Cosmetic Outcome and Percentage of Breast Volume Excision in Oncoplastic Breast-Conserving Surgery: A Proposal

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During our research on breast shape and estimating the breast volume to be excised, we came across the article entitled “Cosmetic Outcome and Percentage of Breast Volume Excision in Oncoplastic Breast Conserving Surgery” [1]. The importance of cosmetic outcomes and patient satisfaction in oncologic surgery is increasing, and we are very much interested in this concept. We have taken advantage of this article for our recent studies.

In our opinion, there is only one problem in the article. Preoperative breast measurements were performed based on mammographic findings, and the final amount was determined in units of volume (cubic centimeters, cm^3); however, intraoperative excised material was weighed and calculated as units of weight (grams, g). The percentage of breast volume excision is then calculated by dividing the weight of the excised tissue by the estimated breast volume (g/cm^3). This might cause confusion when determining cosmetic outcomes depending on the described percentage.

In our opinion, if the researchers measured the volume of excised material by Archimedes principle (water displacement method) or another technique [2], the result would be more consistent and reliable. As we all know,

some breast tissue is more glandular, and some has more fat; even in the same breast the distribution of glandular and fatty tissue varies. Therefore, the weight/volume ratio of the breast changes with these conditions. The authors noted that, “The application of the [sic] oncoplastic technique allows large-volume excision with satisfaction remaining high when the [sic] breast volume excision was [sic] less than 20%, regardless of different tumor location and tumor distance from the [sic] nipple.” If all results were calculated in units of volume, the stated cutoff point of 20% would be changed, which directly affects the point of the research.

References

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