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SPINE IMAGE

Dysphagia caused by Anterior Cervical Osteophytes at C2-C3: Unusual Location and Presentation

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ABSTRACT

Anterior cervical osteophytes are common in old age due to degenerative process; it is usually asymptomatic in elderly people. Due to mechanical compressions, few patients may present with multiple complications, such as dysphagia, dysarthria, and dyspnea. The osteophytes commonly involve lower cervical spine and usually present with neurological symptoms.

This case is unusual as it presented with C2-C3 osteophyte with dysphagia, which was completely relieved by excision.

Keywords: Anterior cervical osteophytes, Complete excision, Compression of pharynx, Dysphagia.

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INTRODUCTION

A 62-year-old male presented with a history of difficulty in swallowing with a duration of 6 months, which was more for solid food and was associated with a foreign body sensation during swallowing. Previously, he was able to chew food without difficulty, and he did not have regurgitation of food. His general physical examination was essentially normal and neurological examination did not reveal any focal neurological deficit; he showed normal pharyngeal sensation tongue movement, and palatal reflexes.

Examination of the oral cavity did not show any abnormalities; however, endoscopic examination revealed a mucosal bulge at the posterior pharyngeal wall.

X-ray cervical spine and computed tomography (CT) scan of cervical spine revealed spondylotic changes with a large C2-C3 breaking osteophyte compressing the pharynx (Figs 1 and 2).

C2-C3 anterior osteophyte was excised by right anterior cervical approach (Fig. 3). The postoperative period was uneventful.[1] Patient had a significant improvement in symptoms and was able to swallow solid food.

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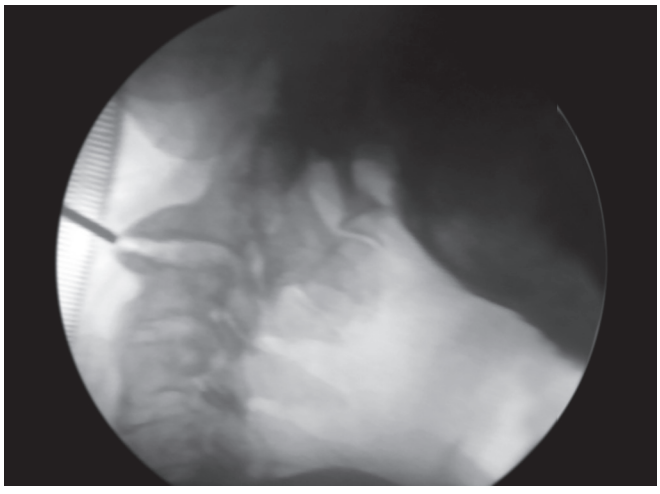

Fig. 1: C2-C3 breaking anterior osteophyte

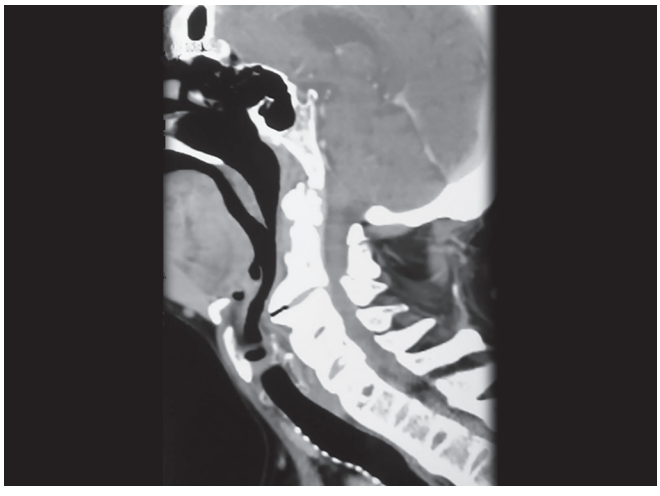

Fig. 2: C2-C3 anterior osteophytes compressing the pharynx

An osteophyte is a bony protuberance that the vertebral body sometimes produces in response to a weakened spine. However, rather than helping the spine, the bone spurs can actually create more problems by infringing on the foramina and spinal canal, which produce radiculopathy and myelopathy. Even the anterior cervical osteophytes can cause problems, such as dysphagia, dysphonia, and dyspnea.[2,3]

Anterior cervical osteophytes are common in old age due to degenerative process; further, they are usually asymptomatic in elderly people. Due to mechanical compressions, few patients may present with multiple complications.

