Tumoral calcinosis of the cervical spine in an infant

Case illustration

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This 17-month-old boy was referred to our institution for evaluation and treatment of torticollis. His mother reported a 3- to 4-week history of abnormal head positioning. The patient held his head rotated to the left and tilted toward the right shoulder, and his head could not be brought back to midline either passively or actively. There was no evidence of facial or cranial asymmetry. Plain radiographs, computerized tomography, and magnetic resonance imaging revealed a large partially calcified mass adjacent to C-1 and C-2 (Figs. 1 and 2). Preoperative differential diagnosis included neuroblastoma, calcified hematoma, ganglioneuroma, and tumoral calcinosis. Values on all laboratory tests were normal, including all serum markers for neuroblastoma.

The mass was resected via a far-lateral approach. The spinal accessory nerve was identified and decompressed, and the portion of the mass within the spinal canal was resected via a limited laminectomy at C-1. The mass was composed of a well-defined capsule surrounding thick, chalky, white fluid. Frozen sections showed benign fibrous tissue, and the final pathological determination was consistent with tumoral calcinosis.

Tumoral calcinosis involving the spine is extremely rare. Riemenschneider and Ecker4 reported a case affecting the lumbar spine in 1952, and Kokubun, et al.,3 reported the first case of tumoral calcinosis involving the upper cervical spine in 1996. This lesion has been reported adjacent to the knee and in the hand in children, but tumoral calcinosis of the cervical spine is a previously unreported lesion in this population.1,2 Mass lesions involving the cervical spine are a rare cause of torticollis in children. However, in any case of limited joint motion associated with a calcified juxtaarticular mass, tumoral calcinosis should be considered in the differential diagnosis.

References