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## 81 - COMPLICATIONS FOLLOWING 1001 NIPPLE-SPARING MASTECTOMIES: A BRAZILIAN COHORT

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Introduction: Nipple-sparing mastectomy (NSM) is a conservative mastectomy approach for breast cancer with oncological safety and good aesthetic satisfaction; however, many surgeons still have concerns about complication rates, especially nipple-areolar complex (NAC) necrosis. **Objective:** The aim of this study was to analyze the complication rates of 1001 NSM performed in a Brazilian cohort. *Methods:* Between January 2004 and August 2020, we evaluated 534 patients who underwent 1001 NSMs. All patients were operated by the same surgeon; the data were retrospectively evaluated by the medical chart and the patient's follow-up was updated during the appointments. **Results:** The majority of indications for NSM were for breast cancer treatment (78%), followed by bilateral risk-reducing mastectomy (BRRM) (18.7%) and contralateral prophylactic mastectomy (3.3%). In total, 416 patients underwent therapeutic NSM, 85.3% for primary tumor treatment, 9.2% presented recurrence of a previous breast cancer, and 5.5% had compromised margins after previous breast-conserving surgery (BCS). Bilateral NSM was performed in 367 (88.2%) patients and unilateral surgery in 49 (11.8%) patients. Among the 100 patients who underwent BRRM, 27% had a previous breast cancer and 55% presented a genetic mutation in highly penetrant genes. Breast reconstruction was performed using silicon prosthetic implants for 91.8%, tissue expander for only 6.8% of patients, and for 1.4% of patients we do not have the data. In the 1001 NSM performed, we observed 4.4% of overall complications, including 1.1% of hematoma needing operation, 1.5% of infection, 1% of partial, and 0.2% of total nipple necrosis. Patients with previous breast cancer treated with BCS and radiotherapy had higher complication rates (21%) than in patients with no previous breast cancer treatment (6.4%), and patients >50 years old presented twofold more chance of having postoperative complications than patients <50 years old. *Conclusion:* We observed an overall postoperative complication rate of 4.4% and low nipple necrosis in 1001 NSM performed by the same surgeon. Older age and previous breast cancer history might be risk factors for increased complication rates following this procedure.