

Donut mastopexy lumpectomy versus standard lumpectomy in breast cancer surgery: A prospective study

Abstract

Aims

Donut mastopexy lumpectomy (DML) is a unique breast resection in which a tissue segment is removed and the breast reshaped through a periareolar incision. The present prospective investigation compares DML and standard lumpectomy (SL) in relation to surgical variables, histological parameters, post operative morbidity and cosmetic outcome.

Methods

One hundred and twenty-seven patients with breast cancer were offered the choice between two conservative surgical approaches: donut mastopexy lumpectomy (DML group, $n = 39$) or standard lumpectomy (SL group, $n = 88$). The groups were comparable for radiological tumour size, tumour location within the breast, histological size, and pT category. Comparison was performed in term of surgical variables, histological parameters, post operative morbidity and cosmetic outcome.

Results

The patients undergoing DML were younger than the patients who chose SL. In the DML group, the skin incision was three-fold longer than in the SL group but was obtained with a final scar located around the nipple areola complex without further postoperative complications. The average volume of the breast specimen was higher in the DML group compared with SL group. The clinician assessment of cosmetic outcome reported a higher rate of acceptable result in the DML group than in the SL group. However, patient's assessment did not show difference

of cosmetic satisfaction between groups.

Conclusion

Our comparative study indicates that DML may be a useful alternative to SL not only in terms of accurate breast tissue resection but also in term of cosmetic results.