ernous[1]. 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[1]. 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[2]. 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[4]. 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[1,4].

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 T2-weighted images, and intense contrast-enhancement[1,4–6]. The main differential diagnoses of epidural hemangiomas include nerve sheath tumor, meningioma, lymphoma, abscess and extradural hematoma[1,6–8].

Finally, cavernous hemangioma should be considered in the differential diagnosis of epidural lesion with hypersignal on T2-weighted images and prominent contrast enhancement, particularly in case where the posterior region of the dorsal spine is affected.

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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 of iso/hyposignal on T1-weighted, low signal intensity on T2-weighted, 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

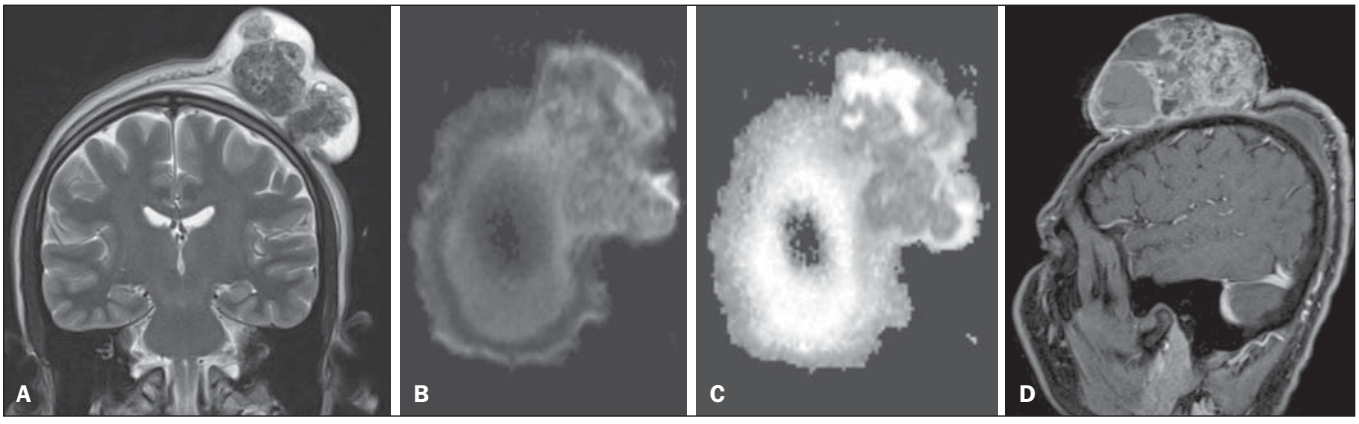

Figure 1. A: Coronal, T2-weighted sequence showing a tumor in the left parietal region with predominance of hyposignal, intermingled with areas of cystic/necrotic degeneration. **B:** Axial functional MRI, diffusion-weighted sequence does not demonstrate areas of hypersignal. **C:** Axial image, apparent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

recent studies developed by Brazilian authors[1–7]. However, skin tumors are rarely similar to each other.

Pilomatrixoma is a rare benign skin tumor originating from hair follicle matrix, most frequently located in the head or neck[8–10]. It is the most common solid skin tumor in patients under the age of 20[9]. Giant pilomatrixomas (> 5 cm) are not frequently found and malignant transformation rarely occurs. Clinically, it manifests as a slow-growing, painless or little painful lesion, sometimes in association with bluish coloration of the skin[11]. Histopathological analysis gives the definitive diagnosis, and the treatment is surgical resection with margins of 1 to 2 cm to avoid recurrence.

At MRI, most lesions are well delimited, measuring up to 3 cm, with homogeneous iso-signal on T1-weighted and low signal intensity on T2-weighted sequences. However, reports about striated lesions with hypersignal from the center to the periphery are found in the literature[8,10,12]. Calcifications are commonly found and may not present expressive contrast enhancement or even enhance only in the already described areas of hypersignal on T2-weighted sequences[8,10,12]. Besides the uncommon lesion size (10.2 cm), heterogeneous signal was observed on T1- and T2-weighted images, with predominance of iso/hyposignal on T2-weighted images, intermingled with areas of cystic/necrotic degeneration and foci of signal drop on magnetic susceptibility sequences. After gadolinium injection, exuberant contrast enhancement of the solid portions of the tumor was observed. Recent studies highlight the utilization of diffusion-weighted sequences in the evaluation of head and neck lesions, demonstrating that apparent diffusion coefficient values $< 1.22 \times 10^{-3}$ mm^2/s are suggestive of malignancy[13]. In the present case, such a value was 1.35×10^{-3} mm^2/s, corroborating the previously described findings. Other advanced MRI sequences might add further data, particularly in the prediction of benignity and malignancy[14,15].

Finally, the diagnosis of pilomatrixoma should be considered in patients under the age of 20 presenting with skin tumors, particularly those located in the head and neck, and typical imaging findings should not be expected in cases of giant pilomatrixomas.

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