(*Refer to page 147*)

Answer: IVORY SPINE

Ivory spine is radiological manifestation defined as 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 discs.[1]

This sign can be seen in both children and adults, albeit less common in children.[1] This radiological sign is often asymptomatic and becomes an incidental finding on radiography [2,3], however occasionally it can be present with symptoms of back pain.

In children the ivory spine is commonly associated with Hodgkin's lymphoma and rarely with Ewing's sarcoma. In adults however, there is a myriad of diseases that may have the appearance of the ivory vertebrae. The most common of them would be Paget's disease, chronic osteomyelitis, lymphomas and myelosclerosis.

One should also be weary of osteoblastic types of malignancies which may metastasize to the vertebrae, mimicking the appearance of the ivory spine. Tumours such as carcinoma of the breast, lung carcinomas and more commonly prostate cancers tend to metastasize to the vertebrae and cause stimulation of the osteoblasts, which replaces the normal spongy vertebral tissue with highly dense bone masses producing the classical sign of ivory vertebrae.[3] It is thought that metastatic tumours tend to affect multiple vertebral levels, however single level lesions may also occur. [1]

In our case, further investigations done revealed a mass in her right lung which was later biopsied and confirmed the diagnosis of pulmonary adenocarcinoma. It is important for the medical practitioner to be aware about this uncommon sign in the imaging of the vertebrae and its common association, as it is can be present as incidental finding and may warrant further investigations.

REFERENCES

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3: Braun AR, Felipe C, MIlito RB: Ivory Vertebra: imaging findings in different diagnoses. Radiol Bras 2016 Mar/Abr; 49(2): 117-121.