Results: This study which involved relatively small, but important series of breast cancer departments throughout Europe, with some of them very famous, clearly showed a great range of differences, sometimes very significant, in parameters regarding pre-surgical evaluation and surgical treatment of breast cancer. However, results obtained suggest that there is no great impact of identified differences on the outcome of the disease. The latter has been widely discussed in this paper.

Conclusions: Although being found, and sometimes significant, the observed differences in several parameters regarding pre-operative evaluation and surgical treatment of breast cancer in six European breast cancer units do not have influence to the outcome of the breast cancer.

115 Poster

Localizing non palpable breast tumours during surgery with an iodine-125 labelled titanium seed instead of the hooked wire. "The better alternative"

P.S. Verduijn[1], Y. Van Riet[2], F. Janssen[1], G.A.P. Nieuwenhuijzen[1], H.J.T. Rutten[1]. [1]*Catharina Hospital Eindhoven, Surgery, Eindhoven, The Netherlands;* [2]*Catharina Hospital Eindhoven, Radiology, Eindhoven, The Netherlands*

Introduction: We explored the possibility of localizing non palpable breast tumours during surgery with an iodine-125 labelled titanium seed and the *NEO 2000®* probe.

Methods: After an ex vivo study, a feasibility study including 25 patients was performed. A radioactive titanium seed containing 10 Mbq of iodine-125 was implanted by the radiologist in the non palpable lesion one week before surgery. During surgery the lesion was excised using a gamma probe. During surgery an X-ray was made of the lump to check the location of the seed. Data of all patients treated this way were prospectively collected and compared with a historical group treated with wire localization (WL).

Results: The radioactive dose of the I-125 seed to the patient and surgeon showed to be negligible. The mammography made in the feasibility study showed no dislocation of the seed 1 week after implantation. Performing a SN biopsy in the same operation using Tc99 is not a problem and operation time was not longer. So far 98 patients with proven malignancy and complete data underwent a lumpectomy using this method. The retrospective group consists of he last 47 cases were WL was used and a SN biopsy was performed, malignancy was proven and data were complete. See also the table.

	I-125			
	Total (n = 98)	10-02-2003 23-02-2004 (n = 51)	03-03-2004 27-02-2005 (n = 47)	Retrospective group WL (n = 47)
Median age (yr)	61.9	60.8	62.1	62.5
Median lump volume (cc)	130	146	112	135
Median T-size (mm)10	10	10	12	
Median lump volume/T-size ratio (cc/mm)	13.0	14.6	11.2	11.8
N# irradical	7/98	5/51	2/47	2/47
Median operation time including SN procedure (min)	70	84	55	65

Conclusions: This technique is unique in The Netherlands. After a successful trial it is now the standard procedure for non-palpable breast lesions in our institute. We present our experience and the prospectively gathered data from 98 patients treated with this technique. The results are comparable to the historical group in which WL was used. There seems to be a trend towards shorter operation time and smaller lump volumes over time. Localizing the tumour days before the planned operation leads to more logistical freedom. Furthermore there is less risk of dislocation and less patient discomfort. Because of the accurate localization and the long half-time we also use this technique during in situ IORT boost in breast saving surgery as well as in tumors eligible for neo-adjuvant systemic therapy that are located with the seed prior to this treatment.

116 Poster

Changes in working practice in breast cancer care since the onset of guideline driven multidisciplinary meeting

A. Sahu, R. Fallaize, N. Laurence. *Frenchay Hospital, Breast Surgery, Bristol, United Kingdom*

Introduction: Development of local or network wide guidelines is considered essential for maintaining standards in the management of breast cancer and is also a requirement for purposes of accreditation of breast units in the UK. Mastectomy is generally recommended for multifocal diesase, however, minimal multifocal disease is found incidentally in a significant number as shown by pathological review of mastectomy specimen without affecting outcome. Mastectomy rates also vary for many reasons in different units. We wanted to review our mastectomy rates and see any effect introduction of guidelines in 2002 have made to our mastectomy rates.

Method: All data was retrieved from our prospectively recorded database in our breast centre. Mastectomy rates for each year from 1999 to first six months of 2005 were recorded. Histology was reviewed to assess the indication of mastectomy. Local recurrence rates for the study period was recorded.

Results: Around 350 cancers are treated in the breast cantre each year. Approximately 250 cases are treated surgically by breast conserving surgery or mastectomy. The mastectomy rate prior to introduction of guideline driven decision making in the MDT was around 30%, increased to 34% in 2002, 48% in 2003, 42.5% in 2004 and 49% in the fisrt six months of 2005.Review of histology showed 8% were recommended mastectomy for minimal multifocal (less than 2mm lesions). Local recurrence rates remianed constant around 1% a year for the study period.

Conclusion: Although introduction of guidelines in the decision making process in MDT have improved care for patients, it may well result in overtreatment of some patients in the form of increased mastectomy rates.

Wednesday, 22 March 2006 16:00–16:45

POSTER SESSION

Sentinel node – technique, diagnosis and management

117 Poster

Survival of sentinel node biopsy negative breast cancer patients similar to axillary lymph node dissected negative patients; a population based analysis

G. Kuijt[1], L. van de Poll-Franse[2], R. Roumen[1], G. Nieuwenhuijzen[3], A. Voogd[4]. [1]*Maxima Medical Centre, Surgery, Veldhoven, The Netherlands;* [2]*Comprehensive Cancer Centre South, Research, Eindhoven;* [3]*Catharina Hospital, Surgery, Eindhoven,* [4]*Maastricht University, Epidemiology, Maastricht*

Background: Many studies have evaluated the use, accuracy and (long-term) complications of sentinel node biopsy (SNB) and an increasing number of studies has been evaluating its safety by determining the axillary recurrence rate in breast cancer patients with negative sentinel lymph nodes who did not undergo further axillary lymph node dissection (ALND). However, axillary recurrence is only a surrogate marker of survival, and to date no studies have been published that used survival data to evaluate the safety of SNB. In this study we compared the survival of SNB-negative breast cancer patients without additional ALND, with the survival of ALND-negative breast cancer patients who had 10 or more axillary nodes examined.

Methods: We used data from the population based Eindhoven Cancer Registry that covers an area of 2.3 million inhabitants. Information of women diagnosed with breast cancer in the period 1984–2002 (follow-up until January 1, 2005), was used. In this period 2056 women, of whom at least 10 axillary nodes were examined, were diagnosed with ALND-negative breast cancer (median follow-up: 8.1 years). Since 1997, when SNB procedure was introduced in this area, 877 women were diagnosed with SNB negative breast cancer (median follow-up: 3.6 years).

Results: Crude 3- and 5-year survival rates were respectively 93% and 86% for ALND-negative and 95% and 89% for SNB-negative breast cancer patients (log-rank p-value = 0.02). After correction for the influence of age, tumour size, location of tumour, histology, grade, oestrogen- and progesterone receptor, systemic therapy and radiotherapy in multivariate Cox-regression analyses, the hazard ratio for overall mortality of ALND-negative compared to SNB-negative patients was: 1.2 (95% CI: 0.9–1.6).

Age, tumour size and having had radiotherapy were significantly and (inversely) independently associated with overall mortality.

Conclusions: Breast cancer patients with a negative SNB (without ALND) had a similar survival compared to ALND-negative patients who had 10 or more axillary nodes examined. SNB therefore seems to be a staging procedure which is at least as safe as ALND.