

Therapeutic reduction mammoplasty: does complications affect aesthetic outcome?

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Aims: Oncoplastic techniques have revolutionized the indications for breast cancer conservative surgery. One drawback is the higher rate of complications compared to conventional conservative surgery. Our aim was to relate complications, after therapeutic reduction mammoplasty (TRM), to aesthetic outcome, using objective parameters.

Methods: 27 women submitted to bilateral reduction mammoplasty and radiotherapy to treat primary breast cancer agreed to participate in this study. A frontal view picture was taken with a standard digital camera. In this group complications occurred in 14 (51,9%) patients – 10 delayed wound closure, 2 hematoma, 1 NAC partial necroses and 1 infection. We used the BCCT.core software to extract the features related to asymmetry measures, skin color differences and scar visibility. If a perfect positive linear relationship between complications and the software's features was obtained, then the correlation coefficient is 1 (values between -1 and 1).

Results: Assymetry measures: Breast Overlap Difference (BOD) – 0,34; Lower Breast Contour (LBC) – 0,20; skin color differences – cEMDa – 0,30; cX2a – 0,31; scar visibility – sEMDL – 0,15; sEMDb – 0,19; sX2b – 0,22.

Conclusions: Although we have a small number of cases, this work objectively correlates morbidity after TRM and aesthetic outcome.