and expected to be well tolerated at long term. It facilitates acceptance by patients because of a limited number of treatment sessions and may contribute to a more efficient use of treatment facilities.

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255 Poster

The tolerance and efficacy of intraoperative radiotherapy (IORT) after conservative treatment in breast cancer

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Background: IORT after conservative treatment in breast cancer allow to raise total radiation dose in tumor bed and ought to reduce local recurrence risk. The aim of the study was to estimate tolerance and efficacy IORT with whole breast irradiation after breast-conserving treatment.

Material and Methods: Between 2003 and 2004, 112 patients with early stage breast cancer (T1−2, N0−1) were treated in Center of Oncology Maria Sklodowska-Curie Memorial Institute, Branch Gliwice in Poland. All patients had breast conservative treatment (wide tumor excision with regional lymph nodes) followed by Intraoperative Radiotherapy using Low-Energy X Rays. The total dose was 5−7.5 Gy and was specifed 0.5 cm depth from tumor bed. After surgery patients received external beam radiation therapy to the whole breast. The total dose was 50 Gy delivered in 25 fractions. The radiotherapy included also regional lymph nodes if pathological stage was classified as N+.

Acute and late toxicity of treatment was evaluated according to RTOG/EORTC criteria. The evaluation of normal tissue early reactions included also the analysis of wound healing time. A Kaplan-Meier method was used to plot survival curves.

Results: Extended wound healing time after operation with IORT was the most frequent and occured in 16% of patients. Wound infection was observed in 15%, fistula or necrosis in 10% and hematoma in tumor bed in 9% of patients. 66 patients (59%) developed Grade I, 12 patients (11%) Grade II and 17 patients (15%) Grade III early skin toxicity. Late skin toxicity in Grade I was observed in 31 patients, Grade II developed 9 patients. Late toxicity from subcutaneous tissues in Grade I, II, III properly developed 56 (50%) patients, 8 patients (7%) and 1 patient (1%). The median follow up was 5 years. 5-year disease free survival was in 88%. In 3 patients (2%) occurred local recurrence. Distant metastases occurred in 7 patients (6%).

Conclusions: The results of the study have shown that IORT with whole breast conventional radiotherapy after conservative treatment in early stage breast cancer was well tolerated. The risk of local recurrence and distant metastases in those group of patients was low.

Thursday, 25 March 2010 18:15–19:15

POSTER SESSION

Surgical management (including reconstructive surgery)

256 Poster

Resection margins in breast conservation surgery: what is an adequate margin?

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Background: Adequate surgical margins are the strongest predictors of local recurrence following breast conservation surgery (BCS). Involved margins carry a significant risk of local recurrence despite radiation therapy. However, there is no consensus as to what is considered an adequate margin. We therefore sought to determine the incidence of residual tumour following BCS, and to identify factors predictive of residual tumour and local recurrence.

Materials and Methods: A retrospective review was performed of 550 patients who underwent BCS at our institution from January 2001 to December 2008. In most cases, wide excision extended from beneath the skin to the pectoralis fascia. The presence of residual tumour and local recurrence was correlated with the closest surgical margin and standard clinicopathological parameters.

Results: Forty-seven of 185 patients (25.4%) who underwent repeat surgery were found to have residual tumour. Twenty-six percent (44 of 170) of patients with involved or close margins had residual tumour, compared to 10% (1 of 33) of those with margins of 1 mm; this was not statistically significant. Two patients with margins of more than 1 mm were found to have separate foci of tumour on repeat surgery. The anterior or posterior margins alone were close or involved in 46 patients; 8 of whom underwent repeat surgery. No residual tumour was found in all cases, although a separate focus of invasive carcinoma was found in 1 patient. None of the 38 patients who did not have repeat surgery developed local recurrence. No factors predicting for residual tumour were identified; notably, margins status did not correlate with the presence of residual tumour or the risk of local recurrence. Only lymphovascular invasion and oestrogen receptor status were independent predictors of local recurrence on multivariate analysis. There were no difference in the local recurrence rate between margin status of 1 mm, 2−5 mm and more than 5 mm (4.5%, 5.7% and 7% respectively).

Conclusions: Our study finds that radial margin of 1 mm result in acceptable and similar local recurrence rate when compared with larger margins and thus re-excision is not necessary. Furthermore, anterior or posterior margins status does not affect local recurrence if the excision had been taken from the skin down to the pectoralis fascia. In addition, factors other than margin status affect local recurrence in BCS.

257 Poster

Quality of care through the eyes of breast cancer patients: an assessment before and after implementation of a short stay programme following breast cancer surgery

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Background: Short admission following breast-cancer surgery is an established and safe care protocol that has not, as yet, been widely implemented across Europe. Aim of this study was to assess breast-cancer patients' opinions on quality of breast-cancer care before and after implementation of a short stay protocol, including disease-management principles, and to formulate patient-inspired targets for further quality improvement.

Material and Methods: Patients were asked to complete a self-administered validated questionnaire on quality of breast-cancer care six weeks after surgery. The study was conducted in four hospitals in the Netherlands, following a before-after design, and included two six-month measurement periods between December 2005 and June 2007. These measurements were performed after implementation of the short stay programme and in the care as usual situation, i.e. before implementation of the short-stay programme.

Results: Among 421 eligible patients, 324 (77%) signed informed consent and 281 (87%, before implementation: 137/161; after implementation: 144/163) completed the questionnaire. Scores on quality of patient education regarding postoperative treatment-related aspects showed a slight deterioration (e.g. education on drain care and education on a prosthesis). Services by the breast nurse remained stable, while services by the surgeon, patient education regarding activities at home, and patient education regarding postoperative treatment-related aspects remained stable on average with a greater variation: some aspects showed improvement and other deteriorated somewhat. Although several separate quality of care items not belonging to a specific factor had improved slightly after introduction of the short stay programme (such as the availability of