

## Letter: C1 Transverse Process Resection for Management of Jugular Stenosis

To the Editor:

We read with great interest the paper by Fritch et al<sup>1</sup> reporting a case of idiopathic intracranial hypertension associated with a bilateral stenosis of the internal jugular vein (IJV).

This is a very interesting case treated by C1 lateral mass resection and venous stenting.

We found the surgical technique very nice and elegant, although we were wondering why the choice was to resect the lateral mass of C1 rather than the styloid process (which is clearly elongated, as shown by Figure 3<sup>1</sup>).

We had experience with 8 symptomatic patients suffering from the eagle jugular syndrome<sup>2</sup> with impingement of IJV by a conflict between the arch of C1 and an elongated styloid process.

We treated 1 patient with styloidectomy and venous stenting with good results. The same procedure was reported by Lin et al<sup>3</sup> with a good outcome.

Indeed, we believe the lateral mass resection of C1 could be a more complex and riskier procedure (especially for vertebral artery injuries) than a styloidectomy.

Since pre- and postoperative angiography also showed a near-complete occlusion on the left IJV (Figures 3 and 4<sup>1</sup>), did the authors consider performing venous manometry and eventually also decompress this side before repositioning the lumbar-peritoneal shunt?

Finally, we are grateful to Fritch et al<sup>1</sup> for showing a different approach and reporting their experience and technique on this particular kind of rare disease. Moreover, we do believe surgical treatment for stenosis of IJV could be considered in long-term symptomatic patients after conservative attempts, especially in patients also presenting signs of intracranial hypertension.<sup>4</sup>

## Disclosures

The authors have no personal, financial, or institutional interest in any of the drugs, materials, or devices described in this article.

**Alba Scerrati, MD** \*‡

**Paolo Zamboni, MD**‡§

**Pasquale De Bonis, MD PhD**\*‡

\*Department of Neurosurgery  
S. Anna University Hospital  
Ferrara, Italy

‡Department of Morphology  
Surgery and Experimental Medicine  
University of Ferrara

Ferrara, Italy

§Vascular Diseases Center  
Translational Surgery Unit  
University of Ferrara

Ferrara, Italy

## REFERENCES

1. Fritch C, Voronovich Z, Carlson AP. C1 transverse process resection for management of jugular stenosis. *Oper Neurosurg*. 2020;19(2):E209-E213.
2. Zamboni P, Scerrati A, Menegatti E, et al. The eagle jugular syndrome. *BMC Neurol*. 2019;19(1):333.
3. Li M, Gao X, Rajah GB, et al. Styloidectomy and venous stenting for treatment of styloid-induced internal jugular vein stenosis: a case report and literature review. *World Neurosurg*. 2019;130:129-132.
4. De Bonis P, Menegatti E, Cavallo MA, et al. JEDI (jugular entrapment, dilated ventricles, intracranial hypertension) syndrome: a new clinical entity? A case report. *Acta Neurochir (Wien)*. 2019;161(7):1367-1370.

Copyright © 2020 by the Congress of Neurological Surgeons

10.1093/ons/opaa200