

Raquideo Cavernous Hemangioma in Pediatric Age. Case Report Clinical

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Abstract

Introduction: Cavernous angiomas are vascular malformations of blood vessels that do not have intercropped nerve tissue, the origin of which is congenital and progress in size throughout life. They are located preferably in the intracranial region being less frequent the spinal localization. Its location is also rare Extradural Pure and in dorsal segments.

It is proposed that 80% of cavernous angiomas are located in the supratentorial space, 15% are infratentorial and 5% in the spinal region.

Objective: Present the clinical, imaging and histopathological findings, emphasizing the unusual location and age in our patient.

Conclusion: Despite the fact that cavernous hemangiomas spinal are uncommon in patients should be taken into account as a differential diagnosis in the presence of occupant injuries of spinal space, because despite being benign their compressive behavior triggers a major neurological clinic and its Exeresis Surgical is curative.

Keywords: *Cavernous Hemangioma; Spinal; Pure Epidural*

Introduction

Cavernous angiomas are vascular malformations congenital progressive growth, formed by blood vessels that do not develop neoplastic development because histologically do not have interlayered nerve tissue.

Your Location is generalmente intracranial supratentorial, Constitute Leaving the spinal location a unusual presentation, equally the location extradural pure and in dorsal segments is uncommon, as it to exist, predominate in the vertebral body. Representant between 5 and 12% of all spinal vascular malformations.

Clinical Case

The clinical case is described of a child of 8 years old that on November 2017, 1 month of evolution, showed sudden onset and without apparent dorsal pain cause, accompanied 1 week later with weakness in lower limbs progressively, leading to the impossibility of wandering, being referred to our hospital where your hospitalization is decided and blood tests are performed, giving you a diagnosis of admission of Guillain Barre. However when the patient's clinical persistence with paraplegia and T4 sensitive level is applied, RM is requested N column where there is evidence of space-occupying injury At intraspinal level Extradural From C4 to D4 (Figure 1).



Figure 1: S/C NMR of cervical and dorsal spine showing posterior epidural mass of 7 cm longitudinal axis at the level of C6 to D4, Hyperintense in both T1 as in T2 with hypointense linear images in all sequences, which causes spinal compression and presented homogeneous reinforcement to contrast management.

A posterior epidural mass of 7 cm is displayed in the cervical and dorsal spine S/C NMR longitudinal axis at C6 to D level 4, hyperintense in both T1 and T2 with hypointense linear images in all sequences, behaving as a possible vascular structure, which reinforced homogeneously after intravenous contrast administration.

Anterior medullary compression was evidenced, which is hyperintense from C4 to D9 with reinforcement posterior to contrast management. It was not associated with lesions of vertebral bodies or posterior elements.

With this background, the patient was taken to a surgical table where it is performed Laminotomy From C4 to D4 Plus Excresis total space occupant injury Intrathecal epidural Fibrous-looking extramedullary, Morula do With Trabeculae and neovascularization, of reddish brown color (Figure 2).



Figure 2: Macroscopic vision: Intrathecal Space Occupant lesion Fibrous-looking extramedullary epidural, Morula do With Trabeculae and neovascularization, reddish-brown color.

During the monitoring of evoked potentials transoperatives there was total absence PESS and potential bilateral tibial motor, having an increase of amplitude of 3 Microvolts in the middle PESS.

The histopathology porte described lesión with neovascularization plus areas of hemosiderina and endothelial wall compatible with cavernous hemangioma (Figura 3).

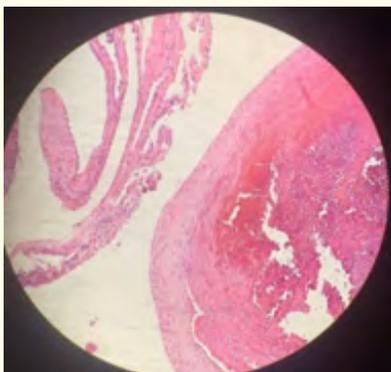


Figure 3: Microscopic vision: Injury CoN NEOvascularización accompanied Wall fragments Vascular coated by endothelium Flat and endothelial proliferación more hemosiderin and Thrombi in Organization Compatible with cavernous hemangioma.

Discussion

Cavernous angiomas are congenital vascular malformations of progressive growth, conformed by blood vessels, deprived of elastic layer and smooth muscle, which do not present neoplastic development because they do not histologically have tissue nervously interspersed. His presence in pediatric age is very rare, Alvarez., *et al.* Published the case of an infant girl with an acute spinal compression syndrome secondary to a spinal epidural hematoma produced by a Cavernoma Epidural spinal [1,2].

