Abstract

Immunoglobulin M myeloma is a very rare a malignant hematological entity that shares many similarities with Waldenstrom's macroglobulinemia. It accounts for about 0.5% of all multiple myeloma cases. Anemia, bone pain, unintentional weight loss remains the most frequent complaints in myeloma patients. Intracerebral bleeding is not directly associated with to multiple myeloma except in the case of intracerebral plasmacytoma associated with bleeding.

We present a 74 year old retired office worker who was admitted with acute onset severe unbearable headache and confusion in the absence of fever or photophobia. He had chronic lower back pain and weight loss for 2 months duration. He was a problem drinker but denied any direct trauma to head. On examination he was afebrile, pale, had mild bilateral pitting ankle edema and old eczemas on both ankles. He didn't have neck stiffness. His GCS was 15/15 on admission but he was not oriented in time, place or person. System examination was unremarkable. Investigations revealed a very high erythrocyte sedimentation rate of 145 mm in 1st hour, normochromic normocytic anemia with hemoglobin of 10g/dL, hypercalcemia (3.2mmol/L) and patient went on to develop acute kidney injury (Serum creatinine 112mmol/L to 245mmol/L) while he was being investigated. Contrast enhanced CT scan of brain revealed bilateral frontal intracerebral hemorrhages. His urinalysis and serum albumin remained normal. Skeletal radiological survey didn't reveal any lytic lesions. Serum protein radiological survey didn't reveal any lytic lesions. Serum protein electrophoresis revealed a monoclonal gamma band. Serum protein immunofixation revealed a prominent IgM band. Two bone marrow biopsies and aspirations didn't notice plasmacytosis. Immunohistochemistry of bone marrow revealed CD 138 marker to be positive in bone marrow. A comprehensive diagnosis of IgM myeloma was made and patient was treated with Lenalidomide, Bortezomib and Dexamethasone. IgM myeloma should be differentiated from Waldenstrom's macroglobulinemia as 2 disease entities are widely differing in therapeutic options and prognosis. Modern techniques of flow cytometry, immunohistochemistry and immunophenotyping play a major role in differentiating these 2 diseases. CD 138 positivity and CD 20 negativity in immunophenotyping supports the diagnosis of multiple myeloma.