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Aim: The aim of our retrospective study was to determine the influence of demographic and clinical characteristics of patients, initial stage of disease and tumor size on symptom period in children with malignant tumors.

Introduction: One of the main goals in pediatric oncology is timely diagnosis, cause it allows prompt and more effective treatment and significantly decreases the number of complications. The majority of children with malignant tumors have specific or non-specific symptoms certain time period before the diagnosis which can point towards malignant disease.

Methods: Our study included 296 children with malignant tumors, diagnosed and

treated between 2005 and 2016 in University Children's Hospital in Belgrade. Collected data included sociodemographic parameters, variety of symptoms and its duration, initial stage of disease and size of the tumor.

Results: The most frequent tumors were as follows: neuroblastoma, Hodgkin and non-Hodgkin lymphoma and kidney tumors. Non-Hodgkin lymphoma was diagnosed more frequently in boys, while Ewing sarcoma and primitive neuroectodermal tumors were seen mostly in girls. The majority was admitted at IV stage (30.1%) in opposite to 13.5% of patients in I stage. The average symptom interval was 87.7 days (median 46; SD = 164), from 5 to 2190 days. We have proven that following factors have significant effect on the extent of symptom interval: age ($p < 0.001$), type of tumor ($p < 0.05$), its localization ($p < 0.001$), specific symptoms ($p < 0.05$), and refferal from primary health care unit in comparison to secondary one ($p < 0.05$).

Conclusion: The results of our study give a new insight in symptom interval of children with malignant tumors in our country. More detailed comprehension of patients' characteristics, their diseases, healthcare system and their effect on symptom interval could significantly contribute to early diagnosis, as well as decreased number of complications at admission and during treatment.[1–6]

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PS069

Impact of prior malignancies on the outcome of colorectal cancer: Revisiting clinical trial eligibility criteria

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Aim: To study the impact of prior malignancies on the survival of subsequent CRC.

Introduction: Colorectal cancer (CRC) is the third most common cancer in the US.[1–3] Some studies have correlated a prior history of malignancy with an increased incidence of CRC. Patients with history of cancer are generally excluded in clinical trials. This practice, not only affects clinical trials accrual, but also limits the potential therapeutic options for this population. The rationale behind this exclusion is that a history of malignancy could potentially interfere with the study outcomes.[4] However, little is known about its real impact on survival of subsequent CRC.

Methods: We identified patients with CRC diagnosed between 1973 and 2008 using the National Cancer Institute's SEER database.[5,6] Outcomes of interest were overall survival and cause-specific survival of subsequent CRC in general, and specifically stage IV disease. Unadjusted Kaplan-Meier test and multivariable covariate-adjusted Cox models were used to assess the eligibility of enrollment of stage IV CRC patients in clinical trials.

Results: Overall, 550,325 patients with CRC were identified, of whom 31,663 patients had a prior malignancy. Both, history of prior non-leukemic malignancy and prior leukemia were associated with a worse overall survival (HR = 1.165 95% CI = 1.148–1.183, $P < 0.001$) and (HR = 1.825 95% CI = 1.691–1.970, $P < 0.001$), respectively. However, a history of any prior non-leukemic malignancy showed a favorable colorectal-specific survival (HR = .930 95% CI = .909–.952, $P < 0.001$). Analysis of stage IV CRC showed that a history of any prior non-leukemic malignancy was not associated with a significant difference in overall survival but having a history of leukemia showed a worse overall survival (HR = 1.535, 95% CI = 1.303–1.809, $P < 0.001$).

Conclusion: Clinical trials should take these results into consideration when including/excluding stage IV CRC patients with prior malignancies.

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PS071

Intervention of diabetes mellitus and metabolic risk factors in AMPK-PGC1α-SIRT3 pathway in the human corpus cavernosum

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