Solitary Plasmacytoma of the Rib

To the Editor: The plasmacytoma can be defined as a more or less well-defined neoplastic proliferation of plasma cells in the absence of generalized disease. This definition allows a common situation, in which a tumor consisting of plasma cells is a manifestation of multiple myeloma, to be ruled out. A plasmacytoma may be located in bone or in soft tissue and there may be visceral organ involvement.[1] The case we report presents an isolated osteolytic lesion, which is a rare type of malignancy of the chest wall.[2]

The patient was a 32-year-old woman who was a patient of the hematology department for thrombocytosis of unclear pathogenesis. She presented no other relevant medical or surgical history. The physical examination revealed no abnormalities, except for a slightly painful rib mass on palpation. Analytical parameters were within normal values, except for the above-mentioned thrombocytosis (585 000 platelets/μL) and the presence of 2 monoclonal paraproteins in small concentrations: immunoglobulin G (IgG) lamda and immunoglobulin M (IgM) kappa, respectively. An osteolytic lesion in the ninth right rib was observed in the chest x-ray (Figure). A computed tomography scan of the lesion showed a mass in the posterior middle of the ninth right rib with insufflation, sclerosis, and a break through the cortex. Increased soft tissue was also observed. A bone scintigram showed diffuse increased uptake in soft tissues adjacent to the ninth right rib, with no sign of dispersed focal deposits. No significant plasmacytosis was observed in the bone marrow biopsy. With this information, surgery under general anesthesia was performed to resect the lesion and obtain a biopsy from which to come to a definitive histological diagnosis. The tumor had not invaded adjacent soft tissue, which displayed only a fibrovascular reaction. The definitive histopathological diagnosis was solitary plasmacytoma of bone, with the lesion totally resected. In examinations carried out 6 months and 1 year after surgery, thrombocytosis and paraproteinemia had disappeared; the patient's clinical status was optimal.

In plasmacytoma, clinical symptoms depend on the location of the lesion. The association of plasmacytoma and polyneuropathy, organomegaly, endocrinopathy, monoclonal proteins, and skin disorders—the POEMS syndrome—is typical. Its association with adenopathy and extensive skin patch overlying a plasmacytoma—or AESOP—has recently been described.[3] A typical plasmacytoma appears radiologically as a lytic lesion which surrounds the rib or the affected sternal region.[4] If the tumor is not detected in time, it can destroy the bone structure and invade soft tissue.[5] A diagnosis of plasmacytoma of the bone is based on histological evidence of this lesion and on the absence of alterations attributable to multiple myeloma, such as anemia, Bence-Jones proteinuria, marked proteinuria, or bone marrow involvement in a different location from that of the primary tumor.[4,5] The treatment of choice is surgical excision of the lesion, thus avoiding local and systemic dissemination and achieving long-term survival. In cases where a residual lesion persists because complete resection of the tumor was not achieved, adjuvant chemo- and radiotherapy should be prescribed.[2,5]

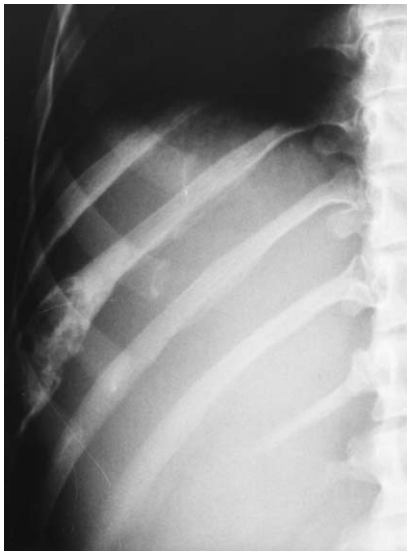

Figure. Chest x-ray showing an osteolytic tumoral lesion in the ninth right rib.

Clinical and analytical follow-up after resection of the lesion is essential to detect possible local or systemic recurrences.

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