

5. COMPLEX INNOVATIVE MANAGEMENT OF THE GIANT ABDOMINAL HERNIA



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Introduction. Giant ventral incisional hernia is a challenging topic in general surgery, as the ideal approach has not been developed due to the high perioperative morbidity (abdominal compartment, frequent recurrences and lowered quality of life). A modification of the classic retromuscular Stoppa technique was described to improve the results of surgical management.

Aim of study. To improve the results of the surgical treatment of large incisional hernias by 1) implementing the technique of posterior components separation with transversus abdominis release procedure (TAR) and prosthetic augmentation, 2) developing an innovative preoperative management and preparation protocol, and 3) performing examination (work-up approach consideration).

Methods and materials. The TAR procedure was performed during the period between 2019 and 2022 on 12 patients with giant ventral incisional hernias, classified according to EHS (2009 in): M1W3 (n=1), M2W3 (n=2), M3W3(n=4), M4W3 (n=2), M5W3 (n=1) and L2W3 (n=2).

Results. The proposed procedure is based on the principal goals of abdominal wall reconstruction: the restoration of abdominal wall functionality by preserving autologous tissue combined with mesh reinforcement and non-tension midline closure. Thus, the TAR technique combined with polypropylene mesh placed in retromuscular/preperitoneal space provides positive results in reconstruction of the abdominal wall. In our study patients developed the following postoperative complications: parietal wound infection (n=4) and intestinal fistula formation (n=1). 1 year follow-up identified 2 cases of hernia recurrence.

Conclusion. TAR technique provides satisfactory postoperative outcomes. It could serve as an effective solution for treatment of complex abdominal wall defects. Additionally, it ensures structural and functional restoration of the abdominal wall.

Keywords. Giant ventral incisional hernia, posterior component separation, prosthetic mesh augmentation.