

PP32

Pediatric cervical spinal cord cavernoma presenting with hematomyelia. Case report

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Introduction: The prevalence of cerebral nervous system cavernomas is 0.5% in the general population, but in children their incidence is 4 times lower than that of the adult population. Spinal cord cavernomas are considered rare (less than 20 cases are reported in the literature). We report a case of cervical spinal cord cavernoma in a 12 years old male child.

Materials and Methods: In December 2012 a 12 years old male child, after minor cervical trauma, presented with a sudden severe tetraparesis. The MRI performed in a peripheral Hospital demonstrated a hemorrhage of the spinal cord at the C6-T1 level. The patient was transferred to our Hospital. Because the previous images were not clear, a MRI was repeated; this showed the presence of a cavernoma of about 5 mm. inside the hematomyelia. After a spontaneous and gradually minimal improvement, the patient in 10th day underwent surgical operation: with use of intraoperative motor and somatosensory evoked potentials monitoring a laminectomy C5-T1 was performed; the dura was open and a posterior midline myelotomy was made; the hematoma was evacuated and the cavernoma resected with microsurgical techniques. The postoperative course was uneventful and the patient was discharged after initial improvement of neurological deficit.

Results: Intensive rehabilitation was performed and at one year follow-up the child has no deficit and walks alone. A cervical MRI showed the absence of cavernoma remnant and of edema.

Conclusion: Surgical treatment produced excellent or good results in about 70% of children with central nervous system cavernomas and these results are particularly related to the preoperative neurological status. In our case a complete excision of hematoma and cavernoma of cervical spinal cord was performed without complications and with an excellent result also if the preoperative neurological deficit were severe.