Spinal cavernous angioma complicated by hemorrhage: susceptibility-weighted imaging findings

Angioma cavernoso medular complicado por hemorragia: achados na RM ponderada em susceptibilidade magnética

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A 16-year-old boy presented with posterior cervical pain radiating to the right upper limb. Cervical magnetic resonance imaging (MRI) revealed an intramedullary cavernous angioma (CA) in the level of C2. Susceptibility-weighted imaging (SWI) showed longitudinal hypointensity from the bulb to the level of T1, which was suggestive of a longitudinal fiber-dissecting hemorrhage (Figure).

Intramedullary CAs are associated with an increased risk of hemorrhage. SWI is optimized for detection of magnetic susceptibility effects of blood products¹. SWI is more sensitive for detection of CAs in the brain², but the usefulness of SWI in cases of spinal CAs is not known.

Figure. T1- (A) and T2-weighted (B) images show a nodular lesion, with a hyperintense central focus in both images and a peripheral halo of hypointensity in the T2-weighted image, suggestive of a CA. (C) SWI showing a longitudinal hypointensity in the posterior portion of the medulla, which extends from the medulla oblongata to the level of T1. The T1- and T2-weighted images do not obviously show the hemorrhage or its extension. In the T2-weighted image, the perilesional hemorrhage is characterized by a discrete longitudinal image, but SWI shows its extension more conspicuously.

References