CNS METASTASIS IN CHILDREN WITH PRIMARY NON-CNS SOLID TUMORS

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Background: Recurring problem of the primary non-CNS pediatric solid malignancies is the appearance of CNS metastasis during or after effective treatment of the primary tumor. Small number of publication could be found concerning this problem. Type of primary tumor, previous and consecutive treatment and outcome of primary non-CNS pediatric solid tumors with CNS metastasis were investigated at our patients. Method: The data of 387 patients at Semmelweis University 2nd Dept of Pediatrics, Budapest, Hungary were analyzed from 1989 through 2001 with primary non-CNS solid tumors. There were patients with soft tissue sarcoma (35), neuroblastoma (48), Ewing sarcoma (36), non-Hodgkin lymphoma (42), malignant chordoma (1), and other tumors (225). Result: Average rate of CNS metastasis of primary non-CNS pediatric solid tumors were 15/387 (3,8%). The primary tumors were soft tissue sarcomas 6/35(17%), neuroblastoma /48(11%), Ewing sarcoma 2/36 (5,5%), non-Hodgkin lymphoma 1/42 (2%), and one case of malignant hordoma. Time from the start of multimodal therapy to the onset of CNS metastasis in most patients was less than one year. Despite the neurosurgical intervention and the intensive chemotherapy the average survival time was 6,8 months. Conclusions: The occurrence of CNS metastasis of primary non-CNS tumors of childhood is relatively rare. CNS metastasis occurs during the multimodal therapy. There is still no effective therapeutic strategy for the treatment of CNS metastasis of primary non-CNS tumors of childhood.