INTRODUCTION

• Reoperation for re-excision following breast conserving therapy is a common challenge amongst all breast surgeons, with commonly published rates ranging from 10-20%
• Gross pathologic inspection has been previously reported by our institution to reduce margin re-excision regardless of surgeon experience
• Our institutional standards:
  • Use of immediate gross inspection with intraoperative specimen radiograph and pathologic consultation as a universal standard
  • SaviScout™ localization of nonpalpable tumors since January 2018
• We hypothesize that gross pathologic inspection with intraoperative specimen radiograph results in a low re-excision rate after breast conserving surgery (BCS) regardless of the method of localization

METHODS

• Prospective review
• Consecutive patients diagnosed with invasive ductal carcinoma (IDC), invasive lobular carcinoma (ILC) and ductal carcinoma in situ (DCIS)
• BCS from 2016 to 2019
• Single institution by three surgeons
• Surgeries during initial 18 months utilized needle localization and subsequent 18 months utilized SaviScout™
• Intraoperative radiograph and formal gross evaluation by the pathologist with the surgeon in attendance on all specimens
• Additional shave margins based off these assessments
• Criteria for reoperation:
  • Ink on tumor for IDC/ILC
  • Within 2mm for pure DCIS
• Groups were compared using paired t-test statistical analysis
• p-value of 0.05 was considered statistically significant
• Outcomes measured were rates of re-excision

RESULTS

• 717 cases of BCS
• Mean patient age 62.8 years (±11.4)
• 12.2 % (n=88) of patients underwent neoadjuvant therapy
• 367 patients underwent needle localization while 350 patients underwent localization with a SaviScout™
• Both groups similar in regard to patient and tumor variables including use of neoadjuvant therapy, tumor size and localization technique
• The average distance of negative margins was 8.7mm
• Total re-excision rate 5.3% (n=38)
• Re-excision rate was 5.2% for needle localization and 5.4% for SAVI Scout
• Neither diagnosis (IDC, ILC or DCIS), nor localization device, significantly differed among those who had re-excisions and those who did not

DISCUSSION

• By utilizing a combination of formal gross inspection with the pathologist intraoperatively and specimen radiograph, both localization methods were able to achieve a similar re-excision rate
• These methods are easily implemented by many practices, and are an excellent tool for surgeons to reduce return to the operating room after BCS

REFERENCES


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