frequently reported as bothersome; however, women who completed the survey expressed high levels of satisfaction with their lives and relationships demonstrating a resilient ability to cope with their disease.

5089 POSTER

Radiosensitized Treatment of Advanced Breast Cancer

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Background: Currently the methodologies that are used in oncology are quite of limited possibilities Therefore, there is a constant search for new perspective treatment methods, which could prolong the lives of cancer patients and would make them more qualitative One of such methods is sensitized tumour therapy based on quite selective porphyrin accumulation in tumour. This study presents our primary results in − radiosensitized advanced breast cancer therapy using derivatives of hematoporphyrin as a radiosensitizers.
Material and Methods: From 2001 to 2010 a total of 54 female patients with advanced breast cancer underwent radiosensitized treatment (RST). All patients underwent chemotherapy and/or radiotherapy and surgical treatment until RST. In all cases any radical method of treatment was impossible. Multiplex metastatic lesions were established in 53 patients. Brain multiplex metastases were diagnosed in 19 patients, multiplex bones metastases in 27 patients. However 9 patients had both metastases − bones and brain. Lung, liver or soft tissues metastatic lesions were obtained in the rest 17 patients. Hematoporphyrin derivative was injected intravenous; 24, 48 and 72 hours after an injection of the sensitizer tumours were irradiated with gamma rays from radioactive ^{60}Co 2 Gy at a time (6 Gy per course).
Results: As the result of RST complete regression of all treated tumours was observed in 5 patients after two or more RST courses. A significant response − regression of more than 50% of all brain metastases and remission of the disease for over 6 months was established in 17 patients. A partial response was observed in 18 patients with malignant brain tumours. For the rest 14 patients treatment was ineffective. The Karnofsky performance scale index increased immediately in 33 patients following RST treatment. RST was especially effective in the treatment of brain and bones metastatic lesions. As regards brain metastases in one patient all 3 brain metastatic lesions fully disappeared and there were no evidence of any recurrence in brain for 8 months. In 6 patients − regression of more than 50% of all brain metastases and remission of the disease for over 6 months was established. The median survival of 19 patients with multiplex brain metastases was 12 months from the moment of brain metastases detection. As regards bone metastases as the result of RST, all metastatic lesions fully disappeared in 7 patients.
Conclusion: Radiosensitized advanced metastatic breast cancer treatment is a hopeful method, especially when lesions involve the brain and bones.

5090 POSTER

Circulating Tumour Cells or Stem Tumour Cells From Periferal Blood as a Prognostic Marker for the Clinical Course of Patients With Breast Cancer?

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Background: Recently it has been proved and recognized the value of the circulating tumour cells as a predictive entity and marker for various types of neoplasm. This analysis has as a unique purpose to induce the exploration of an entity which is a subgroup of whole cancer disease in a patient called circulating tumour cells which include stemness features, with final purpose their exploitation as a predictive and possible diagnostic marker with relevant value.
Materials and Methods: For the reason of the specific analysis of blood samples from 58 patients with breast cancer has been used in different stages according TNM classification system (between II and IV). From these samples we have perform identification, isolation, quantitation and quality analysis of the circulating tumour cells as well as of the presence of cancer stem cell like cells. The assays that have been followed were on pairs in order to form double platform method in order to avoid false positive or negative results. Parallely, we have requested from the medical centers where the patients were being treated their clinical assessment so far according the commonly accepted response rate classification. From these two groups of data (laboratory and clinical) we have performed a static correlation in order to accept or reject the relevance of the cancer stem cell like cells with the clinical assessment and progress of the disease.
Results: From the whole of the patients a statistic analysis of data has been performed and those samples with enough data have been selected in order to avoid statistical error type I. The statistic analysis showed that there is a strong static correlation and relevance between the existence and the concentration of the cancer stem cell like cells in the blood sample of a patient with breast cancer in relation with the progress of the disease and the response to treatment. The immunphenotype of the cancer stem cell like cells has an additional role to the prognosis of cancer patient, equally important with the previous parameters.
Conclusions: From the present analysis it is shown that the detection of cancer stem cell like cells can have an accurate role as a prognostic marker of the clinical development of the cancer patient disease.

5091 POSTER

Prognostic Significance of Breast Cancer Phenotypes in Patients for Operated Stage IIIC Breast Carcinoma

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Background: Breast cancer is a heterogenous disease with varied clinical behaviour. Aim of this retrospective study was to evaluate prognostic significance of phenotypes in patients for operated breast carcinoma who had $\geqslant$10 lymph node positive before approval of trastuzumab for adjuvant use.
Material and Method: Medical records of 136 breast cancer patients with $\geqslant$10 axillary lymph node involvement diagnosed between 1994–2009 years were evaluated retrospectively. 111 patients whose tumours were known hormon receptor(HR) and HER2 status are included in the study. None of these patients had received neoadjuvant systemic therapy.
Results: Median age was 48 (21−77)years. Median follow-up was 42 (3–155) months. 63 patients were premenopousal. 87% of the patients had invasive ductal carcinoma. Only 9.2% of primary tumours were <2 cm. 95% of the patients had grade 2 or 3 tumours. The proportion of breast cancer phenotypes was 56.8% HR+/HER2−, 32.4% HER2+ and 10.8% triple negative (TN). Nearly all patients underwent modified radical mastectomy and adjuvant radiotherapy. 84 patients received taxan-based adjuvant chemotherapy. At the time of analysis, 75 patients had recurrent disease and 53 patients died due to breast cancer. The percentage of recurrent disease in patient subgroups were as follows: 63.5% for luminal A, 77.8% for HER2+, and 58.3% for TN. Five-year overall survival (OS) and disease-free survival (DFS) rate for entire group was 55% and 22% respectively. Tumour size has shown a negative correlation with OS and DFS (log-rank $p < 0.0001$ and $p = 0.07$ respectively). Although DFS of luminal A was relatively longer than others, it did not reach statistically significance (log-rank $p = 0.2$). Patients with HR+/HER2− tumour had a significantly longer survival time as compared with HER2+ and TN groups (65%, 35% and 37%, respectively; log-rank $p = 0.05$). Univariate analysis showed that larger tumour size, HER2+ and TN subtypes had a negative impact on overall survival. In multivariate analysis these parameters were found independent prognostic factor with a significant negative influence on overall survival in patients who had $\geqslant$10 axillary lymph node metastasis also.
Conclusion: HR+/HER2− breast cancer had better prognosis than TN and HER2+ ones even if they had entensive axillary lymph node metastasis. Prognosis of HER2+ breast cancer was similar TN groups in the absence of adjuvant trastuzumab treatment.

5092 POSTER

DNa Toxicity of Pt(II) and Pd(II) Polyamine Complexes in Human Breast Cancer Cells

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Background: Since the discovery of cisplatin [1], Pt(II) and Pd(II) complexes have become of increasing importance in the design of new anticancer drugs. Among these second and third-generation agents, polyamine chelates have been the target of intense research since they yield DNA adducts with long-distance intra- and interstrand cross-links, not available to the conventional mononuclear platinum compounds [2]. The modified spermidine $H_2N(CH_2)_3NH(CH_2)_3NH_2$ (norspermidine, NorSpd) was used as a ligand to synthesize $Pd_3NorSpd_2$ and $Pt_3NorSpd_2$ chelates.
Material and Methods: Normal human breast epithelial cells MCF-10A and breast cancer cells JIMT-1 and L56Br-C1 were treated for several treatment