Case 15583

Forestier syndrome - A rare cause of dysphagia
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Section: Head & neck imaging
Area of Interest: Head and neck
Procedure: Diagnostic procedure
Imaging Technique: Conventional radiography
Imaging Technique: Fluoroscopy
Special Focus: Calcifications / Calculi Case Type:
Clinical Cases
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Patient: 53 years, female

Clinical History:

A 53-year-old otherwise healthy woman presented with a long-standing history of progressive dysphagia, currently to solid foods. Fiberoptic endoscopic evaluation of swallowing and upper gastrointestinal endoscopy were unremarkable.

Imaging Findings:

A videofluoroscopic barium swallow was performed, revealing a filling defect with luminal diameter reduction of the oesophagus due to very prominent osteophytes at C2-C4 vertebrae, which compressed the hypopharynx posteriorly (Fig. 1a and b). The patient mentioned greater difficulty in swallowing a thicker viscosity, even though videofluoroscopic findings (Fig. 1b) were identical to those with liquid viscosity (Fig. 1a). A cervical spine radiograph was obtained, confirming prominent horizontal osteophytes at the C2-C4 vertebrae and ossification of the anterior longitudinal ligament, with normal intervertebral disk heights, findings in keeping with Forestier syndrome or diffuse idiopathic skeletal hyperostosis (DISH).

Discussion:

Diffuse idiopathic skeletal hyperostosis (DISH) - also referred to as Forestier disease - is a common pathology characterised by exuberant spinal and/or peripheral enthesisopathy. Resnick et al. established three diagnostic criteria: a) flowing ossifications of the anterior longitudinal ligament of at least four contiguous vertebral bodies, b) absence of apophyseal bone ankyloses or sacroiliac joint erosions and c) normal intervertebral disk height. [1] The paraspinal ligaments, namely the anterior longitudinal ligament, are most frequently affected. [2] DISH most frequently affects the elderly and has a male predominance. [3, 4] DISH is an uncommon cause of dysphagia [5], which arises either due to direct mechanical compression of the pharynx/oesophagus [1], impairment of normal epiglottic tilting [6] or osteophytic inflammatory reactions. [7] Initial management usually involves conservative treatment. [1] Surgery (osteophyte resection) is warranted when symptoms are severe, with the appearance of aphagia, neurological compressive signs or airway obstruction. [5] Our patient was only treated conservatively since her symptoms were only mild.

Differential Diagnosis List: Forestier syndrome (diffuse idiopathic skeletal hyperostosis), Degenerative spine
disease, Retinoid arthropathy, Ankylosing spondylitis

**Final Diagnosis:** Forestier syndrome (diffuse idiopathic skeletal hyperostosis).

**References:**


Masafumi Ohki (2012) Dysphagia due to Diffuse Idiopathic Skeletal Hyperostosis. Case Reports in Otolaryngology Article ID 123825, 3 pages (PMID: 22953098)


Figure 1

Description: Liquid viscosity - Lateral view

Origin: David Campos-Correia, Centro Hospitalar de Lisboa Ocidental, Department of Radiology, Lisbon, Portugal
Description: Pudding viscosity - Lateral view
Origin: David Campos-Correia, Centro Hospitalar de Lisboa Ocidental, Department of Radiology, Lisbon, Portugal
Figure 2

**Description:** Lateral view  
**Origin:** David Campos-Correia, Centro Hospitalar de Lisboa Ocidental, Department of Radiology, Lisbon, Portugal