

Lichtenstein repair and intersurgeon variations: are we comparing apples and oranges?

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Introduction:

It is uncommon for a surgical technique to be both highly effective and straightforward to perform. The Lichtenstein repair (LR) is one such method. Due to the high incidence of inguinal hernia LR has become the gold standard in inguinal hernia repair. Its widespread adoption is attributed to its simplicity, reproducibility and the option of performing it under local anesthesia. These features have facilitated its global implementation including in resource-limited and underdeveloped settings. However various modifications are now performed under the umbrella term "Lichtenstein repair," with little understanding of how these adaptations affect outcomes such as recurrence rates and chronic pain.

Methods:

To explore the variability in LR techniques a review of five major surgical textbooks was conducted. Additionally a questionnaire comprising 20 key questions about the critical steps of the Lichtenstein repair was distributed to 150 surgeons from 20 hospitals in Austria (7) and Slovenia (13). The questionnaire focused on the essential principles established by Lichtenstein and his successors. The response rate was 85%.

Results:

The review revealed significant differences in how the Lichtenstein repair is described in leading hernia textbooks reflecting both the evolution of the technique and the broad use of the term to describe any subaponeurotic mesh placement in the anterior canal. The survey responses also demonstrated a lack of standardization in key steps of the procedure. More than half of the surgeons reported using pre-formed meshes that are excessively trimmed compromising their coverage of the inguinal region. Patient follow-up was notably absent in most cases.

Conclusions:

The term "Lichtenstein repair" currently encompasses numerous variations involving subaponeurotic mesh placement. While certain modifications may not impact the repair's integrity or outcomes if the core evidence-based principles are followed consistent standardization and adherence to these principles are crucial. Despite the LR's continuous evolution, individual modifications of the LR technique should not interfere with the key principles, as described by the authors of the Lichtenstein Amid Hernia Clinic, in order to obtain optimal results. Teaching the original Amid modified Lichtenstein repair to young surgeons can improve the bias of comparing different techniques under the cover name of LR in the future.