Brain meta. (BM)	No.	Med. age (Yrs)	DFI (months)	BM as 1st relapse	ER/PGR Both score 0	HER2 3+	Triple negative
Whole group	61	47 (30−71)	Med. 24 (0−252)	34/61 (55.75)	27/61 (44%)	9/61 (14.7%)	12/61 (19.6%)
Early relapse (<5 yrs)	43/61 (70%)	47 (30−71)	Med. 20 (0−59)	22/43 (51%)	21/61 (34.2%)	8/61 (13.1%)	10/61 (16.4%)
Late relapse (⩾5 yrs)	18/61 (29.5%)	47.5 (35−63)	Med. 72 (60−252)	11/18 (61%)	6/61 (9.8%)	1/61 (1.6%)	2/61 (3.2%)
p	/	ns	/	ns	<0.001	0.032	0.029

Conclusion: Biological markers of primary BC significantly differ between early vs. late BM subgroup. Therefore, HER2 over-expression, negative steroid receptor and triple negative status are potential markers only for early but not for late BM relapse. These results contribute to the opinion that initial poor prognostic characteristics have limited value in late relapse prediction.

5103 POSTER

Spectrum of malignant breast masses in adolescent Indian girls: outcome of management at the breast unit of a teaching hospital

F. Arshad[1], O. Musa[2], U. Fatima[3]. [1]Sahara hospital, Breast and Endocrine Surgery, Lucknow, India; [2]Eras Medical College and Hospital, Deparment of Surgery, Lucknow, India; [3]Eras Medical College and Hospital, Deparment of Pathology, Lucknow, India

Background: To evaluate the spectrum of malignant breast masses in adolescent Indian females and their management outcome.
Material and Methods: During a 6 year period from 2003 to 2008, 904 young females (12−19 yrs) were referred to the breast clinic with breast related complaints. Clinical and imaging evaluation confirmed the presence of breast masses in 540 females. After preliminary evaluation pathological analysis (FNAC, Core biopsy, excisional biopsy) was conducted on 394 patients. Patients with malignant breast masses were only included in the study. These patients were analyzed for there clinical presentation, duration of complaints, age, menarche, pregnancy status, family history, treatment and outcome.
Results: Out of 394 pathologically evaluated patients, 387 were benign and 7 were malignant cases. Mean age of study group was 15.5 yrs with mean age of menarche at 13 years. There was one pregnant patient and family history of breast cancer was positive in two patients. Average time from start of the symptoms to diagnosis was 10 months. Mean size of lump was 5.5 cm. Distribution of malignant masses was as follows: 1 Ductal carcinoma in situ (DCIS), 3 Carcinomas (1 inflammatory, 2 ductal) and 2 cases of malignant cystosarcoma phyllodes. There was 1 case of mediastinal Nonhodgkins lymphoma with secondary metastasis to breast. The most common clinical presentation was palpable mass (n = 5) followed by progressive increase in breast size (n = 2). Tumour staging in the study group was as follows: Stage IIA: n = 1, stage IIIB: n = 2 and stage IV: n = 2. Patients with malignant cystosarcoma had localized disease. Treatment was with a combination of surgery, chemotherapy and radiotherapy. At 34 months follow up in 3 patients (2: cystosarcoma phyllodes and 1: DCIS) all were alive. Subgroup analysis in rest showed that 12 month survival for stage 4 patients was zero, stage IIIB was 51% and for stage IIA was 81.7%.
Conclusion: Malignant breast masses in adolescent Indian population are rare (1.7%). In our set of population average time to diagnosis was 10 months and majority presented in an advanced stage (lump size >5 cm) making the prognosis ominous. Our experience highlights the need to develop educational awareness programmes to acquaint the significance of breast lumps in adolescent girls.

5104 POSTER

Clinical and pathological prognostic characteristic of breast cancer patients with brain metastases

D. Gabrys[1], E. Pluta[2], M. Hetnal[2], A. Boratyn-Nowicka[3], K. Galwas-Kliber[1], K. Trela[1]. [1]Maria Sklodowska-Curie Memorial Cancer Center and Institute of Oncology, Radiation Oncology, Gliwice, Poland; [2]Maria Sklodowska-Curie Memorial Cancer Center and Institute of Oncology, Radiation Oncology, Krakow, Poland; [3]Maria Sklodowska-Curie Memorial Cancer Center and Institute of Oncology, Clinical Oncology, Gliwice, Poland

Successful improvement in breast cancer patient's treatment leads to life prolongation. This is connected with rising incidence of brain metastases (BM) which occurs in up to one third of patients with metastatic breast cancer. The aim of this study is to analyze clinical and pathological factors in patients with BM.
This is a retrospective review of 177 breast cancer patients with brain metastases, treated with brain radiotherapy between 2005–2007 at two Cancer Centers, Gliwice, Krakow.

