

Comparison of radiotherapeutic management of operated breast cancer in 1999 and in 2006: a sampling survey on the southeast coast of China

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ABSTRACT

Aims. To obtain a better understanding of the changes in radiotherapeutic management of breast cancer patients in the more developed areas of China over the past decade.

Methods. Four academic radiation therapy departments located on the Southeast Coast of China were selected for the study. The survey was conducted on female breast cancer patients who received radiotherapy in 1999 and 2006. The questionnaires were designed to determine the purposes of radiotherapy and to address the postoperative radiotherapy techniques used. The data for these two years were analyzed and compared.

Results. The percentage of breast-conserving treatment increased from 3% in 1999 to 13% in 2006, but the percentage of patients treated with postmastectomy radiotherapy dropped from 69% in 1999 to 66% in 2006 ($P < 0.05$). As regards the changes in techniques from 1999 to 2006, the use of special immobilization devices, treatment planning systems, and CT simulations increased from 46% to 80%, 23% to 70%, and 0% to 14%, respectively ($P < 0.01$). From 1999 to 2006, irradiation of the chest wall following mastectomy increased from 67% to 90%, but for internal mammary irradiation it decreased from 76% to 30% and for the axilla, from 69% to 37% ($P < 0.01$). There were no obvious differences between 1999 and 2006 on the field design, boost treatment on the tumor bed, or dose prescription.

Conclusions. Breast-conserving treatment was performed more frequently in China in 2006 than in 1999, but postmastectomy radiotherapy did not change a great deal and it was still an essential option. Although the international treatment guidelines have been accepted and implemented by physicians in recent years, prompt improvement in the quality of breast cancer radiotherapy is needed. **Free full text available at www.tumorionline.it**

Key words: breast cancer, China, radiotherapy, survey.

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