Comparing Margin Diameter and Margin Index in Predicting Residual Disease Following Partial Mastectomy, P85

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Background:
- Breast conserving surgery combined with radiation therapy standard treatment in early stage breast cancer
- Long term survival equivalent to mastectomy
- 20-60% of patients require a second operation because of inadequate margins
- Local recurrence impacted by many factors
- Strongest predictor

Surgical Margin:
- No consensus on definition of negative margin
- Currently 2-3 mm up to 5 mm for DCIS

Purpose:
- To determine if definition of negative margin should be redefined
- Use margin distance to stratify risk of residual disease

Margin Index:
- Margin Index = closest margin (mm)/tumor size (mm) x 100
- Underwent re-excision for close margins
- Optimum Margin Index ≥5
- No consensus on definition of negative margins
- Strongest predictor

Methods:
- Single institution review
- Retrospective analysis of our database of 95 patients who underwent re-excision from 2008-2009
- Tumor size was assessed microscopically
- Closest margin distance was used
- Margin Index was calculated
- A receiver operating characteristic curve was created

Patient Characteristics:
- 217 patients; 95 had re-excision (43%)
- 88 had sufficient data for QI study
- 20-60% of patients require a second operation because of inadequate margins
- Long term survival equivalent to mastectomy
- Breast conserving surgery combined with radiation therapy standard treatment in early stage breast cancer

Conclusions:
- Not a superior predictor over margin distance
- Limitations:
  - Small Sample Size
  - Retrospective
  - Selection Bias
- Change in re-excision margin to >1 mm
- Further research to determine adequate margins

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