

Material and Methods: One hundred forty-five patients, operated on for breast cancer minimally five years ago, between January 2001 and December 2003, were included. All the above mentioned methods to establish lymphoedema were performed.

Results: Prevalence of lymphoedema varies with the different methods: with water displacement volumetry and a cut-off value of 200 mL or 150 mL results were respectively a prevalence of 7% and 10%. 18% with a circumference difference of >2 cm and 19% using the sum of arm circumferences with a cut-off value of 5 cm. Self-reported lymphoedema yields a prevalence of 17%. Bio-impedance spectroscopy resistance of extracellular water (Recw) ratio is significantly smaller in the subjective oedema group ($p=0.033$), the sum of arm circumferences (SOAC) >5 cm group ($p=0.005$) and volume >200 mL group ($p=0.003$), but was not able to detect lymphoedema patients. Of those patients with self-reported lymphoedema, 56% tested positive with the SOAC method, and only 36% tested positive using the water displacement method. Ninety percent of the patients with an arm volume difference of more than 200 mL reported lymphoedema. So a smaller volume difference does not exclude the presence of subjective lymphoedema.

Conclusions: When measuring lymphoedema 5 years after surgery for breast cancer, different methods result in a prevalence varying from 0.7% to 19%. Water displacement volumetry resulted in a much higher prevalence than Bio-impedance spectroscopy, in contrast with acute phase studies where BIS and volumetry yield comparable results. In this study there was a relatively high prevalence of subjective lymphoedema when compared with water displacement volumetry. These findings support the hypothesis that after 5 years the consistency of lymphoedema has changed drastically.

Thursday, 25 March 2010

18:15–19:15

POSTER SESSION

Side effects of treatment

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Poster

Long-term cause specific mortality in patients treated for DCIS; a population based study

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Background: Since the introduction of the national breast cancer screening program in the Netherlands in 1990, incidence of ductal carcinoma in situ (DCIS) has increased dramatically. DCIS is treated by surgery and, in case of breast conserving therapy, radiotherapy is also frequently used. The prognosis of DCIS is very good. However, it is still unclear what proportion of these in situ tumours would have progressed into invasive breast cancer if left untreated. Because of potential overdiagnosis, treatment-related late health effects after DCIS may be of even greater importance than late effects of invasive breast cancer treatment. Currently, there is no information on treatment-related excess mortality following treatment for DCIS.

Treatment-related late health effects after breast cancer include second tumours and cardiovascular disease. Previous studies have indeed shown increased mortality after treatment of invasive breast cancer with radiotherapy. However, most of these studies are based on outdated treatment regimens. Therefore it is still unclear to what extent contemporary radiotherapy regimens used to treat DCIS also increase the risk of cardiovascular disease and second tumours.

The aim of the current study is to assess long-term cause-specific mortality in patients treated for DCIS in a population-based design.

Materials and Methods: Data on all incident DCIS cases in the Netherlands between 1989 and 2004 were obtained from the population-based Netherlands Cancer Registry. The Netherlands Cancer Registry was established in 1989 and also collects treatment information. Date and cause of death were acquired through linkage with Statistics Netherlands until January 2009.

Results: At the EBCC, results will be presented on the evaluation of mortality rates (including the three main outcomes breast cancer, other cancer, and cardiovascular disease) in comparison with the general population. In addition, we will compare mortality rates between DCIS patients treated with surgery and radiotherapy, and those treated with surgery alone. For cardiovascular disease we will also compare mortality after radiotherapy for left-sided and right-sided DCIS.

