

An unusual localization of primary plasmacytoma

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Localized plasmacytomas constitute less than 10% of all multiple myelomas (MM) and they occur as solitary plasmacytoma of bone (SPB) or as extramedullary lesions.^{1,2} Among the primary localizations, the mediastinal one is rarely described.³⁻⁵

While the treatment strategies for multiple myeloma are based on chemotherapeutic agents,⁶ extramedullary plasmacytomas (EMP) can be controlled with local irradiation and/or surgical resection and they appear to have a different natural history with a lower incidence of conversion to myeloma than do SPB.⁷⁻¹⁰

A 58-year-old woman was admitted to our department for a cough and progressive dyspnea. A computed tomography scan showed a bulky mediastinal mass originating from the prevertebral region. Magnetic resonance (MR) coronal T1 (Figure 1) and T2 weighted images showed a solid round bulky (10 cm in diameter) mass, inhomogeneous for hyperintensity on T2 due to hypervascular component, originating from the posterior mediastinal region, connected to the infiltrate of the vertebrocostal angle region by a thick pedunculus. Large left pleural effusion was also present. No mediastinal lymphadenomegaly were detected. Needle biopsy with CT scan of the mass disclosed a tissue made of plasmacytic elements

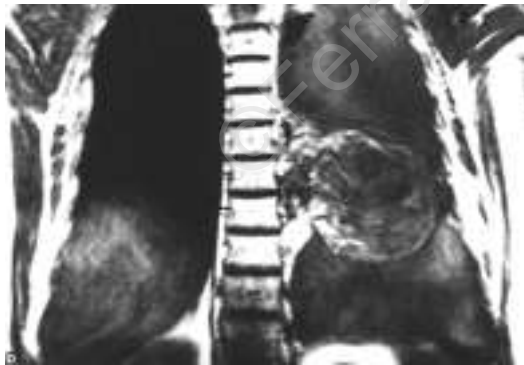


Figure 1. Magnetic resonance (MR) coronal T1 weighted image showing a solid round bulky (10 cm in diameter) mass, inhomogeneous due to hypervascular component, originating from the posterior mediastinal region, connected to the infiltrate of the vertebrocostal angle region by a thick pedunculus. Large left pleural effusion is present.

that at immunohistochemical analysis showed positivity for λ chains. Laboratory data were normal and immunoelectrophoresis and immunofixation techniques ruled out serum and urine monoclonal components. Bone marrow aspiration and biopsy excluded a plasmacytosis and disclosed a normal hematopoiesis while no lytic bone lesions were detected with a complete skeletal X-ray study. Thoracentesis revealed a transudate fluid without plasmacytomatous elements.

Since the first-line treatment radiation therapy (18 Gy in 10 fractions) didn't produce any notable reduc-

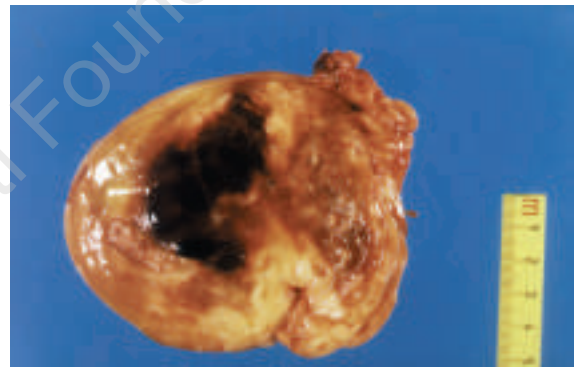


Figure 2. Gross whitish specimen of mediastinal mass with hemorrhagic areas.

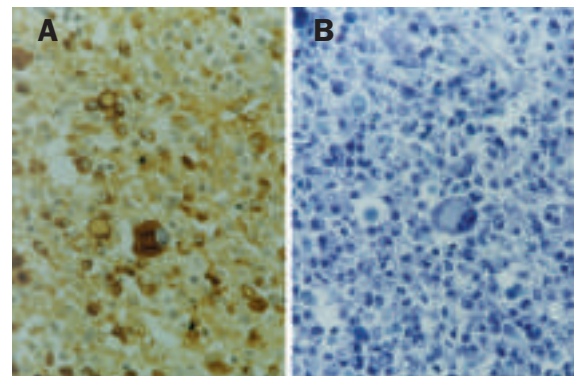


Figure 3. A: High magnification field with Giemsa stain showing atypical plasma cell proliferation with hypochromic and dismorphic nuclei. Several Russel bodies are present (Giemsa, original magnification 80 \times). B: Immunoperoxidase for λ chains: strong positivity in the majority of the plasma cells. (ABC method, original magnification 80 \times).

tion of the mass the patient was submitted to surgery. The completely removed mediastinal mass appearing as a well encapsulated tissue, is showed in Figure 2. Histologic sections have disclosed an extramedullary plasmacytoma, showing atypical plasmacell proliferation with hypocromic and dismorfic nuclei, several Russel bodies (Figure 3, A) and strong positivity for λ chains at immunoperoxidase (Figure 3, B).

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