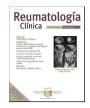


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Images in Clinical Rheumatology

Hypertrophic anterior cervical osteophyte

Osteófito cervical anterior hipertrófico

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An 88-year-old man with hypertension attended an 'basic health checkup' and underwent annual endoscopic screening with no abnormal findings in the pharynx. At presentation, an extrinsic posterior hypo-pharyngeal mass covered by normal mucosa was found (Fig. 1A, arrow). Subsequent radiographs and computed tomography scans of the neck confirmed pharyngeal compression by ossification of the anterior longitudinal ligament at the level of C3–C4 (Fig. 1B and 1C, arrow). The largest osteophyte was 13 mm wide (Fig. 1B, lower left). Since he was asymptomatic, no additional studies or treatment were recommended.

An anterior cervical osteophyte even larger than 10 mm can be asymptomatic. Dysphagia is reported to be common in patients with anterior cervical osteophytes larger than 10 mm and rare in those with smaller osteophytes^{1,2}), while some investigators suggest that there is no correlation between the size of the osteophyte and the development of symptoms³). For further understanding the causal relationship between anterior cervical osteophytes and their associated symptoms, the precise site of the osteophyte should also be taken into account; anterior cervical osteophytes protruding to right and/or left side could lead to compression of the laryngeal nerve, leading to pharyngoesophageal spasm and/or paralysis of the vocal cords^{1,2,4}). Clinically significant mechanical compression of the pharynx and/or esophagus at any level from C2-C7 due to anterior cervical osteophytes may induce dysphagia¹⁻⁵), and disturbances of normal epiglottis tilt over the laryngeal inlet by an osteophyte at the level of C3–C4 can cause dyspnea^{3–5}). Therefore, radiological assessment should be focused not only on the size of the osteophyte but also on the site of the osteophyte in relation to symptoms.

Ethical committee approval

None (because a case report and review of the literature is not research that must be approved by the IRB).

Informed consent

The patient and his family provided consent for submission of the case for publication.

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Contributions

All authors wrote the manuscript.

Conflict of interest

There is no conflict of interest associated with the manuscript.

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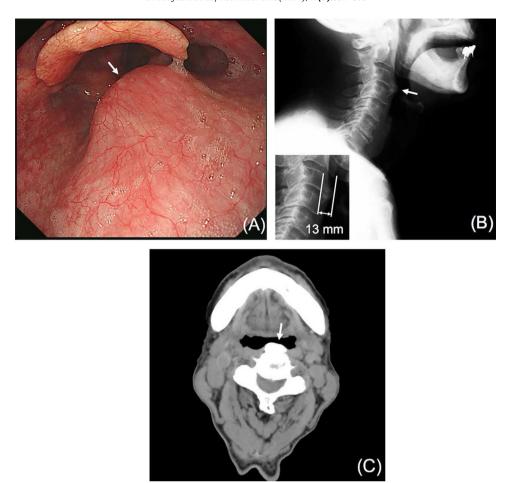


Fig. 1. An extrinsic posterior hypo-pharyngeal mass covered by normal mucosa was found at presentation (A, arrow). Pharyngeal compression by ossification of the anterior longitudinal ligament at the level of C3–C4 on a lateral cervical spine radiograph (B, arrow) and at the level of C4 in the axial plane of a computed tomography scan image at presentation (C, arrow). The distance between the tip of the osteophyte and the anterior vertebral margin was 13 mm (B, lower left).

References

- 1. Miyamoto K, Sugiyama S, Hosoe H, Iinuma N, Suzuki Y, Shimizu K. Post-surgical recurrence of osteophytes causing dysphagia in patients with diffuse idiopathic skeletal hyperostosis. Eur Spine J. 2009;18:1652–8, http://dx.doi.org/10.1007/s00586-009-1133-3.
- Yoshioka K, Murakami H, Demura S, Kato S, Yonezawa N, Takahashi N, et al. Surgical treatment for cervical diffuse idiopathic skeletal hyperostosis as a cause of dysphagia. Spine Surg Relat Res. 2018;2:197–201, http://dx.doi.org/10.22603/ssrr.2017-0045.
- 3. Lecerf P, Malard O. How to diagnose and treat symptomatic anterior cervical osteophytes? Eur Ann Otorhinolaryngol Head Neck Dis. 2010;127:111-6, http://dx.doi.org/10.1016/j.anorl.2010.05.002.
- 4. Maiuri F, Stella L, Sardo L, Buonamassa S. Dysphagia and dyspnea due to an anterior cervical osteophyte. Arch Orthop Trauma Surg. 2002;122:245–7, http://dx.doi.org/10.1007/s00402-001-0369-0.
- Choi HE, Jo GY, Kim WJ, Do HK, Kwon JK, Park SH. Characteristics and clinical course of dysphagia caused by anterior cervical osteophyte. Ann Rehabil Med. 2019;43:27–37, http://dx.doi.org/10.5535/arm.2019.43.1.27.