25 Proffered Paper Oral

Reduction of ipsilateral breast tumor recurrence rates by intraoperative radiotherapy boost technique and whole breast irradiation

R. Reitsamer[1], F. Peintinger[2], F. Sedlmayer[3], M. Kopp[3], G. Kametriser[3], C. Menzel[1]. [1]*University Hospital Salzburg, Paracelsus Private M, Breast Center, Salzburg, Austria;* [2]*General Hospital Leoben, Department of Gynecology, Leoben, Austria;* [3]*University Hospital Salzburg, Paracelsus Private Medical School Salzburg, Department of Radiotherapy and Radiooncology, Salzburg, Austria*

Introduction: Ipisilateral breast tumor recurrence (IBTR) after breast conserving surgery is rare (1–2% per year), but can be further reduced by proper surgery and modern radiotherapy techniques. The Salzburg Concept of intraoperative radiotherapy (IORT) applies the combination of IORT in boost modality and postoperative whole breast irradiation.

Patients and Methods: 378 women with stage I or II breast cancer were included in this study. All patients had breast conserving surgery and received 51 Gy to 56.1 Gy of postoperative radiation to the whole breast in 1.7 Gy fractions, but patients received different boost strategies. Group 1 (n = 188) received electron boost radiation of 12 Gy subsequent to the irradiation to the whole breast, group 2 (n = 190) received electron boost radiation of 9 Gy directly to the tumor bed intraoperatively, followed by whole breast irradiation. The groups were treated sequentially, group 1 from January 1996 to October 1998 and group 2 from November 1998 to March 2001. The groups are comparable looking at age, menopausal status, tumor size, grading and nodal status. All statistical tests are two-sided.

Results: After a median follow up period of 81.0 months in group 1 and a median follow up period of 51.1 months in group 2, 12 IBTRs (6.4%) could be observed in group 1 and no IBTR could be observed in group 2 (0.0%). The five year actuarial rates of IBTR were 4.3% (95% CI, 1.9% to 8.3%) and 0.0% (95% CI, 0.0% to 1.9%) respectively (P = 0.0018). Distant recurrences occurred in 24 patients (12.8%) in group 1 and in 8 patients (4.2%) in group 2. The five year actuarial rates of distant recurrence were 8.6% (95% CI, 4.9% to 13.5%) and 4.2% (95% CI, 1.8% to 8.2%) respectively (P = 0.08). The five year disease-free survival rates were 90.9% (95% CI, 85.8% to 94.7%) in group 1 and 95.8% (95% CI, 91.8% to 98.2%) in group 2 (P = 0.064).

Conclusions: Immediate IORT-boost yields excellent local control and results in statistically significant lower IBTR rates compared to the treatment with conventional postoperative electron boost after five years of follow-up.

Wednesday, 22 March 2006 14:15–16:00

SCIENTIFIC SESSION

Nursing and breast cancer follow-up

26 Invited

Follow-up for patients with breast cancer – who benefits? The surgeon's view

N. Roche. *Royal Marsden Hospital, Surrey, United Kingdom*

It is standard practice in most countries to provide follow-up care for women after the diagnosis and treatment of breast cancer. This generally takes the form of physician-led appointments at regular intervals, the frequency of the appointments diminishing with time. In recent years the value of this process, in terms of clinical and cost-effectiveness, has been questioned (1–4). The main purpose of follow-up is perceived as being the early detection of recurrence with a view to affecting outcome. Secondary aims include screening for contralateral cancer, observing and alleviating treatment related morbidity, pyschological support, data collection and audit. A number of questions with regard to breast cancer follow-up services remain unanswered:

- Who should provide follow-up care? Oncologist, surgeon, specialist nurse, family doctor?
- Frequency of appointments.
- Intensity of investigations.
- What interventions are employed to relieve patient morbidity.
- Patients involvement and choice of follow-up.

There are a limited number of studies addressing the issue of which type of health professional should provide follow-up care. Grunfeld and colleagues compared follow-up in hospital to that provided in the community by the family doctor [5]. The outcome measures were health related quality of life and time between presentation of symptoms and diagnosis of recurrence. Two thirds of the women approached agreed to randomisation and no significant difference was found with regard to delay in diagnosis, anxiety and quality of life between the two follow-up groups. As demonstrated in other studies [1,6,7] the majority of patients with recurrence presented at interval appointments rather than at their routine appointments. Koinberg and colleagues [8] and Brown and colleagues [9] performed similar studies comparing Nurse-led follow-up on demand with routine physician-led follow-up. In the later study 50% of those approached agreed to enter the study but there is no record of the number women who chose not to enter the Swedish study. Neither study reported signficant differences in terms of anxiety, patient satisfaction and quality of life.

The optimal frequency of follow-up visits is unknown although guidelines provide a recommended schedule [10]. In a study comparing standard follow-up versus less frequent appointments 93% of women approached agreed to randomisation [11]. Patients who did not agree to participate tended to be younger and have poor prognosis tumours.

There is a long held view that the early detection of distant recurrence is does not affect survival. This was demonstrated by two randomised controlled trials conducted in the 1980s [12,13]. As a result, intensive follow-up with the regular use of chest x-rays, liver ultrasound, bone scans and routine bloods, is not encouraged [10]. A number of new treatments, in particular the aromatase inhibitors and Herceptin, are now available. Studies using these agents have demonstrated improved time to progression of disease, clinical benefit and prolonged survival [14]. It is perhaps time to repeat some of these studies to assess if early intervention with newer agents affects quality of life with recurrent disease and survival.

There is considerable physical and psychological morbidity associated with both the diagnosis and treatment of breast cancer. Lymphoedema, infertility, premature menopause, osteoporosis and depression are seen in many breast cancer patients. Studies have demonstrated that many of these conditions go unnoticed or are not addressed [15,16].

When breast cancer patients have been asked about their attitudes to follow-up they express a desire for a continuing relationship with a health care professional, unrushed consultations, consistent information, easy access to experienced, knowledgeable health care personnel and specialist investigations [17–19]. It is my personal view that almost none of these needs are met with the conventional format of follow-up services. Increasing numbers of women are surviving early breast cancer and as a result a greater number remain under follow-up. There is continued pressure to cut costs and at the same time meet targets for new referrals. Currently no one seems to derive much benefit from the follow-up of breast cancer patients.

There is an increasing emphasis, particularly with the advent of microarray technology, to tailor breast cancer treatments to suit the individual. Women vary in their appreciation of the different aspects of follow-up care [19]. There is evidence that patient involvement in decision-making about follow-up care may improve quality of life for breast cancer survivors [20]. It would therefore seem reasonable to allow individuals to choose and tailor what kind of follow-up schedule is best suited to them. My personal prejudice is that follow-up should be in a hospital setting where there are specialist practitioners be they a nurse, oncologist or surgeon. Some patients may be better suited to regular follow-up others may prefer symptom/patient-led follow-up. There needs to be more focus on detecting treatment-related morbidity. Structured interventions that improve quality of life and morbidity need to be identified and assessed. Finally perhaps there is a case for re-looking at intensive follow-up, particularly in oestrogen or Her2 receptor positive tumours, needless to say this would need to be conducted in large randomised controlled trials.

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