

Extradural cavernous hemangioma of thoracic spine

Apio Antunes¹, Mateus Felipe Lasta Beck², Atahualpa Caue Paim Strapasson²,
André Cerutti Franciscatto², Mateus Franzoi²

Cavernous hemangioma of the central nervous system is a vascular malformation which is a developmental hamartoma, also known as cavernoma or cavernous malformation or venous angioma¹.

Cavernomas may affect any segment of the neuraxis. Most of these malformations are intracranial: supratentorial compartment is a site usually affected^{2,3}. Pure spinal epidural cavernomas represent approximately 12% of spinal cavernous anomalies⁴ and the thoracic segment is the most frequently affected⁵. There are approximately 80 cases of epidural cavernous hemangioma published in the literature^{4,5}.

We report on a case of thoracic extradural cavernous hemangioma, with emphasis on the clinical aspects.

CASE

A 63-years-old female caucasian patient with a previous history of cryptogenic epilepsy was referred to our emergency department with complaints of a one year history of gait ataxia, numbness and dysesthesia in both lower limbs. In the last 2 months, she also noticed reduced strength in the lower limbs.

Neurological examination showed reduced strength in the lower limbs, grade 4/5 in the right lower limb and grade 3/5 in the left one. There was reduced sensation for all sensory modalities below the T10-11 dermatomes. There was also lower limb hyperreflexia and hypertonia, with bilateral extensor plantar response.

An MRI showed an epidural space-occupying lesion involving the T9-T10 spinal canal levels and extending to



Figure. Preoperative MRI. Sagittal T2-weighted image showing isodense lesion in the posterior extradural space at T9-T10 with ventral dislocation of the spinal cord.

the T9 left foramen, with an intense and homogeneous contrast enhancement (Figure).

The patient was submitted to a T9-T10 laminectomy, including a T9 left foraminectomy. A posterior soft and reddish epidural mass with a good cleavage plan was completely removed. The patient evolved with partial improvement of sensibility in both lower limbs and strength.

Histological examination revealed thin-walled blood vessels lined with a single layer of endothelial cells, surrounded by connective tissue. The microscopic appearance was compatible with cavernous hemangioma.

720

Arq Neuropsiquiatr 2011;69(4)

Letters

DISCUSSION

Cavernoma is a benign tumor and it is considered a dysplasia of the vessels-forming mesoderm⁴. Cavernous hemangiomas in the vertebral, extradural, intradural extramedullary and intramedullary spaces are responsible for 3 to 16% of spinal vascular anomalies^{4,5}.

Extradural cavernous hemangioma represent 4% of all spinal epidural lesions⁵. Modern diagnostic imaging techniques are increasing the number of diagnosis and its frequency may be more than previously reported in the medical literature⁵.

There are four clinical syndromes described: slow and progressive spinal cord syndrome, which is the most common form; acute spinal cord syndrome; back pain; and radiculopathy³.

Imaging diagnostic exams such as spine X-rays, myelography, CT and MRI are important for evaluating the relationship of the lesion with the surrounding anatomic structures¹. Currently, MRI is the modality of choice⁵.

The treatment for these lesions is total removal of the tumor with microsurgical technique¹.

REFERENCES

1. Hatiboglu MA, Iplikcioglu AC, Ozcan D. Epidural spinal cavernous hemangioma-case Report. *Neurol Med Chir (Tokyo)* 2006;46:455-458.
2. Goyal A, Singh AK, Gupta V, Tatke M. Spinal epidural cavernous haemangioma: a case report and review of literature. *Spinal Cord* 2002;40: 200-202.
3. Zevgaridis D, Buttner A, Weis S, Hamburger C, Reulen HJ. Spinal epidural cavernous hemangiomas. Report of three cases and review of the literature. *J Neurosurg* 1988;88:903-908.
4. Saringer W, Nobauer I, Haberer C, Ungersbock K. Extraforaminal, thoracic, epidural cavernous hemangioma: case report with analysis of magnetic resonance imaging characteristics and review of the literature. *Acta Neurochir (Wien)* 2001;43:1293-1297.
5. Santoro A, Piccirilli M, Bristot R, Norgia V, Salvati M, Delfini R. Extradural spinal cavernous angiomas: report of seven cases. *Neurosurg Rev* 2005;28: 313-319.

HEMANGIOMA CAVERNOZO EXTRADURAL DA COLUNA TORÁCICA

Neurosurgical Unit, Hospital de Clínicas de Porto Alegre, Porto Alegre RS, Brazil: ¹Head of Neurosurgical Unit, Associate Professor of Neurosurgery, FAMED, UFRGS; ²Resident of Neurosurgery.

Correspondence: Apio Antunes - Unidade de Neurocirurgia / Serviço de Neurologia do HCPA - Rua Ramiro Barcelos 2350 / 2º andar - 90035-903 Porto Alegre RS - Brasil. E-mail: apioantunes@gmail.com

Received 13 February 2011. Received in final form 31 November 2011. Accepted 7 April 2011.