

## Intraoperative radiotherapy in patients with breast cancer treated by breast-conserving therapy

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### ABSTRACT

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**Objective.** To assess the safety, cosmetic effects, and clinical efficacy of breast-conserving surgery combined with intraoperative radiation therapy for the treatment of Chinese patients with breast cancer.

**Methods.** Breast-conserving surgery combined with intraoperative radiation therapy was performed in 64 breast cancer patients. The postoperative short-term efficacy, safety, and cosmetic effects were assessed.

**Results.** Of the 64 patients, 1 case (1.6%) had local recurrence one year later, 7 cases (10.9%) had grade I postoperative radiation-induced lung injury, 10 cases (15.6%) had local hardening at the surgical sites, 8 cases (12.5%) had changes in skin color, and 8 cases (12.5%) had pain at the surgical sites. Excellent or good levels of cosmetic effects were achieved in 95.3% of the patients.

**Conclusions.** The application of intraoperative radiation therapy with breast-conserving surgery can yield satisfactory short-term curative efficacy, a high level of clinical safety, and good cosmetic effects.

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**Key words:** breast cancer, breast-conserving therapy, intraoperative radiotherapy.

*Acknowledgments:* The study was supported in part by Chinese Army High-Tech Key Research Fund (No. 2010gxjs092).

*Conflict of interest:* The authors have no commercial, proprietary, or financial interest in the products or companies described in this article.

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Received April 5, 2012;  
accepted May 16, 2012.