Its location is usually intracranial supratentorial, constituting the spinal location an unusual presentation, likewise the location extradural pure and in dorsal segments is uncommon, to exist, predominate in the vertebral body [1,3].

Only 80 cases of this type have been reported in the literature since its first description by Globus and Doshay in 1929 [4].

They represent between 5 and 12% of all spinal vascular malformations.

It is proposed that 80% of cavernous angiomas are located in the supratentorial space, 15% are infratentorial and 5% in the spinal region.

Clinically the sudden increase in volume of the lesion, either by thrombosis or hemorrhage, causes acute medullary compression syndrome, however the usual is Slow evolution Of the symptomatology characterized by radiculopathy, Dorsalgia or medullary compression syndrome [5,6].

At the level of image exams, it is indicated the MRI where they are presented as Images Isointense T1 and Hyperintense in T2, having homogeneous enhancement when administering contrast. EL Widening of the intervertebral foramen and vertebral erosion can be seen in computed axial tomography [1,5,7,8].

The differential diagnosis by image comprises Neurinomas, Meningiomas, lymphomas, metastases, and extruded discs. Neurinomas are often not as delimited as Cavernomas; The Meningiomas they have wide implantation base; Lymphomas do not enlarge the intervertebral foramen and are usually isointense in T2; Metastases produce marked erosion of adjacent bone structures and extruded discs often have continuity with Intervertebral space [3,6,9,10].

The Exeresis Surgical total of these lesions is indicated, however when the exeresis is incomplete radiation therapy has been applied [1,6,8,10].

Vascular malformations of the spine are rare in the pediatric population, however Despite its histological benignity can be potentially prejudicial, By the degree of compression they can cause, For which surgery constitutes the ideal treatment [1,6,11].

Conclusions

1. Although spinal vascular malformations are rare in children. The case of our 8-year-old patient requires a detailed review of the possible differential diagnoses, since in imaging examinations an occupying lesion of intrathecal space was evidenced Extradural That could correspond to Meningioma, lymphoma or even metastases.
2. Our patient debuted with dorsal and paraplegia pain of progressive establishment, which enabled other diagnoses, being catalogued in a beginning as a syndrome of Guillán Barré, which corroborates that despite being histologically benign, spinal arterio-venous malformations can be potentially prejudicial by the degree of spinal compression they exert.
3. A Cavernous hemangioma Epidural pure spinal is rare, however it should be considered as a differential diagnosis in case of being injured occupants of space spinal Extradural In children since a total surgical excision is curative as is the case of our patient.

Bibliography

1. Téllez G., *et al.* "Angioma cavernous espinal Extradural Dorsal". *MEDISAN* 16.6 (2012): 973.
2. Alvarez, C., *et al.* "Paraplegia in infant by hematoma Extradural Due to bleeding from Cavernoma Spinal". *Neurosurgery* 10 (1999): 367-371.
3. Satpathy DK., *et al.* "Spinal epidural cavernous hemangioma UIT myelopathy: a rare lesion". *Neurology India* 57.1 (2009): 88-90.
4. Iglesias S., *et al.* "Cavernoma Epidural spinal in Hourglass: presentation of a case and review of the literature". *Neurocirugía* 19.3 (2008): 248-253.
5. Cortés Vela JJ., *et al.* "Intracranial cavernous malformations: spectrum of manifestations". *Neuroradiological. Radiology* (2011).
6. Batra S., *et al.* "Cavernous malformations: natural history, diagnosis and treatment". *Nature Reviews Neurology* 5.12 (2009): 659-670.
7. Hatiboglu MA., *et al.* "Epidural spinal cavernous angioma". *Neurologia Medico-Chirurgica* 46.9 (2006): 455-458.
8. Sanghvi D., *et al.* "Dorsal spinal epidural cavenous hemangioma: case repot and review of the literature". *Journal of Craniovertebral Junction and Spine* 1.2 (2010) 122-125.
9. Labauge P. "Familial forms of central nervous system cavernomas: from recognition to gene therapy". *Neurochirurgie* 53 (2007): 152-155.
10. Sarikaya-Seiwert S., *et al.* "Solitary spinal epidural cavernous angiomas in children presenting with acute neurological symptoms caused by hemorrhage". *Journal of Neurosurgery: Pediatrics* 5.1 (2010): 89-93.
11. Yadla S., *et al.* "Cerebral cavernous malformations as a disease of vascular permeability: from bech to bedside with caution". *Neurosurgical Focus* 29.3 (2010): E4.

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