## **GRAND ROUNDS**

Expert's comment concerning Grand Rounds case entitled "Solid variant of aneurysmal bone cyst on the cervical spine of a child: case report, differential diagnosis, and treatment rationale" (by Christos Karampalis, Robert Lenthall, and Bronek Boszczyk)

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This article reports a case of solid variant aneurysmal bone cyst (S-ABC) in the cervical spine of a child [1]. Aneurysmal bone cyst (ABC) of the vertebral column occurs infrequently and, as the article points out, the solid variant is exceedingly rare in the spine. While MRI can be very helpful in formulating a differential diagnosis and differentiating S-ABC from more typical cystic ABC, imaging studies cannot always differentiate S-ABC from other benign bone lesions. Performing an incisional biopsy with intra-operative frozen section is an important first step in our approach to treatment of this and other forms of ABC.

Traditional treatment of ABC with intralesional curettage and bone grafting produced recurrence rates of 10–60 % [2]. To limit recurrence, we recommend a four-step approach to treatment of ABC, including the solid variant form. This includes (1) intralesional curettage, (2) cauterization of the osseous cyst wall, (3) extended curettage with a high-speed diamond burr, and (4) dilute (5 %) phenol application [3]. Titanium instrumentation may be necessary after removal to reestablish spinal stability. As in this case, arterial embolization can be used as an adjunct to surgical excision.

## References

- Karampalis C, Lenthall R, Boszczyk B (2012) Solid variant of aneurysmal bone cyst on the cervical spine of a child. Case report, differential diagnosis and treatment rationale. Eur Spine J (submitted)
- Dormans JP, Moroz L (2007) Infection and tumors of the spine in children. J Bone Joint Surg 89(1):79–97
- Garg G, Mehta S, Dormans JP (2005) Modern surgical treatment of primary aneurysmal bone cyst of the spine in children and adolescents. J Pediatr Orthop 25:387–392

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