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Spinal cord compression due to extramedullary hematopoiesis in beta-thalassemia

Compressão da medula espinhal por hematopoese extramedular na beta-talassemia

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This study reports the case of a 35-year-old man with beta-thalassemia intermedia, with irregular treatment, who presented progressive paresthesia mainly affecting the left side and strength loss in the lower limbs for five months. Besides, he developed difficulty to ambulate and urinate. MRI (Figures 1, 2, 3 and 4) showed vertebral canal stenosis with spinal cord compression. This finding illustrates a rare complication of thalassemia, an extramedullary hematopoietic center due to ineffective erythropoiesis, causing vertebral bone hyperplasia[1,4,5]. Given the substantial number of segments affected, surgical procedures were contraindicated based upon hemorrhage risk. Radiotherapy was performed with subsequent strength recovery [2,3].

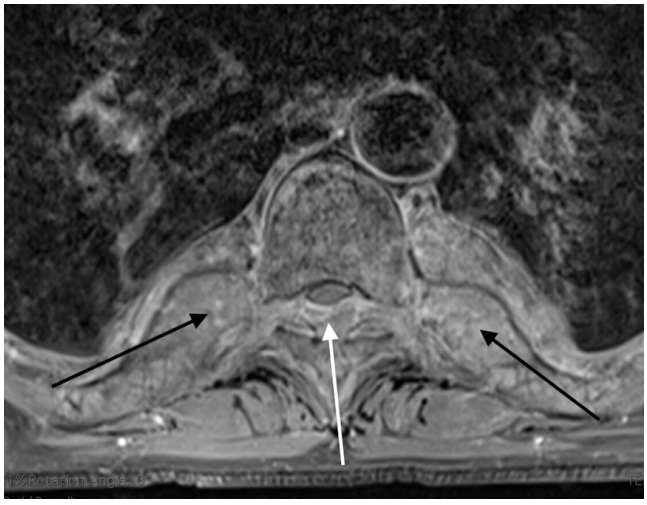

Figure 1. T1-weighted axial MRI with contrast showing moderate contrast enhancement of the epidural masses. Ribs and the vertebral bodies are also enhanced.

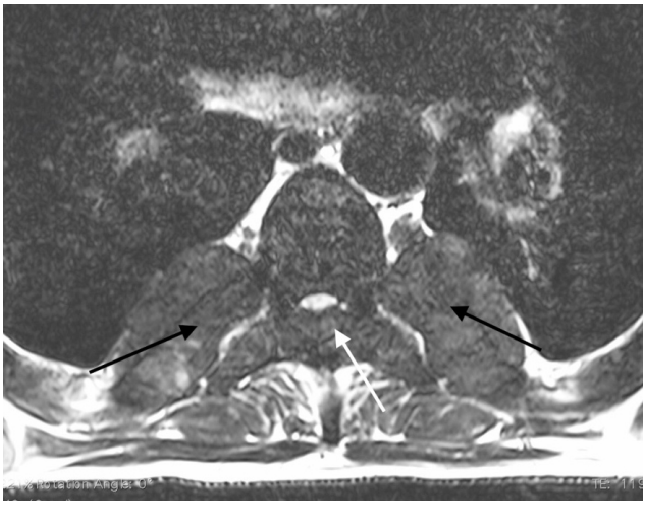

Figure 2. T2-weighted axial MRI showing severe spinal cord compression (the black arrows indicate the ribs and the white one indicates the vertebral bone).

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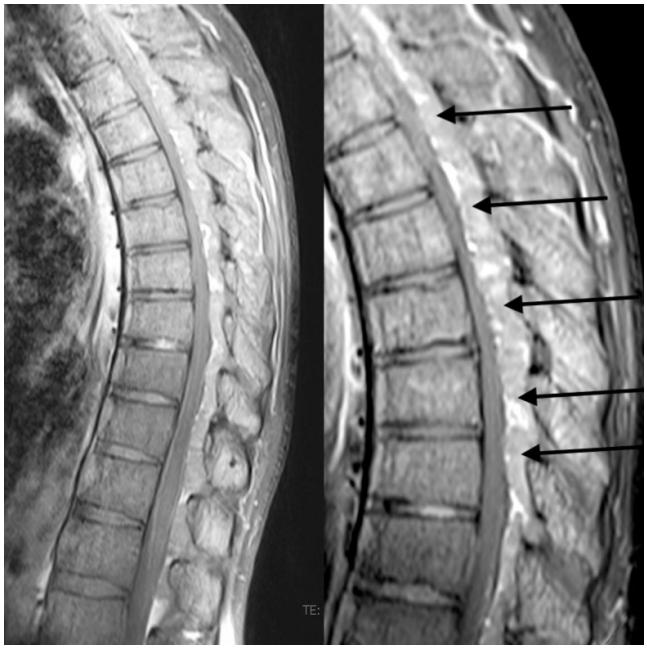

Figure 3. T1-weighted sagittal MRI showing moderate and heterogeneous enhancement of epidural masses.

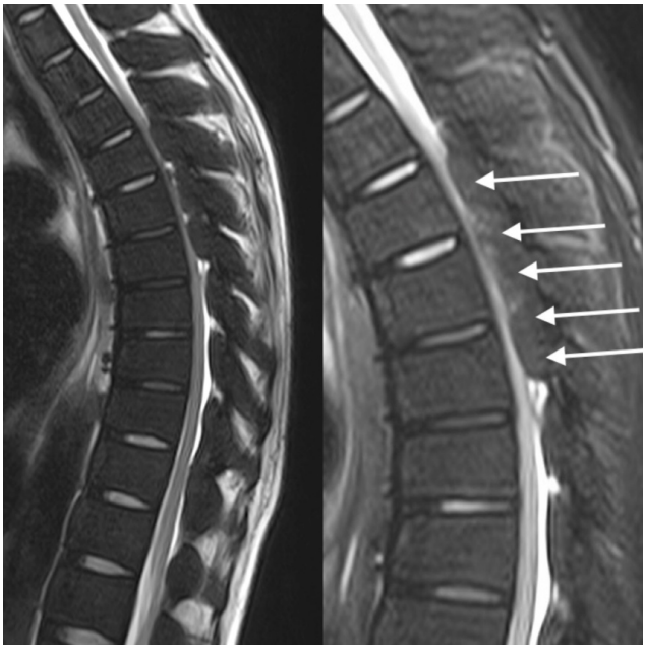

Figure 4. T2-weighted sagittal MRI showing spinal cord compression caused by an extensive epidural lesion.

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