

breast cancers (log rank test,  $P=0.016$ ), but the Cox proportional hazard model failed to confirm that MGBA was an independent prognostic factor (hazard ratio 1.77,  $P=0.1755$ ).

**Conclusion:** Our results suggest that MGB A is a sensitive marker of breast carcinoma, is a useful method to detect breast cancer micro-metastases. It may characterize a subgroup of breast carcinoma patients with less aggressive forms of tumour and better prognosis, if assessed for a prolonged follow up duration in future studies.

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Poster

#### **Breast Cancer Among Young Women in Mures, Romania – a 5-year Retrospective Study Emphasizing the Role of New Therapeutical Strategies**

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**Background:** to assess the frequency, the imaging features and prognostic factors in young female patients with breast carcinoma in order to establish new therapeutic strategies.

**Materials and Methods:** We retrospectively reviewed 112 cases of breast cancer in young women ( $\leq 45$  years) admitted to the Emergency Clinical District Hospital Mures between October 2006 and October 2011. The collected data were: age, clinical, imaging, surgical, histopathologic and immunohistochemical (hormone receptors status, ki 67 and HER2-neu) reports in order to evaluate important prognostic parameters and to assess the response to therapy.

**Results:** Among 1663 women with breast lesions 949 (57.06%) had breast cancer. Young women ( $\leq 45$  years) with breast cancer were 112 (11.80%), out of which those  $\leq 35$  years were 21 (18.75%). Autopalpation/clinical examination of women  $\leq 45$  years revealed the presence of tumor in 95 (84.82%) cases, out of which 59 (53.20%) had axillary adenopathies. In the  $\leq 35$  years age group, 15 (71.42%) had palpable tumor on presentation, 12 (57.14%) with axillary adenopathies. Out of the 86 (76.78%) mammographically examined patients, 55 (63.95%) with invasive carcinomas had spiculated/irregular opacities, 20 (23.25%) architectural distortion associated with a mass and 26 (30.23%) associated calcifications. On ultrasonography, a majority of 105 (93.75%) lesions displayed spiculated/irregular masses. 50.47% lesions had 2–4 cm in dimension at the time of diagnosis. In 77 (68.75%) cases tumoral type was invasive ductal NOS (IDC-NOS), mostly grade 2 and 3 (71 cases – 92.20%), especially in women  $\leq 35$  years – 16 cases (76.19%). Most invasive carcinomas were unifocal – 67 (63.80%) versus multifocal 38 (36.19%). Ductal carcinoma in situ was found in 7 cases – 6.25%, more frequently grade 3, mostly in the 36–40 years-old age group (5 cases – 71.42%). Histologically, 62 patients  $\leq 45$  years (55.35%) had axillary lymph node metastases with a higher frequency in multifocal/multicentric (60.52%) carcinomas.

**Conclusions:** Our results indicated a higher frequency of breast cancer in young women  $\leq 45$  years, especially in those  $\leq 35$  years, than in previous decades, a result that overpasses data from literature (5–7%). Most young patients discovered the tumor by autopalpation, with measurements over 2 cm in diameter at the time of diagnosis and associated axillary lymph node metastases. Tumor type was most often grade 2 or 3 NOS. It seems that breast tumors in young patients have a different morphological and immunohistochemical aspect and are associated with a different prognostic, which is why therapeutic strategies must be adapted according to this. Acknowledgements: This paper is partially supported by the Sectoral Operational Programme Human Resources Development, financed from the European Social Fund and by the Romanian Government under the contract number POSDRU/89/1.5/S/60782.

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#### **Triple Negative Breast Cancer in Young Patients – Experience of the National Institute of Oncology in Morocco**

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**Background:** Triple-negative breast cancer (TNBC) is defined as a group of breast carcinomas that are negative for expression of hormone receptors and HER2. They tend to have a higher grade, with a poorer outcome compared to non-TN breast cancers. TNBC are associated generally with a younger age at presentation. There is a dearth of data in a younger population of patients with TNBC regarding epidemiology, prognosis, and outcome.

**Objective:** The primary aim of this analysis of young TNBC patients was to characterize the clinical features of this distinct young population of patients. We selected the age of 35 years and under as the cut-off point in defining our patient population of interest.

