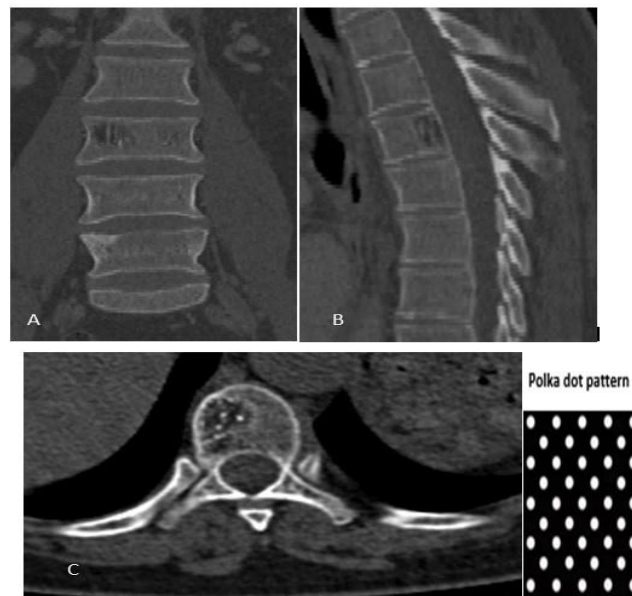


Clinical-Medical Image

## Vertebral Hemangiomas: Polka-dot and Corduroy Sign

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**Figure 1:** Spine CT scan (Bone window) in coronal (A), and sagittal (B) reconstructions, showing the jail bar or corduroy sign and axial (C) reconstruction, showing the polka-dot sign: white dots within a black background.

### Clinical Image

Vertebral hemangiomas are mal-formative benign tumours consisting of newly formed normal blood vessels without arteriovenous shunt. It has two main histopathological types, cavernous and capillary angiomas. The exact etiology of spinal hemangiomas genesis is not well understood yet, a well-known characteristic of these lesions includes a vascular proliferation of capillaries, subsequently leads to displacement of bone and in rarer cases erosion into the spinal canal. In 1% of cases, the tumour can be locally aggressive, revealed by neurological complications thus requiring a surgical intervention.

The development of this vascular malformation causes osteolysis of cancellous bone and its replacement by coarse, sclerotic trabeculae surrounded by fatty marrow or vascular spaces, creating a vertically striated appearance (Figures 1A and 1B) due to thickening of the bony trabeculae. This radiological aspect is referred to as the jail bar sign, also known as the corduroy sign.

The polka-dot sign is the result of the same phenomenon happening in vertebral intraosseous hemangiomas. It is the axial equivalent of the corduroy sign seen on sagittal and coronal images. On CT scan the dots are white on a black fatty background bearing a likeness to a polka-dot pattern (Figure 1C).

**Keywords:** Vertebral hemangiomas, Polka-dot sign, Corduroy sign

### Declaration of Interests

The authors declare that they have no competing interests.

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