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BREAST RECONSTRUCTION WITH AND WITHOUT ADJUVANT RADIOTHERAPY: A CRITICAL REVIEW

Maria Luiza de Oliveira Almeida Bax¹, Clécio Ênio Murta de Lucena¹, Calliny Cristina Pimentel Alves¹, Matheus Assis dos Anjos Bastos Oliveira¹

¹Universidade Federal de Minas Gerais, Faculdade de Medicina – Belo Horizonte (MG), Brazil.

Objective: Breast cancer is the most common malignancy in women worldwide. After mastectomy, many women wish to reconstruct the affected breast, and immediate breast reconstruction has proven to be oncologically safe in relation to just mastectomy. In addition, indications for post-mastectomy radiotherapy (PMRT) sessions are becoming more frequent, due to their relationship with reduced mortality and locoregional recurrence. For this reason, many women who opted for immediate reconstruction underwent radiotherapy with implants or expanders. This study aims to compare the outcomes of patients with breast cancer undergoing adjuvant radiotherapy after breast reconstruction surgery with an implant or expander with patients who did not need irradiation. **Methods:** A literature review was carried out on the CAPES Journal Portal. **Results:** The studies are unanimous when it comes to the increased risk of complications between the control groups and patients who have undergone PMRT. The reconstructive failure rates are lower, and the aesthetic results are better in surgeries with implants when compared with tissue expanders. Autologous surgeries are apparently safe and should be considered in the context of the PMRT. **Conclusion:** This review did not find sufficient scientific evidence to determine the best technique and the best period for radiotherapy in PMRT indications. It is concluded that the choice of the operative technique and the time of radiotherapy must be at the discretion of the surgeon and the multidisciplinary team of each service, always in a shared decision with the patient.

Keywords: Breast cancer. Mammoplasty. Breast implants. Radiotherapy, adjuvant. Autologous. Flaps.