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Spinal Intradural Extramedullary Capillary Hemangioma Mimicking Meningioma

Moeinadin Safavi, Shahriar Dabiri

Dept. of Pathology, Afzalipour School of Medicine, Kerman University of Medical Sciences, Kerman, Iran
Corresponding author and reprints: Shahriar Dabiri MD FIAC, Pathology Department, Afzalipour Hospital, Kerman University of Medical Sciences, 22 Bahman Blvd., Kerman, Iran. Tel: +98-341-322-2250-60, Fax: +98-341-322-2763, E-mail: dabiri12@yahoo.com.

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Dear Editor-in-Chief

Hemangiomas are considered as vascular malformations categorized by the type of vascular channel to capillary, cavernous, venous or arteriovenous (1). Their usual locations are soft tissue, cutaneous or subcutaneous tissue and bone especially vertebra (2). However, intradural extramedullary hemangiomas are rare and most of them fall in cavernous type category. Hereby, we report a woman with intradural extramedullary capillary hemangioma which is exceedingly rare. The patient was a 45-yr-old woman with thoracic spine pain for 6 month. She also had progressive parasthesia of lower limbs without muscular weakness or sphincteric problems. The spinal magnetic resonance imaging revealed a rather well-circumscribed intradural extramedullary mass at T9-T10 level with a broad dural base mimicking dural tail sign suggestive for meningioma. The mass had isointensity at T1 weighted images and hyperintensity at T2 weighted images. It was homogenously intensified after contrast administration (Figure 1). Then, the patient underwent surgery with preoperative diagnosis of meningioma. After laminectomy, an intradural mass was explored which was spongy and soft. Resection of mass led to bleeding controlled by cauterizing.

Histopathologic findings revealed a well circumscribed neoplastic growth composed of capillary sized vessels and spindle shaped stromal cells proliferation (Figure 2). Immunohistochemically, the lesion was positive for CD34 in vascular elements and negative for Epithelial Membrane Antigen (EMA). IHC results ruled out angiomatous meningioma and were in favor of cellular capillary hemangioma.

To best of our knowledge, 36 cases of intradural extramedullary capillary hemangioma have been reported so far (3). They usually manifested in fourth to sixth decades of life. They had a male predominance with a 3:1 ratio. Most of previous cases were located in lumbar or conus medullaris region followed by thoracic spine especially between T4-T11 vertebrae. They had various clinical presentations as back pain, leg pain, sensory abnormalities, parasthesia, weakness, gait disturbance and urinary incontinence (3).

Typical MR imaging findings in intradural capillary hemangioma are homogenous and isointense signal compared to spinal cord on T1 weighted images, iso-hyperintense signals on T2 weight images and a strong postcontrast (gadolinium) enhancement (2, 3). Anyhow, the differential diagnosis of Intradural



Fig. 1
Post contrast T1 weighted image showed a spinal intradural extramedullary lesion with homogenous enhancement and a broad dural base

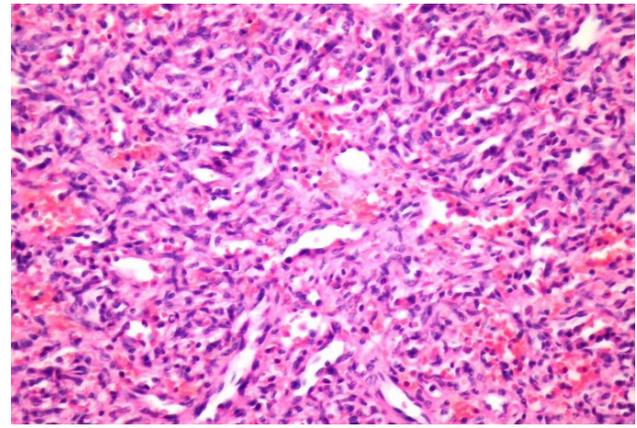


Fig. 2
Histologic sections revealed a relatively well circumscribed proliferation of capillary size vessels along with spindle cells

extramedullary lesions with similar MR features and postcontrast enhancement is various including meningioma, schwannoma, hemangioblastoma and paraganglioma (5).

Radiologic findings are non-specific and one should consider capillary hemangioma as the differential diagnosis of these intradural extramedullary lesions, especially the most common one, meningioma.

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