Abeygunawardene H., Nonis P.N.Y.

CONVENTIONAL HERNIA REPAIR VERSUS COMBINED ABDOMINOPLASTY

Tutor: PhD, associate professor Tarasenko A.V.
Department of General Surgery
Belarusian State Medical University, Minsk

The approach to surgical management of incisional and umbilical hernias has traditionally focused on fascial closure and the prevention of recurrent hernias using tension-free mesh techniques. A paradigm shift towards outcome-oriented care for patients has brought about the need to evaluate the role of combined procedures, including abdominoplasty and hernia repair.

This literature review highlights current information from the period 2016 to 2025, comparing established hernia repair approaches and combined procedures, such as abdominoplasty and hernia repair. Studies performed in the form of randomised controlled trials and comparative assessments have shown that the combination of abdominoplasty and either incisional or umbilical hernia repair does not increase risks of morbidity, surgical site issues, or reoperation in comparison with hernia repair alone, while being associated with slightly prolonged duration and time in hospital.

A study was done comparing outcomes in 106 patients undergoing abdominoplasty alone versus 64% abdominoplasty with concurrent umbilical or small ventral hernia repair. All hernia repairs were performed without mesh, using primary fascial closure. After a mean follow-up of 1.5 years, the hernia recurrence rate was very low at 1.4%. Multivariate analysis revealed no significant differences between the two groups in surgical site occurrences, cosmetic complications (such as delayed healing or necrosis), procedure length, readmission rates, or reoperation rates. The study concludes that combining mesh-free hernia repair with abdominoplasty is safe and effective, does not increase adverse outcomes or cosmetic complications, and provides enhanced aesthetic results with reduced long-term abdominal wall morbidity.It has been observed that the combination of abdominoplasty and hernia repair results in higher patient satisfaction levels and better quality of life, while hernia recurrence is relatively rare (1.4% for non-mesh umbilical repairs within 1.5 years). While tension-free hernioplasty along with abdominoplasty leads to improved functionality in obese patients with ptotic abdominal walls without increased cardiovascular risks, seroma formation needs to be managed adequately.

Evidence available for support of combined procedures is restricted by the limited number of investigations of moderate and low quality, and lack of direct comparative analysis against the gold standard. However, it appears evident from current research that traditional hernia surgery, although effective in preventing recurrence, might neglect aesthetics of the abdominal wall. There is a necessity to perform a randomised controlled trial of combined hernia/abdominoplasty surgery against tension-free mesh technique.

Conclusively, this literature review has indicated that performing abdominoplasty concurrently with hernia surgery is safe and an efficient surgical approach compared to conventional methods of dealing with hernias only. The evidence reviewed, which included randomized control trials and other comparative research designs, proves beyond reasonable doubt that there is no difference in terms of morbidity rates, occurrences in surgical sites, and reoperations when conducting a combination of abdominoplasty and hernia operations. Furthermore, there is improved quality of life and aesthetics for patients undergoing combined operations. However, it is unfortunate that the current literature lacks high-quality research and direct comparison of the outcomes of combined approaches and the use of tension-free mesh in operations. In light of the findings, further research using a randomized controlled design can help in formulating comprehensive guidelines.