RE-EXCISION MARGIN RATES AND CONTRIBUTING FACTORS IN BREAST-CONSERVING SURGERY: A SINGLE-CENTER EXPERIENCE

• H. Khan[1], T. Ayaz[2], B. Rehman[3], A. Zahir[4]

Shaukat Khanum Memorial Cancer Hospital and Research Centre, Surgical Oncology, Peshawar, Pakistan

BACKGROUND

Achieving negative surgical margins is crucial in breast-conserving surgery (BCS) to reduce local recurrence. Re-excision rates are a recognized quality indicator, with international benchmarks ranging between 10–20%. This study evaluated re-excision rates at our center and identified clinicopathological factors associated with margin positivity

OBJECTIVE

To evaluate re-excision rates and identify clinicopathological factors associated with margin positivity in patients undergoing breast-conserving surgery for breast cancer at our center.

METHODS

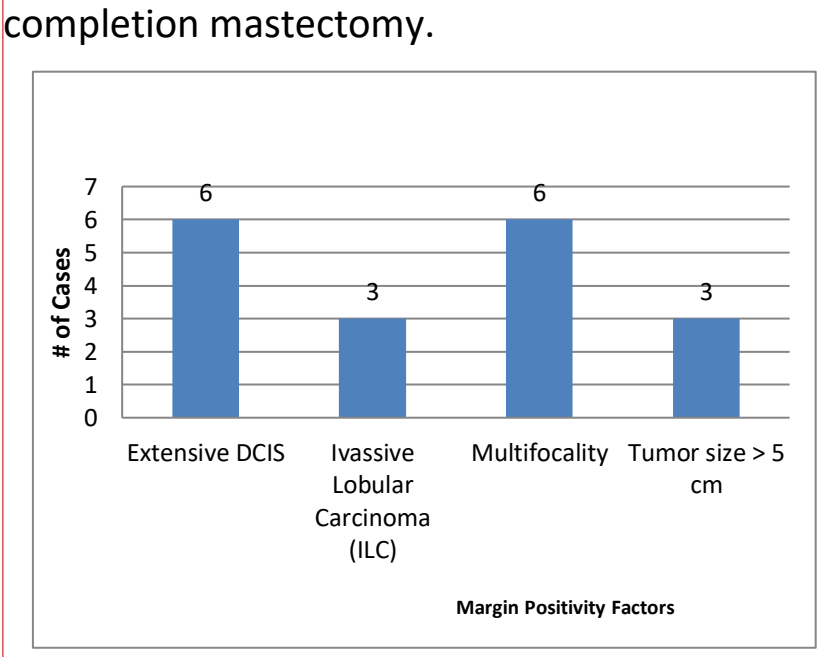
We retrospectively reviewed all patients who underwent breast surgery for breast cancer between September 2024 and September 2025. Patients undergoing mastectomy (n=60) were excluded, leaving 300 patients who underwent BCS. Margin assessment followed ASCO guidelines, defining negative margins as *no tumor on ink* for invasive carcinoma and ≥2 mm for ductal carcinoma in situ (DCIS). Data collected included age, tumor size, histology, focality, neoadjuvant chemotherapy status, and reconstructive procedures.

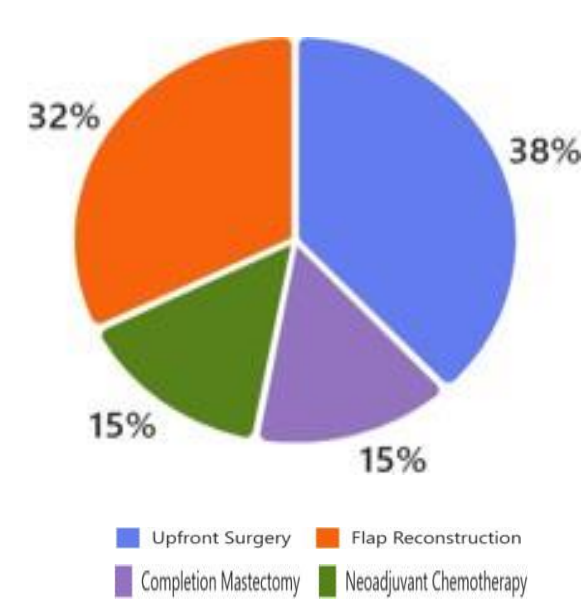
RESULTS

Total BCS patients	***300***	***100%***
Re-excision rate	18	6%
Margin Positivity associated with:		
Extensive DCIS	6	2%
Invasive Lobular Ca	3	1%
Multifocality	6	2%
Tmor size >5cm	3	1%
Surgical timing in patients with positive Margins:		
Underwent upfront surgery	13	4.3%
Received Neoadjuvant chemotherapy	5	1.6%
Multifocal Tumors	4	1.3%
Residual Tumors>5cm	1	0.3%
Flap Reconstruction at initial surgery	11	3.6%
Completion Mastectomy performed	5	1.6%

RESULTS

The overall re-excision rate was 6% (18/300), considerably lower than international standards. Margin positivity was most frequently associated with extensive DCIS (n=6), invasive lobular carcinoma (ILC) (n=3), multifocality (n=6), and tumor size >5 cm (n=3). Thirteen patients with positive margins underwent upfront surgery, while five had received neoadjuvant chemotherapy (four multifocal, one with residual tumor >5 cm). Due to large tumor size or multifocality, 11 patients required flap reconstruction at initial surgery, and 5 ultimately underwent completion mastectomy.





CONCLUSION

Our re-excision rate after BCS was 6%, demonstrating excellent compliance with oncological standards and favorable outcomes compared to international data. Factors most strongly associated with margin positivity were extensive DCIS, multifocal tumors, larger tumor size, and ILC histology.