

Lack of clinical utility for sentinel lymph node biopsy in contralateral prophylactic mastectomies with in situ carcinoma or atypia

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BACKGROUND

- Routine use of sentinel lymph node biopsy (SLNB) during contralateral prophylactic mastectomy has limited clinical value.
- The role of SLNB has not been evaluated in high risk patients, nor have the long term axillary outcomes in high risk cases in which SLNB has been omitted.
- The objective of the current study was to examine bilateral mastectomy patients with contralateral in situ carcinoma or atypia and determine the utility of SLNB.

METHODS

- A retrospective study included all bilateral mastectomy patients from March 1, 2005 to February 1, 2017 at a single institution who had ipsilateral carcinoma with contralateral in situ carcinoma or atypia.
- Patients were divided into groups based on if they underwent contralateral SLNB and if they had a known contralateral lesion. Groups were compared with Fisher's exact test.
- 2017 Medicare reimbursement rates were used to estimate the costs of contralateral SLNB.

RESULTS

| Lesion characteristics | Number of Patients (%) |
|--|------------------------|
| Diagnosis of contralateral lesion | |
| MRI | 31 (72.1%) |
| Mammography | 10 (23.2%) |
| Ultrasound | 2(4.6%) |
| Status of contralateral lesion | |
| Known | 43 (58.9%) |
| Occult | 30 (41.1%) |
| Type of contralateral lesion | |
| LCIS | 42(57.5%) |
| DCIS | 23 (31.5%) |
| Occult invasive cancer | 5 (6.8%) |
| Atypia | 3 (5.6%) |

- Of 73 patients with contralateral high risk lesions, 36 patients (49.3%) underwent contralateral SLNB and 80.6% of the SLNB group had a known contralateral lesion.
- MRI was associated with increased identification of contralateral in situ disease or atypia.
- There were no positive sentinel lymph nodes in any patients who underwent contralateral SLNB.

- At a mean follow up of 56 months there were no local or axillary recurrences on the contralateral side.
- Omitting contralateral SLNB in this cohort would have resulted in cost savings of \$101,916.

CONCLUSION

- Although considered a low risk procedure, contralateral SLNB is costly and low yield.
- In patients with contralateral atypia or in situ disease who did not undergo SLNB, there were no adverse axillary outcomes.
- Based on the current study, SLNB is not indicated in patients undergoing contralateral prophylactic mastectomy for known in situ carcinoma or atypia.

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