

uptake parameters were provided from the raw data as peak intensity (PI), slope (S), area under curve (AUC), mean transit time (MTT). Volume and contrast uptake changes were compared between the complete (CR) and partial responders (PR) (Kruskal-Wallis test, $p < 0.05$). The response was evaluated from the clinical follow up at 3 months.

Results: At date 55 patients were included and 212 DCE-US were performed. The 3 months follow-up is available for 50 patients and preliminary results are available for 35. The global response rate was 85.7% (30/35): 42.8% (15/35) CR and PR, 11.4% (4/35) stable disease, and 2.8% (1/35) non responder. Volume changes at D+1, D+7 did not predict the CR or PR response. Conversely PI and AUC parameters were significantly higher in CR at D-1 and the ratio values of PI and AUC at D+1 and D+7 /D-1 were significantly lower in CR.

Conclusion: Our preliminary results showed that the use of the raw data in US functional imaging should provide acute parameters of perfusion for early prediction (at D+1 and D+7 after treatment) of tumoral response.

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POSTER

Ki67 (MIB1) in differential diagnosis between naevi and melanomas

Y. Vishnevskaya¹, D. Martynkov², N. Savelov¹. ¹Russian N.N. Blokhin Cancer Research Centre, pathology, Moscow, Russian Federation; ²Russian N.N. Blokhin Cancer Research Centre, general oncology, Moscow, Russian Federation

Background: Differentiation between naevi and melanomas sometimes may be difficult on routine histological examination. Ki67 (MIB1) immunolabeling may be useful in this difficult cases.

Materials and Methods: To evaluate Ki67 labeling 65 patients with primary fast growing melanocytic lesions were selected. 20 from Cancer Research Center (Moscow) and 45 were consultative cases. 46 females (71%), 19 males (29%). Of which 13 patients were children under 14 years (20%). Age from 1y. 10 m. to 90 years. Mean age was 36 years. Skin tumors located on trunk in 31 cases (48%), upper and lower extremity in 28 cases (43%), head and neck region in 6 cases (9%). After routine histological examination the primary diagnosis were as follows: naevus with suspicion to melanoma, dysplastic naevus, cellular blue naevus, spindle cell naevus, Spitz naevus, malignant melanoma. All specimens were studied immunohistochemically. We used monoclonal antibody to Ki67 (clone MIB-1, DakoCytomation, USA). Polymer-based detection system with DAB as chromogene was used for immunostaining. In cases with hyperpigmentation we performed Giemse staining for 5 min to avoid misinterpretation of immunostaining. The usage of AEC instead of DAB gave similar results.

Results: In benign melanocytic skin lesions Ki67 labeling was 5–9%. In melanomas Ki67 labeling was more than 10%. After immunohistochemical analysis diagnosis "naevi" was in 40 cases (62%), melanoma in 25 (38%). Benign lesions were observed in 26 females (65%), 14 males (35%). All 13 children had benign tumors. Melanomas localized on skin of trunk in 12 cases (48%), extremities in 10 cases (40%), head and neck region in 3 cases (12%).

Conclusions: Ki67 (MIB1) labeling can be used to differentiate benign and malignant melanocytic skin lesions. Especially in difficult cases on routine histological examination.

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POSTER

Timing of lymph node involvement is an important prognostic factor in stage III patients with thick (>4.0 mm) lower extremity melanoma

K. Herman¹, W. Wysocki¹, A. Komorowski¹, P. Skotnicki¹, J. Tabor¹, E. Luczynska². ¹Cracow Cancer Centre, Surgical Oncology, Krakow, Poland; ²Cracow Cancer Centre, Radiology and Diagnostic Imaging, Krakow, Poland

Background: The prognosis of stage III melanoma patients is very heterogenic, therefore the new TNM system was verified in the prospective material. Who has a real chance for cure in this subgroup of patients?

Materials and Methods: Between 249 melanoma patients who had selective ilio-inguinal lymphadenectomy 185 patients with thick (>4.00 mm) melanoma with full information were analyzed. The average depth of invasion was 5.85 mm, tumor was ulcerated in 67 of all cases (36.2%) and Clark V was assessed in 82 patients (44.3%). The median interval between primary excision and the time of lymphadenectomy was 11.1 months.

Results: In 150 of 185 patients recurrent disease were reported, including skin (29pts, 15.7%), lymph nodes (25pts, 13.5%) and distant metastases (53pts, 28.7%) as a first site of recurrence. Others (43pts, 23.2%) had multifocal recurrences and 35 pts (18.9%) were disease free. Skip metastases (positive iliac and negative inguinal) were found in 26 patients (14%). In multivariate Cox analysis only the time between first surgery and lymphadenectomy and the number of involved nodes were significant. Relative risk of death was 5.2 times higher for subgroups which

had simultaneously lymphadenectomy (compared to lymph dissection performed more than 1 year after primary excision), and circa 2.7 times higher for more advanced N subgroups (pN3v pN1).