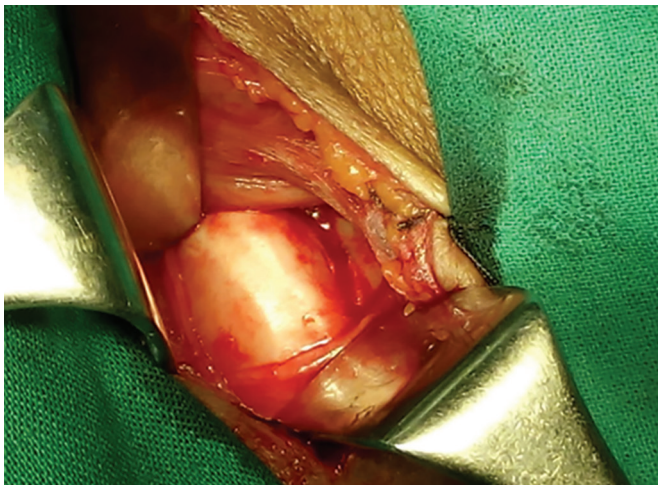

Fig. 3: Preoperative image showing C2-C3 osteophyte with anterior longitudinal ligament

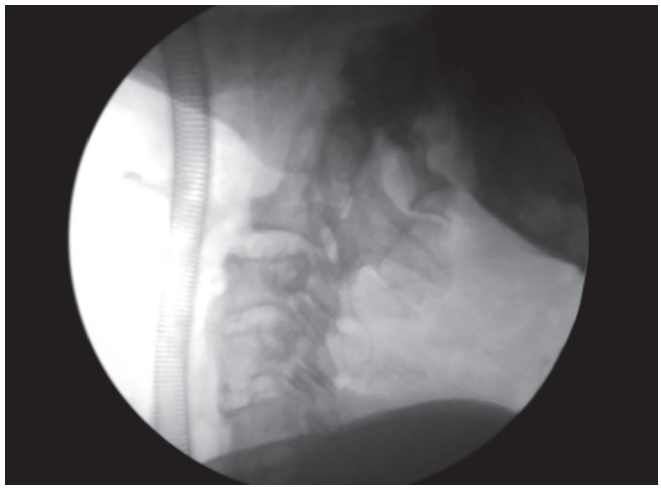

Fig. 4: Postoperative X-ray cervical spine after C2-C3 anterior osteophyte excision

Degeneration most commonly involves C5 to C6 (40%), followed by C4 to C5 (23%), C3 to C4 (14%), and C2 to C3 (14%). In literature, only few patients with C2-C3 anterior osteophytes presented with dysphagia (Fig. 4).

The most common causes of cervical osteophytes are osteoarthritis, ankylosing spondylitis, and ankylosing hyperostosis or diffuse idiopathic spinal hyperostosis (DISH), also known as Forestier's disease. Other causes are hypoparathyroidism, trauma, acromegaly, ochronosis, and fluorosis.[4]

Excision of primary degenerative osteophyte results in excellent symptom relief, but in patients with cervical DISH and dysphagia, surgical resection of osteophytes resulted in a high likelihood of the recurrence of osteophytes.[1,5] Therefore, these patients need periodic postoperative follow-up to assess the regrowth and recurrence of osteophytes.

REFERENCES

1. Oppenlander ME, Orringer DA, La Marca F, McGillicuddy JE, Sullivan SE, Chandler WF, Park P. Dysphagia due to anterior cervical hyperosteophytosis. Surg Neurol 2009 Sep;72(3): 266-270.
2. Seo JW, Park JW, Jang JC, Kim JW, Lee YG, Kim YT, Lee SM. Anterior cervical osteophytes causing dysphagia and paradoxical vocal cord motion leading to dyspnea and dysphonia. Ann Rehabil Med 2013 Oct;37(5):717-720.
3. Hwang JS, Chough CK, Joo WI. Giant anterior cervical osteophyte leading to dysphagia. Korean J Spine 2013 Sep;10(3): 200-202.
4. Khan MS, Bansal M, Agarwal A. Dysphagia due to cervical osteophytes. J Ark Med Soc 2012 May;108(12):278-279.
5. Miyamoto K, Sugiyama S, Hosoe H, Iinuma N, Suzuki Y, Shimizu K. Postsurgical recurrence of osteophytes causing dysphagia in patients with diffuse idiopathic skeletal hyperostosis. Eur Spine J 2009 Nov;18(11):1652-1658.