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## 28597 – INTEGRATIVE REVIEW: RISK FACTORS AND COMPLICATIONS OF BREAST ONCOPLASTIC SURGERY

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Introduction: The surgical treatment of breast cancer was initiated with Halsted's radical mastectomy in 1984. Since then, it has been refined over the years, and in 1981, Veronesi et al. published a study that enabled the standardization of breast-conserving oncological surgeries. In this context, breast oncoplastic surgery was first described in 1994 and has since spread worldwide, being considered a relatively modern approach in breast cancer treatment, combining oncological surgical techniques with plastic surgery methods to achieve better aesthetic outcomes after tumor resection. Based on the principle that oncological guidelines should not be compromised and always take precedence, oncoplastic surgery has been increasingly established as a surgical approach in the treatment of breast cancer, providing patients with greater satisfaction and quality of life due to more aesthetic surgical outcomes. However, it is essential to provide greater clarification regarding the risk factors and complications associated with this therapy. Methodology: This is an integrative literature review. The search for studies was conducted in September 2023 in the Medical Literature Analysis and Retrieval System Online (Medline) database, provided by the U.S. National Library of Medicine (PubMed). The following keywords and their combinations were used in Portuguese and English: "oncoplastic," "breast surgery," "oncoplastic risk factors," and "complications. The inclusion criteria defined for the selection of articles were: clinical trial, meta-analysis, random controlled trial, and systematic review with abstract availability. The articles were searched in Portuguese, English, and Spanish, published between 2019 and 2023. Conclusion: When it comes to therapeutic intervention for breast cancer, it is essential to consider the patient's perception of surgical risk, their expectations of outcomes, and their life expectancy. The surgical decision regarding which procedure to perform should be made collaboratively between the doctor and the patient, following an appropriate discussion about the risks and benefits, taking into account clinicopathological factors. It is crucial to provide a comprehensive understanding of the potential risks associated with each procedure, ensuring that choices are informed and personalized for each patient. As surgical interventions evolve in accordance with oncological guidelines, patient preferences, and modern reconstructive options, it becomes imperative to determine and recognize the inherent complication rates of the procedure. This article summarized the main risk factors and complications associated with oncoplastic breast surgery, which should be considered during patient counseling. Although oncoplastic surgery is a safe procedure for most cases, caution should be exercised when performing it in patients with class 2 or 3 obesity (BMI  $\geq$  35 kg/m<sup>2</sup>), advanced age, prior radiotherapy, or diabetes, due to a higher rate of general and specific complications in this population. Careful patient selection and the most appropriate surgical technique should be considered to minimize complications and ensure low rates of local recurrence. Clear communication at all stages — from decision-making to surgery and recovery — is essential to achieve outcomes that meet patients' needs and expectations. This review highlighted the scarcity of well-conducted studies on evaluating patients with risk factors and complications. Additional research is recommended to thoroughly investigate important risk factors and provide more robust evidence for surgical decision-making.