# 2022

An 80-year-old man with spinal metastases presented with acute onset of severe back pain, and investigations revealed a fracture of a metastatic lesion in T10-T12 in the range of Diffuse Idiopathic Skeletal Hyperostosis. They performed posterior fixation with a percutaneous pedicle screw system using a penetrating endplate technique. The patient's back pain improved, and he was able to mobilize with minimal assistance and survived for 8 months with a good quality of life. Spinal fracture accompanied by DISH sometimes occurs with severe instability because of injury across 3-column injury and its long lever arm. Spinal instability neoplastic score indicates instability of pathological fractures of spinal metastases but needs to be evaluated carefully when DISH is present. The prevalence of DISH is increasing in the elderly, and penetrating endplate screws can be an effective option in posterior fusion surgery for patients with DISH and spinal metastases [1)]

## 2017

A 78-year-old Japanese man presented with a 6-month history of gait disorder. A magnetic resonance imaging scan of his cervical and thoracic spine revealed anterior spondylolisthesis and severe spinal cord compression at T3 to T4 and T10 to T11, as well as high signal intensity in a T2 weighted image at T10/11. Computed tomography revealed diffuse idiopathic skeletal hyperostosis at T4 to T10. He underwent partial laminectomy of T10 and posterior fusion of T9 to T12. The postoperative magnetic resonance imaging revealed resolution of the spinal cord compression and an improvement in the high signal intensity on the T2-weighted image.

This is the first case of thoracic degenerative spondylolisthesis and spinal cord compression in diffuse idiopathic skeletal hyperostosis. Neurosurgical intervention resulted in a significant improvement of patient's neurological symptoms [2)].

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A 58-year-old man with diabetes mellitus who did not smoke presented to the hospital with a 12-month history of back pain, progressive numbness in his extremities and difficulty walking. Upon physical examination, the patient had reduced neck motion, bilateral weakness in arm extensors below the elbow, positive Hoffmann sign bilaterally and spastic gait. Radiographic examination showed multilevel contiguous ossification of the anterior longitudinal ligament, ligamentum flavum and posterior longitudinal ligament. We diagnosed diffuse idiopathic skeletal hyperostosis (Figure 1). The patient was treated with a posterior laminectomy and fusion to decompress the spinal cord. His neurologic status improved markedly at six months and remained stable two years after the procedure [3)].

## 2005

Sreedharan et al., report on 3 patients with DISH, who sustained traumatic cervical cord injuries. Two were tetraplegic at presentation. The radiologic findings of the patients are also discussed.

Both the tetraplegic patients were treated non-surgically in view of high surgical risk.

Both the tetraplegic patients died due to mechanical respiratory failure.

The potential catastrophic neurological sequelae of DISH from relatively minor trauma must be understood. Further studies are needed to aid in evidence-based clinical management of asymptomatic patients with DISH [4].

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A total of 114 patients undergoing anterior cervical procedures over a 6-year period were included in a retrospective, case-control study. The diagnosis was cervical radiculopathy, and/or myelopathy due to degenerative disc disease, cervical spondylosis, or traumatic cervical spine injury. All our participants underwent surgical treatment, and complications were recorded. The most commonly performed procedure (79%) was anterior cervical discectomy and fusion (ACDF). Fourteen patients (12.3%) underwent anterior cervical corpectomy and interbody fusion, seven (6.1%) ACDF with plating, two (1.7%) odontoid screw fixation, and one anterior removal of osteophytes for severe Forestier's disease. Mean follow-up time was 42.5 months (range, 6-78 months). The overall complication rate was 13.2%. Specifically, we encountered adjacent intervertebral disc degeneration in 2.7% of our cases, dysphagia in 1.7%, postoperative soft tissue swelling and hematoma in 1.7%, and dural penetration in 1.7%. Additionally, esophageal perforation was observed in 0.9%, aggravation of preexisting myelopathy in 0.9%, symptomatic recurrent laryngeal nerve palsy in 0.9%, mechanical failure in 0.9%, and superficial wound infection in 0.9%. In the vast majority anterior cervical spine surgery-associated complications are minor, requiring no further intervention. Awareness, early recognition, and appropriate management, are of paramount importance for improving the patients' overall functional outcome [5].

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Association with Retroodontoid synovial cyst has been reported in only one previous study. Cyst probably develop as a result of enhanced mechanical stress on the only remaining mobile joint. In the literature treatment of retro-odontoid mass associated with Forestier has usually involved occipito-cervical fusion with transoral decompression [6].

1)
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5)
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6)

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