithelialization of the esophageal defect in 21 patients (87.5%) in the form of linear scar on the site of perforation or pseudodiverticulum. Complications were noted in 4 patients (16.6%), including bleeding (2) and and esophageal stenosis in the perforation area (2). Lethal outcome was in one observation (4.2%). Conclusion. EVT may be the method of choice in complex treatment in patients with esophageal lesions.

**Keywords:** esophagus injuries, damage to the esophagus, perforation of the esophagus, spontaneous perforation of the esophagus, mediastinitis, endoscopic vacuum therapy

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