

Commentary

Aneurysmal bone cysts (ABC) of the spine are rare benign tumor that can create several problems in terms of severe pain, deformity, neurological deterioration. Treatment options include intralesional curettage, complete excision, embolization, radiation therapy, intracystic injection of calcitonin and methylprednisolone and combination of these. Surgery is mandatory when the mass compresses the neural structures or destroys the integrity of the vertebrae. A total excision is coupled with higher and stable rate of cure. Complete resection of the lesion means the entire cyst walls and spongy tissues that are lined with hypervascular membrane.^[1] Actually, relapses are better defined as continued progression of residual disease left behind by the incomplete treatment rather than regrowth of lesions. The aggressive surgical strategy implies that destroyed spinal segment must be in some way replaced or spinal stability restored.^[2,3] In those cases where ABC are diagnosed incidentally or are of little volume, a watchful wait can be an option reserving the treatment to those who expand rapidly. In some other cases, an intracystic injection of different substances can lead to an ossification of the mass and to an arrest of the growth.^[4]

This paper from Joaquim *et al.*,^[5] illustrates well 2 rare cases of aneurysmal bone cysts (ABC) of the craniocervical region. Apart from the rarity of this occurrence, the authors have to be congratulated for the brilliant management of these two complex cases in a relatively low-resources environment. In fact, the highly vascular structure of ABC makes surgical extirpation particularly dangerous since intraoperative blood loss can be fatal, especially in pediatric patients' nature. That's why intraarterial embolization is strongly desired, when feasible, in order to devascularize the mass. However, ABC are insidious in their clinical presentation and in their natural history as well. Actually, the more these tumors arise in complex location and with large volumes, the more the risks of relapse and/or spinal deformation are around the corner. In the current case number 2, the involvement of the occipital condyle made resection for sure more troublesome. Moreover, the necessity to drill the condyle away for achieving total resection puts into question the need for an occipito-cervical

fixation. Rightly, the authors propose to strictly follow-up the patient in order to rule out a progressive craniocervical instability. As our rule, we have the attitude to consider the persistent neck pain as a sign of instability even in absence of radiological misalignment. Still, it's my opinion that fusing the occipito-cervical junction during the first surgery would have avoided the risks for the second surgery vertebral artery dissection that could be embedded in hard scar tissue.

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References

1. Liu JK, Brockmeyer DL, Dailey AT, Schmidt MH. Surgical management of aneurysmal bone cysts of the spine. *Neurosurg Focus* 2003;15:E4.
2. Boriani S, De Iure F, Campanacci L, Gasbarrini A, Bandiera S, Biagini R, *et al.* Aneurysmal bone cyst of the mobile spine: Report on 41 cases. *Spine* 2001;26:27-35.
3. Kransdorf MJ, Sweet DE. Aneurysmal bone cyst: Concept, controversy, clinical presentation, and imaging. *AJR Am J Roentgenol* 1995;164:573-80.
4. Tonomura ET, Ramos P, Hemais PM, Marchiori E, Gasparetto EL. Aneurysmal bone cyst at C2. Imaging evaluation after intralesional injection of calcitonin and methylprednisolone. *Arq Neuropsiquiatr* 2008;66:711-5.
5. Joaquim AF, Ghizoni E, Giacomini L, Tedeschi H. Aneurysmal bone cysts of the craniocervical region – surgical technique. *J Neurosci Rural Pract* 2014;5:55-8.

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