


In Reply to: “Position of the Styloid Process in Eagle’s Syndrome”

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Sponsorships or competing interests that may be relevant to content are disclosed at the end of this article.

We appreciate Dr Fatma Caylakli’s commentary regarding “Angulation of the Styloid Process in Eagle’s Syndrome” by Yavuz and colleagues,1 which we cited in our manuscript2 characterizing the anatomy of the stylohyoid chain in Eagle’s syndrome (ES). Both articles agree the pathophysiology in ES is likely related to irritation of surrounding soft tissues by the styloid process (SP).

The studies are similar, measuring the length, medial-lateral angulation (MLA), and anterior-posterior angulation (APA) of the SP in ES patients and asymptomatic controls (ACs). We used 3-dimensional computed tomography reformats (3D CTRs) and conventional computed tomography for measurements versus radiographs in the study by Yavuz et al.1 We prefer the use of 3D CTRs, which provide an unobstructed view of the SP and avoid projection errors that can confound measurements when radiographic positioning is suboptimal.

The techniques for measuring the APA and MLA differ. Our technique and control results2 are similar to those of Ramadan et al.3 Yavuz et al1 reported a difference in APA and SP length between ES and AC patients. We did not detect a difference in SP length, APA, or MLA between ES and AC patients. If we correct our APA measurements to approximate the measurement used by Yavuz et al,1 our average corrected APA in ACs is 23 ± 8 mm, similar to the control mean reported by Yavuz et al1 but no different from the corrected APA in our ES patients. Using 3D CTRs in a larger study, Okur et al4 also found no difference in APA measurements between AC and symptomatic patients. Our sample size limits the power of our study, and a larger sample may be required to detect a true, albeit small, difference in APA or MLA angulation between ES and AC patients.

We believe irritation of the glossopharyngeal nerve and surrounding soft tissues by the SP to be the likely etiology of pain in ES. Our finding of a shorter distance from the SP tip to the tonsillar fossa in ES patients (12.7 mm in ES vs 24.8 mm in AC; *P* < .0005) supports this hypothesis. This measurement may ultimately be more comprehensive than individual SP measurements (including APA), as it may take into account variations in the craniocaudal length and angulation of the cervical spine, the length and curvature of the SP, as well as the anatomy of the lateral pharyngeal wall. Larger studies are required to confirm our results.

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Disclosures

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References