Conclusions: The long time before development of lymph node metastases and before node dissection is a favorable prognostic factor independent of other well known parameters. The value of too early lymphadenectomy (including sentinel node procedure) in this group should be reanalyzed very carefully.

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POSTER

Evaluation of serum IL-6, DHEA and DHEAS levels in comparison with two conventional metastatic markers in melanoma

M. Boldizsár¹, B. Vincze¹, B. Kapuvári¹, T. Bánfalvi², K. Borbola², S. Otto³, K. Gilde². ¹National Institute of Oncology, Biochemistry, Budapest, Hungary; ²National Institute of Oncology, Dermatology, Budapest, Hungary; ³National Institute of Oncology, Central Laboratory, Budapest, Hungary

Based on our previous studies 5-S-cysteinyldopa (5-SCD) a precursor of pheomelanin and S-100 beta (S-100B), an acidic, low molecular weight calcium-binding protein proved to be metastatic markers in melanoma. Interleukin-6 (IL-6) is a multifunctional inflammatory cytokine secreted by malignant cells appeared to be involved in the progression of the disease. Dehydroepiandrosterone (DHEA) and its sulfate (DHEAS) are adrenal hormones with immunostimulating effects. According to the recent reports skin produces DHEA and DHEAS due to the presence of their key enzymes. Data revealed that DHEA, as well as DHEAS had a direct effect on the suppression of IL-6 production, while the circulating DHEAS level has been shown to be correlated negatively with serum IL-6. Our study involved 247 patients (man:127, woman:120) with (n = 107) or without (n = 140) metastasis of Stage I-IV following surgical intervention. The objectives were to establish the clinical significance of serum levels of IL-6, DHEA and DHEAS measured simultaneously with the melanoma metastasis markers 5-SCD and S-100B. The absence or presence of metastasis was verified by conventional imaging techniques (abdominal UH, X-ray, MR, CT, etc.).

Serum 5-SCD concentration was determined by HPLC with electrochemical detection. IL-6, DHEA, DHEAS and S-100B levels were measured using RIA/IRMA and ILMA methods.

MedCalc Software statistical analysis (Mann Whitney Test, Receiver Operating Characteristic "ROC" curve, logistic regression and multiple regression analysis) was used. Significant increase in the serum concentrations of 5-SCD, S-100B and IL-6 were found in patients with metastasis compared to metastasis-free cases, while a significant decrease in DHEA and DHEAS levels was detected. A significant positive correlation between 5-SCD and S-100B ($P < 0.0001$), 5-SCD and IL-6 ($P < 0.0001$) as well as S-100 and IL-6 ($P < 0.0001$) were found, respectively. In the contrary, a significant negative correlation between IL-6 and DHEAS ($P < 0.0001$) was observed. In order to study the relation of parameters to the localization of metastasis, survival and the progression of the disease further investigations are needed. These results suggest that simultaneous determination of IL-6, DHEA and DHEAS together with 5-SCD and S-100B measured in melanoma patients could be predictive factors of the progression.

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POSTER

Long-term outcome of patients with advanced melanoma

V. Parolin¹, R. Nortilli¹, C. Strina¹, R. Sabbioni¹, T. Sava¹, G.L. Cetto¹. ¹Policlinico GB Rossi, Department of Clinical and Experimental Medicine, Verona, Italy

Background: Advanced melanoma is a devastating disease with a very poor prognosis, an extremely rare long-term survival and limited treatment options. The aim of this study was to evaluate long-term survival and treatment outcomes in a retrospective review of patients with stage IV melanoma.

Methods: Between 1987 and 2006, 452 patients with cutaneous melanoma were followed at our institute. Survival estimates were calculated using the Kaplan-Meier method and multiple logistic regression analysis was performed to assess correlations.

Results: One hundred eighty-eight patients (41.6%) developed distant metastasis. There were 109 males and 79 females, with average age of 54 years at diagnosis. The median survival time was 9 months. Thirty-two patients underwent surgical resection of distant tumor, alone or in combination with other treatments, with a median survival time significantly superior compared with patients not surgically treated ($p < 0.0001$, HR = 0.3333, 95% CI : 0.2822–0.5840). The metastatic lesions resected were in the brain (28%), in the gastrointestinal tract (19%), in the lung