### Letters to the Editor

Congenital abnormalities not related to the fusion site are observed in 10% to 20% of cases of conjoined twins. Diaphragmatic hernia such as the one observed in the present case is one of the described findings<sup>(7)</sup>. Upper eyelid coloboma that was also identified in the present case is considered to be a rare abnormality<sup>(8)</sup>.

Thus, the correct determination of the type of imperfect twinning as well as of the fusion extent may be useful in the evaluation of the condition severity and in the postnatal surgical planning. Determining the severity of the condition is of paramount importance considering that the Brazilian laws allows for gestation termination in cases where the extrauterine life is not possible<sup>(3)</sup>.

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# Epidural cavernous hemangioma of the spine: magnetic resonance imaging findings

## Dear Editor,

A previously healthy male, 52-year-old patient complaining of progressive lower limbs paraparesis for four months and recent onset of urinary incontinence, with no history of local trauma. At admission, the patient was afebrile and, at physical examination presented with spastic paraparesis with sensitive level at D8. Laboratory tests (blood count and biochemical blood tests) did not demonstrate any significant alteration.

Magnetic resonance imaging (MRI) demonstrated the presence of an elongated lesion with regular contour, intermediate signal intensity on T1-weighted and marked hypersignal on T2weighted sequences, with intense and homogeneous contrast en-

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hancement, located in the epidural space, extending from D5 to D7. Such a lesion determined a significant narrowing of the rachidian canal and medullary compression on the corresponding segments, with consequential medullary hypersignal on T2-weighted and STIR sequences compatible with compressive myelopathy (Figure 1).

The patient was submitted to surgical procedure where a wine-colored lesion compressing the dural sac was observed. The lesion was completely resected with no significant complication. Anatomopathological analysis demonstrated proliferation of middle-sized vessels filled with blood, with no atypias, compatible with cavernous hemangioma.

Hemangiomas are benign proliferative vascular lesions. According to the predominant type of vascular canal, hemangiomas are classified as follows: venous, arteriovenous, capillary and cav-



Figure 1. Sagittal MRI T1-weighted (A), T2-weighted (B), STIR (C) and T1-weighted sequences with fat saturation following intravenous contrast injection (D) demonstrating an elongated, expansile well-delimited lesion with regular contour, located in the epidural space of the posterior region of the dorsal spine, extending from D5 to D7. The lesion presents intermediate signal on T1-, marked hypersignal on T2-weighted and STIR sequences, with intense and homogeneous contrast enhancement, suggestive of hemangioma. Such a tumor causes remarkable narrowing of the rachidian canal, determining high signal intensity in the spinal cord (better visualized on STIR sequences) due to compressive myelopathy.

#### Letters to the Editor

ernous<sup>(1)</sup>. A purely epidural hemangioma is a rare lesion, representing only 4% of epidural lesions, and the cavernous subtype is the most commonly found in this region<sup>(1)</sup>. The lesion is located in the posterior region of the spine in up to 93% of cases and the dorsal spine is affected in 80% of cases<sup>(2)</sup>. Epidural cavernous hemangioma is most commonly found in men (at a 2:1 ratio) aged over  $40^{(2)}$ . Vertebral intraosseous involvement is frequent, with a prevalence of  $11\%^{(3)}$ .

The clinical condition includes dorsal or lumbar pain, with signs of radiculopathy and myelopathy, and the patient is referred to undergo imaging study for suspicion of disk herniation. The clinical presentation is normally insidious, but acute clinical deterioration due to sudden increase in the lesion volume resulting from hemorrhage or venous occlusion<sup>(4)</sup>. As the lesion is highly vascularized, the diagnostic suspicion is very important for the surgical planning, reducing the chances of bleeding during the procedure. Incomplete resection due to bleeding might lead to persistence of clinical symptoms and reoperation would be difficult because of local adhesions<sup>(1,4)</sup>.

Epidural hemangiomas are described as elongated and lobulated lesions, possibly with distinctive imaging findings depending on the subtype. Venous and arteriovenous hemangiomas present as cystic masses, generally with hypo- or intermediate signal on T1-weighted and marked hypersignal on T2-weighted images with peripheral contrast enhancement. Capillary and cavernous hemangiomas are seen as solid masses, with hypo- or intermediate signal on T1-weighted, marked hypersignal on T2weighted images, and intense contrast-enhancement<sup>(1,4–6)</sup>. The main differential diagnoses of epidural hemangiomas include nerve sheath tumor, meningioma, lymphoma, abscess and extradural hematoma<sup>(1,6–8)</sup>.

## Giant pilomatrixoma: conventional and diffusion-weighted magnetic resonance imaging findings

## Dear Editor,

Over the last two years, a 32-year-old man presented growth of a little painful firm nodule located in the high parietal region. Due to the cosmetic deformity, the patient sought medical assistance and underwent laboratory tests whose results were normal, and magnetic resonance imaging (MRI) (Figure 1) that demonstrated the presence of a heterogeneous lesion with predominance Finally, cavernous hemangioma should be considered in the differential diagnosis of epidural lesion with hypersignal on T2weighted images and prominent contrast enhancement, particularly in case where the posterior region of the dorsal spine is affected.

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of iso/hyposignal on T1-weighted, low signal intensity on T2weighted, foci of signal drop on magnetic susceptibility sequences and absence of diffusion restriction. After gadolinium injection, exuberant contrast enhancement was observed. Histopathological analysis revealed the presence of basaloid cells associated with phantom cells, with areas of foreign-body-type granulomatous reaction compatible with pilomatrixoma. Surgical resection was performed and no recurrence has been observed up to the present moment.

Most of times, tumor-like processes in the skull are associated with bone or central nervous system lesions, as reported by



Figure 1. A: Coronal, T2-weighted sequence showing a tumor in the left parietal region with predominance of hyposignal, intermingled with areas of cystic/necrotic degeneration. B: Axial functional MRI, diffusion-weighted sequence does not demonstrate areas of hypersignal. C: Axial image, apparent diffusion coefficient mapping corroborating the absence of areas of diffusion restriction. D: Contrast-enhanced sagittal T1-weighted sequence showing exuberant and heterogeneous contrast enhancement.