Patient's age at the time of diagnosis ranged from 28 to 80 years, average 50 years. Patient's stages at the time of cancer diagnosis were: T_{1-2} 38% T_{3-4} 31%, N_{0-1} 49%, N_{2-3} 22%. Majority of patients were treated with radical intent 74%. Most of patients underwent radical mastectomy 68% or breast conserving therapy 6%. Ductal invasive carcinoma was the predominant histology accounts for 57%. Lymph nodes metastases were present in 40% of patients with median lymph nodes ratio 9%. Tumours were ER, PR receptor positive only in 28% and 27%, and only in 12% for ER and 7% for PR were highly positive. We were able to establish HER2 status in 42% of patients and in 19% HER2 was negative, and highly positive in 12%.
All patients were treated with radiotherapy, 15% underwent metastasectomy, 21% stereotactic irradiation, in combination with WBRT 15% or alone 6%. Median time from diagnosis to BM was 2.7 years (range 0−19), to distant relapse 2.1 or local relapse 1.6. Single BM was diagnosed in 22%, and multiple metastases in 26% of patients, remaining had 2−7 lesions. First metastatic site was brain 38%, lung 19%, bones 12%, hepar 6%, multiple metastatic site 13%. Median time from treatment dissemination to brain relapse was 1.2 years (range 0.02−9.2). Median time to BM was longer in ER+ patients 3.4 yeas vs ER− patients 2.3. (p < 0.00001). Median time to BM was longer in HER2− patients 3.3 years vs HER2+ 2 years (p < 0.00001). Higher node ratio was also significant risk factor for faster BM (p < 0.00001). A median time to BM shortened with T stage and was 4.4, 3.1, 2.3 and 1.5 years for T_1-T_4 respectively and also shortened with N stage and was 3.7, 3.1, 1.5 and 1 for N_0-N_3. Patients with brain metastases as a first site had a shorter time to BM than patients with other primary sites (2.0 vs 3.4 years).
Advanced stages, ER-, PR-, HER2+ are related to higher risk of BM. Major cause of death was brain metastases, therefore further studies are needed for early BM patients selection.

5105 POSTER

Clinical and patohistological caracteristics of synchronous and metachronous bilateral breast cancer

D. Kolarevic[1], Z. Tomasevic[1], N. Andjelic Dekic[1], S. Milosevic[1], S. Jelic[2]. [1]Institute for Oncology and Radiology of Serbia, Daily Hospital for Chemotherapy, Belgrade, Serbia; [2]Institute for Oncology and Radiology of Serbia, Clinic for Medical Oncology, Belgrade, Serbia

Background: The purpose of this study was to review the clinical and histopathologic (HP) characteristics of patients with bilateral synchronous and metachronous breast cancer.
Material and Methods: The data were analyzed for 49 BBC pts registered during two years at the Daily Hospital for Chemotherapy, Institute for Oncology and Radiology of Serbia. We defined synchronous bilateral breast cancer (SBBC) as cancer diagnosed in both breasts at the same time or within a 3 months-period of diagnosis of the first tumor and metachronous if diagnosed more than 3 months after first cancer. For HP analysis 74 breast specimens were available, 40 of synchronous and 35 of metachronous BBC.
Results: Out of a total of 49 pts, 51% (25 pts) suffered from synchronous and 49% (24 pts) from metachronous BBC. Median age at diagnosis was 59.6 in SBBC group. In MBBC group median age at first diagnosis was 52.5 and 60.2 for contralateral BC diagnosis, with the median period from first to second BC diagnosis 86 months. In the SBBC group 88% of pts were postmenopausal, compared to 63% in the MBBC group. A family history of breast cancer was more common in pts with MBBC (19%) than in pts with SBBC (7%). Initial metastases were more frequent in SBBC group, 36%, compared to 12.5% in MBBC. Only 4% of SBBC was manifested as inflammatory breast cancer (IBC), while in MBBC group 12.5% of first and 33% of second malignancy was diagnosed mastitis. Negative nodal status at diagnosis was similar in groups, 33% of SBBC and 28% of MBBC. In a group of SBBC, 21 of 40 (52.5%) tumors were found to be ductal and 14 (35%) were lobular carcinoma. In a group of MBBC frequency of ductal and lobular carcinoma was the same, 15 of 35 (43%). Same HP results in both breasts were found in 79% of SBBC and 50% of MBBC. 73% of SBBC were hormone receptor positive, while in MBBC hormone receptor negative tumors were more common, 55%. In SBBC group 28% of pts without initial metastasis had a disease progression with a median DFI 28 months. In MBBC progression was detected in 37.5% pts with a median DFI 41 months.
Conclusion: Our study revealed that SBBC are more frequent in postmenopausal women, presented more often in stage IV as hormon receptor positive tumors with a same HP findigs in bothside breasts. MBBC are more often presented as an IBC. BBC is an unusual clinical entity and because of its atypical and complex presentation patients with bilateral breast cancer require compound and individualized treatment.