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Letter to Editor

Occipital Condyle-C1 Complex Screw for Fixation of Basilar Invagination Patients with Atlas Assimilation

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To the Editor;

We read with interest the recent article by Tong et al.(1). In this article, the authors report on C1-occipital condyle complex (CC complex) screw fixation technique in basilar invagination patients with atlas assimilation. The authors reported eight consecutive patients operated via this technique combined with C2 pedicle screw fixation. Tong and colleagues performed the reduction of this deformity with applying power on CC complex-C2 pedicle screw which was shown in Figure 2 of this article (1). At the follow-up period of this series, none of the patients had implant failure with successful fusion.

The same group reported their experience of posterior reduction of the fixed atlantoaxial dislocation (AAD) and basilar invagination (BI) by atlantoaxial facet joint release and fixation in larger series (2,3). They also stated that the irreducible nature of AAD and BI is due to the olisthy of the atlantoaxial facet joint and this malalignment can be reduced after opening the C1-C2 facet joint which guarantees longer bone purchase with immediate stabilization (2).

Even the main aim of this article was to describe the safe and rapidly placement of the CC complex screw fixation tech-

nique, facet joint release was not described at the published article (1). It should be discussed why it was not performed or if it was, should be added to the surgical technique by the authors.

We strongly believe that; facet joint release is the key surgical procedure that addresses the etiology of the deformity at BI with AAD, which may also help to perform better reduction of the deformity, without implant failure at long term follow-up.

■ REFERENCES

1. Tong H, Li L, Yu XG, Zhang Y, Peng W: Occipital condyle-C1 complex screw for fixation of basilar invagination patients with atlas assimilation. *Turk Neurosurg* 26: 758-762, 2016
2. Yin YH, Tong HY, Qiao GY, Yu XG: Posterior reduction of fixed atlantoaxial dislocation and basilar invagination by atlantoaxial facet joint release and fixation: A modified technique with 174 cases. *Neurosurgery* 78: 391-400; discussion 400, 2016
3. Yin YH, Yu XG, Qiao GY, Guo SL, Zhang JN: C1 lateral mass screw placement in occipitalization with atlantoaxial dislocation and basilar invagination: A report of 146 cases. *Spine (Phila Pa 1976)* 39: 2013-2018, 2014



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