

SURVEILLANCE IMAGING IN BREAST CANCER PATIENTS UNDERGOING BREAST CONSERVING SURGERY WITH CHEST WALL PERFORATOR FLAP RECONSTRUCTION AND THERAPEUTIC MAMMOPLASTY

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Breast conserving surgery (BCS) using chest wall perforator flaps (CWPFs) have increased in popularity over the past decade whilst therapeutic mammoplasty (TM) using wise pattern reduction has entered the mainstay of level 2 oncoplastic BCS technique. These versatile approaches allow wider margin resection whilst maintaining a natural breast form for patients with excess breast tissue. There is paucity in literature regarding these oncoplastic techniques and its implication on breast cancer surveillance imaging.

Method

This is a retrospective analysis of consecutive patients who underwent either BCS with CWPF, TM and BCS only between August 2020 and April 2023 by breast oncoplastic surgeons in a tertiary referral centre. Qualitative analysis of postoperative mammogram and ultrasound were performed.

When comparing oncoplastic BCS with standard WLE, both groups had similar incidence of benign reported features on imaging which include benign calcifications, fat necrosis, volume loss, and radiotherapy changes. There was no significant difference in the diagnostic biopsy between the two groups. Only two patients in the CWPF group were recalled with biopsies showing post-surgical changes and a benign cyst respectively. In the TM group, no patients required any further tissue biopsy.

Conclusion

Patients who had BCS with CWPF and TM did not have greater rates of imaging abnormality compared to patient who had BCS only. We conclude that these Level II and Level III oncoplastic techniques did not lead to greater rates of diagnostic procedures and dilemma during the surveillance period. As our surveillance period is relatively short, further studies with longer follow-up will be required.

Results

Twenty patients undergoing CWPF and twenty patients undergoing TM were compared with 40 patients undergoing simple BCS only with median follow up of 1.4 years. The CWPF and TM groups were younger and had larger tumour size. Tumour pathological characteristics were similar in both groups.



Clinical photography of a 56-year-old lady with a Right breast cancer at 10 o'clock, 5 cm from nipple undergoing LICAP repair.

*Final pathology showing a **37mm** Gr 2 Invasive Carcinoma NST. ER/PR positive HER2 negative.*

References

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