

Special Feature: Clinical image**Dysphagia in an elderly male: a rare cause**

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A 65-year-old male patient who was known to have type 2 diabetes mellitus and was receiving treatment for the same for the last 20 years presented with pain and stiffness of neck with limited mobility of cervical spine, and progressive dysphagia of 1 month duration. His glycaemic control was good and he did not have evidence of diabetic nephropathy. Radiograph of the cervical spine showed florid, anterior flowing of bridging osteophytes from C3-C6 vertebra (Figures 1A and 1B) impinging on the

oesophagus with preservation of disc spaces. There was no evidence of apophyseal joint degeneration or sacroiliac inflammatory changes. The patient was diagnosed to have diffuse idiopathic skeletal hyperostosis (DISH) as per the classification criteria defined by Resnick and Niwayama.^{1,2}

DISH (also called Forestier disease) is a common condition characterized by proliferation of bone at sites of tendinous and ligamentous insertion of spine. DISH is more

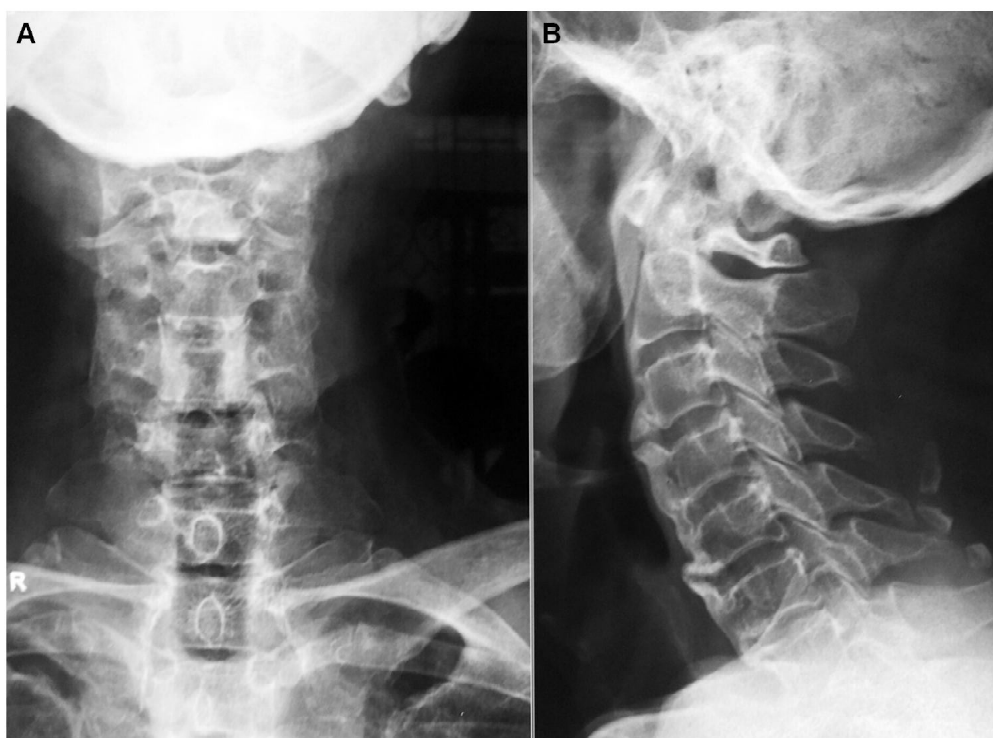


Figure 1: Plain radiograph of the cervical spine (antero-posterior view) (A), lateral view (B) showing florid, calcification and ossification along ventrolateral aspect of C3-C6 vertebral bodies

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frequent in men, and the incidence increases with age. DISH most frequently affects the lower part of thoracic spine followed by cervical and lumbar spine. Patients with DISH may remain asymptomatic or may present with symptoms, such as, backache and stiffness which is worse in the morning. Dysphagia is an uncommon manifestation of DISH³ and is often caused by osteophytes arising from C5-C6 level followed by C4-C5 level. Our patient had osteophytes from C3-C6 level.⁴ In patients with DISH, dysphagia can be progressive and is greater for solids as compared to liquids.

Aetiology of this condition is unknown. DISH has been associated with hyperglycaemia, human leucocyte antigen (HLA) B-27 positivity, ossification of posterior longitudinal ligament (OPLL). On a plain radiograph, non-marginal syndesmophytes at three successive levels (in 4 vertebra) give rise to an appearance of “*flowing wax*”. DISH must be differentiated from ankylosing spondylitis and spondylosis deformans. Like DISH, preponderance in males and an association with ligamentous ossification and syndesmophytes is observed in ankylosing spondylitis. However, unlike in DISH, in ankylosing spondylitis the bony bridges are slender, vertical, and involve the outer margin of the annulus fibrosus; involvement of the anterior longitudinal ligament is rare. Further, erosions and bony ankylosis of the sacroiliac and apophyseal joints that are evident in ankylosing spondylitis are not seen in DISH.^{5,6} In spondylosis deformans, involvement of anterior longitudinal ligament

in the thoracic spine is rare.^{3,4} In fluorosis endemic areas, DISH with OPLL constitutes a differential diagnosis for fluorosis. Occurrence in an area that is endemic for fluorosis, older age at the time of presentation, absence of radiological changes, such as, facetopathy and interosseous membrane calcification distinguish DISH from endemic fluorosis.⁷ Treatment for DISH is largely conservative and involves use of brace, physiotherapy and non-steroidal anti-inflammatory drugs.

REFERENCES

1. Resnick D, Niwayama G. Radiographic and pathologic features of spinal involvement in diffuse idiopathic skeletal hyperostosis (DISH). *Radiology* 1976;119:559-68.
2. Resnick D, Niwayama G. Diagnosis of bone and joint disorders. Second edition. Philadelphia: WB Saunders;1988.p.1563-615.
3. Krishnarasa B, Vivekanandarajah A, Ripoll L, Chang E, Wetz R. Diffuse idiopathic skeletal hyperostosis (DISH) - a rare etiology of dysphagia. *Clini Med Insights Arthritis Musculoskelet Disord* 2011;4:71-5.
4. Hilding DA, Tachdjian MO. Dysphagia and hypertrophic spurring of the cervical spine. *N Engl J Med* 1960;263:11-4.
5. Cammisa M, De Serio A, Guglielmi G. Diffuse idiopathic skeletal hyperostosis. *Eur J Radiol* 1998;27:S7-11.
6. Nascimento FA, Gatto LA, Lages RO, Neto HM, Demartini Z, Koppe GL. Diffuse idiopathic skeletal hyperostosis: a review. *Surg Neurol Int* 2014;5:S122-5.
7. Pandey A, Chaturvedi M, Maheshwari PK, Pandey S, Madhusudan. Fluorosis: an overlooked cause of dysphagia. *J Assoc Physicians India* 2012;60:7.