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Poster

Prophylactic use of H1 and H2 antagonists may prevent hypersensitivity reactions and skin toxicity to docetaxel with cyclophosphamide in early breast cancer patients

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Background: US oncology 9735 study demonstrated significant improvement in DFS and OS for Docetaxel/Cyclophosphamide (TC) compared with Doxorubicin/cyclophosphamide (AC). We previously evaluated tolerability and safety of TC regimen and reported this regimen was feasible for Japanese patients with early breast cancer (Takabatake et al. Jpn J Clin Oncol 2009). In this feasibility study, relatively high incidence of hypersensitivity reactions (HSRs) or rashes were observed. Therefore, to reduce these side effects patients were premedicated with H1 and H2 antagonists in our institution. The aim of this study is to compare the rates of HSRs and rashes when TC is administered with and without prophylactic H1 and H2 antagonists.

Patients and Methods: This study was a retrospective cohort study evaluating the rates of HSRs and rashes in patients receiving TC regimen for early breast cancer at Shikoku Cancer Center from June 2006 to August 2009. Until October 2008, patients received 8 mg of iv dexamethasone (DEX) for prophylaxis: Group H(-). From November 2008, patients received H1 and H2 antagonists (50 mg of oral diphenhydramine and 20 mg iv famotidine, respectively), 30 min prior to docetaxel in addition to intravenous DEX: Group H(+). All patients received oral 8 mg of DEX day2 and day3. Medical records from all patients were reviewed to evaluate demographics, drug administration and incidence of HSRs and rashes. The chi-squared test was used for statistical analyses.

Results: Fifty eight patients received only iv DEX and 69 received H1 and H2 antagonists with DEX. Of the 58 patients in group H(-), 26 had HSRs (44.8%) and 33 had rashes (56.9%). In contrast, of the 69 patients in group H(+), 21 had HSRs (30.4%) and 26 had rashes (37.7%). There were statistically significant differences in both HSRs and rashes ($p=0.042$ and 0.031, respectively).

Conclusion: Our study suggests that prophylactic use of H1 and H2 antagonists may prevent hypersensitivity reactions and skin toxicity to Docetaxel with Cyclophosphamide in early breast cancer patients.

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Poster

Musculoskeletal pain in the FEC-D regimen is common and frequently severe – experiences in an outer metropolitan oncology unit

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Background: The FEC-D regimen is a commonly used adjuvant chemotherapy regimen for node positive early breast cancer in our oncology unit. It has demonstrated considerable toxicity in terms of febrile neutropenia (FN) but also fatigue, myalgias and arthralgias. G-CSF can decrease the risk of FN but as the main side effect of G-CSF treatment is bone pain, there is a possible risk that it may compound the musculoskeletal side effects of docetaxel.

Materials and Methods: A retrospective analysis of the medical records of all clinic patients who had completed treatment with FEC-D between July 2007 and October 2009 was performed. Parameters measured were rates of use of G-CSF (pegylated filgrastim, Neulasta®), incidence of FN and occurrence and NCI-CTC grade musculoskeletal (MSK) pain.

Results: Of the 37 patients included, six (16%) had an episode of FN. None of these were receiving G-CSF at the time of the episode. The majority of FN occurred in either Cycle 1 of FEC or Cycle 1 of docetaxel. 25 patients (68%) received some treatment cycles with G-CSF. There were two chemotherapy discontinuations during the docetaxel treatment due to severe side effects. MSK symptoms are listed in the table.

Treatment cycle	No. treated (no. also receiving GCSF)	MSK pain			
		All grades	Grades 2 and 3		
		n (%)	receiving GCSF (% of all GCSF)	(% of total cases)	receiving GCSF (% of all cases also receiving GCSF)
FEC1	37 (6)	2 (5%)	0 (0%)	0 (0%)	0 (0%)
FEC2	37 (13)	2 (5%)	2 (15%)	0 (0%)	0 (0%)
FEC3	37 (15)	2 (5%)	0 (0%)	0 (0%)	0 (0%)
D1	37 (19)	26 (70%)	17 (89%)	16 (62%)	10 (59%)
D2	36 (25)	19 (53%)	15 (60%)	7 (37%)	5 (33%)
D3	35 (25)	10 (28%)	8 (32%)	5 (50%)	5 (62%)