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1195 – The hidden scar revolution: clinical outcomes and applications of endoscopic breast surgery

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Introduction: Minimally invasive techniques, including endoscopic and video-assisted approaches, have gained increasing attention in breast surgery due to their potential to enhance aesthetic outcomes without compromising oncological safety. However, the application of these techniques in mastology remains limited and poorly disseminated among specialists, often restricted to centers with specific expertise. This study aims to review the main applications, surgical access routes, scar patterns, and postoperative recovery associated with minimally invasive breast surgery.

Methods: A narrative literature review was conducted using the PubMed, Scopus, and Web of Science databases. Studies addressing endoscopic or video-assisted techniques in breast surgery were included. Data regarding surgical indications, incision sites, aesthetic results, and postoperative recovery were qualitatively analyzed.

Results: Minimally invasive techniques in mastology have been applied in procedures such as nipple-sparing mastectomy, excision of benign tumors, and breast reconstruction. The most commonly used access routes include axillary and periareolar incisions, which avoid visible scars on the breast surface. Compared to conventional open surgery, these approaches were associated with superior aesthetic outcomes, characterized by smaller and less conspicuous scars. Postoperative recovery showed potential benefits, including reduced pain, shorter hospital stays, and a faster return to daily activities in selected cases.

Conclusion: Despite the potential benefits, minimally invasive breast surgery is still underutilized and limited by factors such as the learning curve, the need for specialized training, and resource availability. Its broader incorporation depends on wider knowledge dissemination and robust studies validating its oncological safety and reproducibility.

Ethics: Public data – Literature review.

Keywords: minimally invasive procedures; breast surgery; breast conserving surgery.