AB016. Tumors of CNS in the first year of life: characteristics, outcomes and prognoses

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Abstract: CNS tumors in the first year of life differ in histological features, locations, dynamics of development, and clinical presentations. The analysis of diagnostic and therapeutic procedures and outcomes in tumors of CNS was performed to establish factors which have an impact on outcome. A retrospective study of 42 patients was performed according to symptoms, tumor location, histology, methods of treatment and outcome. Functional outcome was evaluated prospectively according to Glasgow Outcome Scale and Lansky Performance Scale. CSN tumors in the first year of life represent 8.89% of all children operated on due to newly recognized CNS tumors. The most common signs in children up to 6 weeks of age were macrocrania and those of increased intracranial pressure whereas in older children focal symptoms prevailed. Nearly 60% of all tumors were located in the supratentorial compartment. There was prevalence of high grade tumors during the first 6 months of life and low grade tumors throughout 6–12 months. There was significantly higher mortality in cases located in the infratentorial region and with high grade tumors. There was also significant deterioration after 5 years that mainly affected patients who received low scores after 1 year, with high grade tumors located in the posterior fossa and incompletely resected. Congenital CNS tumors have poor prognosis both in respect of mortality and quality of life. The outcome of congenital CNS tumors depends on the extent of surgical resection, histopathologic type, and location of the tumor.

Keywords: Brain tumors; congenital tumors; children

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