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1126 – Incidental breast carcinoma as a finding in reduction mammoplasty: a systematic review

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Introduction: Reduction mammoplasty is a surgical technique aimed at reducing breast volume, indicated in cases of hypertrophy and breast ptosis. Through the anatomopathological evaluation of tissue fragments from this procedure, it is possible to identify previously undetected histological alterations, even in the absence of clinical suspicion, including incidental carcinoma. Thus, early diagnosis and staging of this neoplasm can favor clinical management and improve prognostic outlook.

Methods: This systematic literature review was conducted according to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines and registered in PROSPERO, under CRD420261355066. The PubMed database was used to search for the descriptors “incidental breast cancer” and “reduction mammoplasty”. The filters “last 10 years”, “free full text”, “humans”, and “women” were applied. The PICO criteria evaluated were: participant – women undergoing reduction mammoplasty without a prior diagnosis of breast cancer; intervention – surgical anatomopathological evaluation; comparison – patients without incidental neoplastic findings; and outcome – incidence of incidental breast carcinoma. The included studies presented observational evidence, with an overall risk of bias classified as low to moderate according to the Joanna Briggs Institute criteria.

Results: The fourteen selected studies demonstrated that the incidence of occult malignancy in reduction mammoplasty is low, ranging from 0.2% to 1.0%, with incidental carcinoma identified mainly as ductal carcinoma *in situ* and, less frequently, as invasive carcinoma. In addition, proliferative or high-risk lesions, such as atypical hyperplasias and lobular carcinoma *in situ*, ranged from 1.3% to 7.0%. These findings were more frequent in women aged 40 years or older and in those with a prior history of breast cancer.

Conclusion: Reduction mammoplasty allows the identification of incidental carcinomas, albeit infrequent, reinforcing the relevance of systematic histopathological analysis, especially in older patients or those with associated risk factors.

Ethics: Public data – Literature review.

Registry: International Prospective Register of Systematic Reviews (PROSPERO) CRD420261355066.

Keywords: breast neoplasms; early diagnosis; incidental findings; pathology; reduction mammoplasty.