A Case Of An Ivory Vertebrae
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INTRODUCTION:
Low back pain is a common symptom seen in an orthopedic clinic. Although mostly benign, it is not uncommon to get a grave diagnosis with low back pain as a symptom.

CASE PRESENTATION:
This is a case of a 59 years old Malay lady, who presented to Orthopaedic department with vague lower back pain for 1 year, which was shooting in nature, radiating from her lower back until bilateral foot. The back pain was made worse by prolonged sitting and prolonged walking. She also reports of intermittent cough, which was non-productive in the last 2 to 3 years. In this time duration, she had very poor appetite and also noticed a significant lost in weight of around 20 kilograms. Her premorbid include type 2 diabetes mellitus and hypertension for which she was on oral medications. She had also undergone a colonoscopy a year before for lower abdominal pain which showed diverticulosis. Clinical examination revealed a small, frail looking elderly lady. There is no midline spine tenderness. Power of bilateral lower limbs were full over all myotomes. Sensation of bilateral lower limbs were intact. Digital rectal examination showed good anal tone with intact perianal sensation. Systemic examination were unremarkable and there were no evidence of any organomegaly or swellings in this patient. Her plain lumbosacral x ray showed and increased opacity, which was homogenous over the L4 vertebrae body while the contour and the size of the vertebral body was maintained. Chest x ray revealed multiple nodular opacities over bilateral lung field. We then proceeded for CT-TAP which showed heterogeneously enhancing right lung mass, suggestive of lung carcinoma with local infiltration to the mediastinum and mediastinal and hilar lymphadenopathy. Also there were bilateral lung, liver, bones and abdominal nodal metastases. The lung lesion was biopsied and the histopathological report was adenocarcinoma of the lung. Patient is currently transferred to a cancer institute within the country for further care.

Fig 1: AP view
Fig 2: lateral
Fig 3: Chest X-ray

DISCUSSION:
The spine is a common site for metastatic deposits.[1] Between 5% to 10% of all cancer patients develop spinal metastases during the course of their disease. [2], although some studies report this up to 60%.[4] The ivory vertebra sign is seen at conventional radiography and refers to an increase in opacity of a vertebral body that retains its size and contours, with no change in the opacity and size of adjacent intervertebral disks [3]. The ivory vertebra sign has been associated with metastatic disease, especially carcinoma of the prostate or breast, and occasionally with osteosarcoma, carcinoid, Paget disease, and Hodgkin lymphoma[3].

CONCLUSION:
The ivory vertebrae sign has multiple causes and low back pain may be the only presenting symptom for a metastatic disease. A watchful eye must be kept in evaluating every patient who presents with low back pain so as not to miss any of the possible causes.

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