development of BM, overall survival (OS) and survival from diagnosis of BM (post-BM-OS).
Results: Overall, 4 patients presented brain lesions before starting treatment, while 42 pts (39%) developed BM during trastuzumab therapy, for an overall incidence of 43%. In about 78% of cases BM were multiple, with 18% of patients having at least one cerebellar lesion at the time of CT and/or MNR diagnosis; brain was the first site of progression for 24 patients (52%). The median time to BM was 34.2 months from the diagnosis of metastatic disease and 29.6 months from the start of trastuzumab therapy. In patients developing BM median OS was significantly lower than in those without brain lesions (40.2 months *versus* 65 months, $p = 0.004$). Median post-BM-OS was 23.5 months. Statistical analysis showed that neither tumor grade nor ER-negative status or adjuvant anthracycline- and/or taxane-based chemotherapy were significantly correlated with the risk of developing BM. In the multivariate analysis only younger age at diagnosis (<50 *versus* >50) was significantly associated with increased risk of BM ($p < 0.005$).
Conclusions: Our results confirm that BM are a common event in patients with HER2-overexpressed MBC treated with trastuzumab, even if survival after diagnosis of BM this patient population is longer than historical reports. Further investigation of risk factors for BM may help identify subgroups of patients for whom CNS imaging screening and/or prophylactic strategies should be warranted.

5110 POSTER

Triple negative breast cancer with "basal-like" phenotype: clinical features and characteristics – a retrospective analysis of cases from a tertiary center

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Background: The aim of our research was to explore the clinical features and characteristics of triple negative breast cancer with "basal-like phenotype", in order to assess the behaviour of these tumours characterised by poor prognosis, affecting young women and lacking effective hormonal or targeted therapy.
Material and Methods: We studied retrospectively 1200 tissue specimens from women with breast cancer, who where diagnosed, operated, histologically examined and treated in our hospital between 2003–2008 (6 years). Median follow up, disease free survival, overall survival, clinical and histological characteristics were recorded. Hormone receptors and Her2(n) gene expression were blindly checked twice by the same pathologist. Regression analysis and chi-square test were mainly used for statistical evaluation of the results.
Results: 113 cases were identified as triple negative breast cancers with "basal-like phenotype". These women were divided to two age groups, 19.3% <40 years old and 80.7% >40 years old, respectively. Tumor size was described >2 cm in 53.2%, <2 cm in 46.8%. Lymph nodes were positive in 32.2% and negative in 67.8%. Nuclear grade was 1 in 6.4%, 2 in 8% and 3 in 85.6%, respectively. Overall 6 year survival rate was 95.1%, 6 year disease free survival rate was 85%.
Conclusions: Triple negative breast cancers with "basal-like phenotype" are often presented as poorly differentiated tumors and are reported to appear in the younger population. Pathological identification of this specific histology needs training and diagnostic experience in order to minimize false further therapeutic interventions.

Poster presentations (Wed, 23 Sep, 14:00−17:00)
Breast cancer − Clinical early disease

5111 POSTER

Surgical treatment of Paget's disease of the breast

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Background: We evaluated clinical presentation, surgical treatment and loco-regional recurrences in patients with Paget's disease of the breast, with a special emphasis on the role of magnetic resonance imaging (MRI) and sentinel node biopsy (SNB).
Methods: The records of 58 consecutive patients with Paget's disease treated between 1995 and 2006 were reviewed.
Results: MRI was performed in 14 patients revealing ductal carcinoma in situ (DCIS) or invasive cancer in seven patients. Five of these patients were negative in conventional imaging.
Altogether 44 patients underwent mastectomy either as primary or second operation. Eighteen patients underwent SNB, 26 patients underwent axillary clearance without preceding SNB, while 14 patients had no axillary surgery.
Altogether 56 patients had underlying DCIS or invasive carcinoma. Sixteen patients had peripherally located tumours. Twenty-three patients had multifocal or multicentric tumours. Nineteen patients had axillary lymph node metastases.
Local recurrence was detected in one patient after breast conservation. One patient had axillary recurrence after negative SNB. Six patients had distant metastases, two with a concomitant recurrence in the subclavicular lymph nodes. Four patients died in breast cancer.
Conclusions: Paget's disease is frequently associated with peripheral or multicentric cancer. Mastectomy is the best treatment option for the majority of patients. MRI may be helpful when considering breast conservation or omitting axillary nodal staging, especially in patients with negative findings in conventional imaging.

5112 POSTER

Use of local anaesthetics in breast cancer surgery

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Introduction: Surgery is usually the first line of treatment in Breast Cancer. Postoperative pain is a significant factor in postoperative morbidity. Infiltration with local anaesthetics (LA) is known to reduce pain and analgesic requirement. Little evidence exists of use of LA in patients undergoing breast surgery. LAs do have uncommon but significant adverse effects. Our aim was to assess the evidence for the use of LA, optimal timing and complications of LA in breast cancer surgery
Methods & Materials: A literature search was conducted with the words 'breast surgery', 'local anaesthetic' and several related keywords using pubmed, MESH, Cochrane database & Cochrane Review. Cosmetic breast surgery was excluded.
Results: Eight RCTs were found: 6 were carried out in mastectomy patients, 1 in patients undergoing lumpectomy and 1 for breast biopsies under GA. Two studies used topical LA while the remainder used infiltration of either bupivacaine or ropivacaine alone. The mean number of patients in each study was 71 (range 30–120). Three studied pre-incision LA Vs pre-closure, 3 looked at pre-closure Vs placebo and 2 studied pre-incision Vs placebo. No difference was found in pain scores and analgesic requirements between pre-incision and pre-closure LA. Four studies showed a reduction in pain with LA which was usually early (<6 hours post op) while one study also found a significant reduction in pain at 3 months. Two studies showed no difference between placebo and LA. There was no difference in post-operative complications. No study documented at mortality
Conclusion: The use of LA in patients undergoing breast cancer surgery can reduce pain in the early postoperative period however the evidence to support this is not overwhelming. There is no difference between giving LA pre-incision or pre-closure. Only one study has studied the effect of LA on long term pain. More studies are needed to assess the usefulness (and safety) of using LA to control postoperative pain in breast surgery as well as to identify the optimal drug and method of administration.

5113 POSTER

Role of lymph-nodes scintigraphy in planning of radiotherapy for patients with breast cancer

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Background: to compare standard irradiation volume with radiotherapy portals designed according to results of sentinel lymph-nodes (SLN) scintigraphy.
Materials & Methods: SLN was performed in 49 primary patients with breast cancer and histological evidence of axillary SLN involvement. Instrumental examinations of nonaxillary LN ruled out macroscopic invasion. SLN visualisation was performed 0.5, 2 and 12 hours after intra-, peritumoral injection of 75–150 MBq (0.5−1 ml) of 99 mTc-nanocolloid. Standard irradiation volume in patients with tumours in external quadrants encompassed axillary (Ax) + sub-supraclavicular (SSCL) regions; in internal quadrants – Ax+SSCL+internal mammary nodes (IM).