**Materials and Methods:** A retrospective analysis of patients referred to the national institute of oncology with TNBC, identified from the institutional tumor registry, who were  $\leq 35$  years on the date of the diagnostic biopsy, between January 2007 and February 2009, was performed. Epidemiological, clinical and pathological staging, therapeutic and follow-up data were extracted.

**Results:** Twenty seven cases of TNBC, with age  $\leq 35$  years at diagnosis, were collected. This represented 17.7 % of the entire population ( $N=152$ ) of TNBC seen at the national institute of oncology over that time period. The mean age was 31.3 years (25–35 years). Four patients (14.8%) had a family history of breast cancer. Nineteen patients (70.3%) had nursing antecedents and six patients (22%) reported use of oral contraceptives. Twenty two (81.4%) had infiltrating ductal carcinoma and five had medullary carcinoma (18.5%). Twenty three cases (85%) were grade III Scarff-Bloom-Richardson (SBR) and 4 patients (14.8%) were grade II.

Two patients (7%) had metastatic disease (stage IV) at first diagnosis, one patient (8%) had stage I, 17 patients (63%) had stage II and the remaining patients 7(25%) had stage III.

For treatment modalities 25 patients underwent surgery (radical mastectomy in 70% of cases and 30% had conservative surgery).

Neoadjuvant chemotherapy was administered to 8 patients and adjuvant chemotherapy to 86. All patients received anthracycline based regimen and only 29.6% received taxanes. Radiotherapy was administered to 85% of patients. Metastatic patients at diagnosis progressed after first line chemotherapy and then died.

Six (22.2%) patients had a distant failure after adjuvant treatment and one local recurrence. The median follow-up time was 36,3 months (range 2–84.8 months). At the end of the study period, 7 patients (26%) died.

**Conclusion:** This is the first reported study, in our context, of young patients with TNBC  $\leq 35$  years of age. TNBC in young patient were associated with high grade tumors, advanced stage at diagnosis (92%  $\geq$  stage II), and short time to relapse. These data suggested that patients with younger age seem to have a severe prognosis. No risk factors have been identified. However this study is retrospective and more studies are needed in this young population.

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#### **Presentation and Outcomes of Breast Cancer in Asian Women Under 40: Misdiagnosis or Misfortune?**

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**Background:** There are few studies examining breast cancer in women under 40, particularly in Asian women. While it has been reported that only 5.5–7% of all breast cancers are detected in women under 40 in the West, this group of women accounts for at least 12–15% in Asian populations. It has been reported that the poorer prognosis seen in this group of women is contributed by delays at diagnosis and aggressive tumour biology. This study seeks to understand clinicopathologic factors that correlate with treatment outcomes in this unscreened group of women.

**Methods:** A retrospective institutional board-approved review of our center's breast cancer database identified women diagnosed with breast cancer from January 2006 to February 2011. Patient demographics, clinical presentation patterns, imaging findings, pathological findings and treatment received were determined. Outcome end-points include disease recurrence and death.

**Results:** Of a total of 1160 women diagnosed with breast cancer during the study period, 150(12.9%) were under 40. The median age was 36 years (range 18–39 years). The majority (81%) presented with a self-detected lump and did not have a family history (84.2%). The median duration of symptoms before presentation was 4 weeks (range 1–96 weeks). Four women had metastatic disease at presentation (2.7%) and 6 (4%) defaulted treatment and follow-up after biopsy. These 10 women were excluded from further analysis. Five women (3.5%) had pregnancy-associated breast cancer with 4 being pregnant at the time of diagnosis. 2 women had synchronous bilateral breast cancer.

Mammography was less sensitive than ultrasound (77.1% Vs 94.5%) and MRI was helpful in demonstrating 60% of lesions not seen on mammography or ultrasound. 42/140 (30%) underwent breast conserving surgery (BCS) of which 5 (12%) proceeded to mastectomy due to involved margins. 98/140 (70%) underwent mastectomy of which 25/98 (25%) had immediate reconstruction. The median tumour size was 22 mm (range 1.1–100 mm). 10% (14/140) received neoadjuvant chemotherapy. Of a total of 126 primary resections, 84 % were invasive carcinoma while 16 %