Chest wall tumor at relapse of multiple myeloma

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Case report

We report the case of a 70-year-old Moroccan man who was diagnosed with stage IIIA IgA kappa multiple myeloma according to Durie and Salmon classification. He was an alcohol abuser and heavy smoker (2 packs per day). He was admitted to our department for thoracic pain, persistent and increasing. He also complained of mild shortness of breath and poor appetite. Initial physical examination was normal. Laboratory investigations showed a hemoglobin of 12 g/dL, MCV of 83fL, white cell count of 3,900/ L and platelet of 174,000/ L.

The bleeding time and coagulation time were normal. Erythrocyte sedimentation rate was 100 mm/1h and C-reactive protein was 15 mg/dL. A monoclonal spike was discovered in the betaglobulin of the serum. Immunoelectrophoresis identified the monoclonal component as IgA kappa and the level was 3.7 g/dl. A 24-hour specimen of urine was normal. The calcemia was normal. The bone marrow contained approximately 35% plasma cells, with atypical aspects. X-ray examination showed lytic defect in cranial bone. The skeletal radiograph showed diffuse lytic lesions. Treatment with melphalan and prednisone (MP protocol) was started and bisphosphanate was administered regularly. After two cycles of MP therapy, the patient presented a chest wall tumor, dyspnea and cough (figure 1).

The WBC rose to >30,000 cmm with 40% circulating plasma cells and his inflammatory parameters were increased (C-reactive protein 71mg/L). Incisional biopsy was performed on the left chest wall and the histopathologic examination revealed an abundant number of atypical plasma cells demonstrating a myeloumatous etiology of the chest wall tumor (figure 2). Salvage chemotherapy was performed with bortezomib, cyclophosphamide and dexamethasone. After the first cycle of chemotherapy, due to grade 3 asthenia, the patient could not receive consecutive cycles. He died four months later due to progression of multiple myeloma.

Multiple myeloma is a malignant tumor of plasmacytes most commonly seen in the bone marrow. The thorax can be invaded by myeloma, producing thoracic skeletal abnormalities, plasmacytoma, pulmonary infiltrates, and pleural effusion[1]. Recognition of the atypical plasma cells in fluids is critical for therapeutic and prognostic considerations as this finding portends a poor prognosis[2] . These patients are usually resistant to treatment in spite of aggressive chemo-radiotherapy.

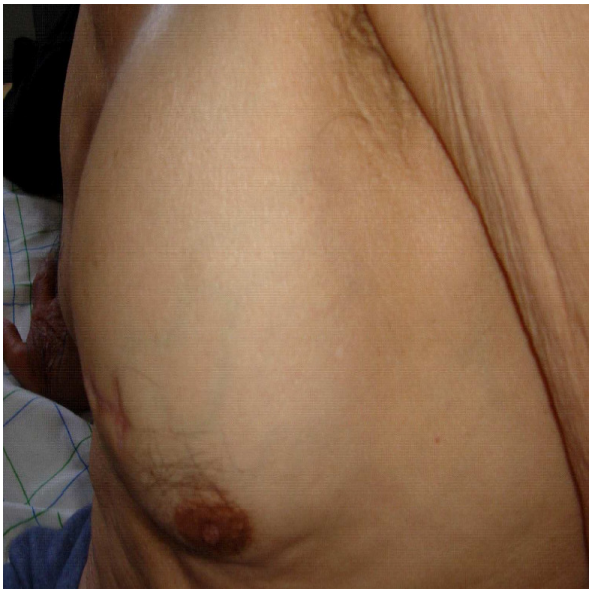

Figure 1: Chest wall tumor 722×540mm (72×72DPI)

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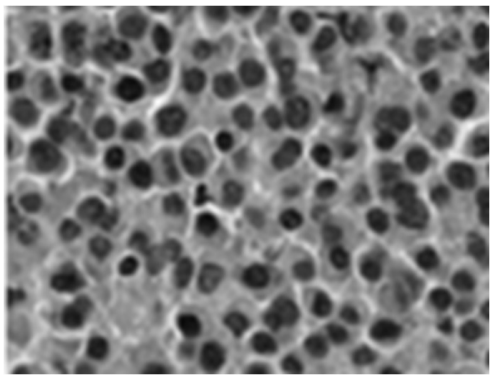

Figure 2: Histology of chest wall tumor showing abundant plasma cell

References

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