Multiple Myeloma Presenting with Facial Nerve Palsy

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INTRODUCTION

Multiple myeloma is the most common malignant plasma cell disorder, accounting for approximately 10% of all hematological malignancies. It is usually associated with hypercalcemia(C), renal failure(R), anemia(A) and bone lesions. Neurologic complications are frequent during myeloma and plasmacytoma and constitute the most frequent non–CRAB presenting symptom in Multiple Myeloma. This is unusual case of multiple myeloma involving temporal bone without otologic symptoms associated facial nerve palsy which is rare presentation.

CASE REPORT

A 50 year old female patient presented with history of back pain of six weeks duration and then developed inability to close left eye, deviation of angle of mouth on right side and dribbling of saliva over the last two weeks. She also had recurrent episode of vomiting for last one week. She denies any complaints of convulsions, altered sensorium, dysphagia, diplopia, difficulty in mastication, hoarseness of voice, numbness over face, nasal regurgitation, hearing loss, tinnitus, vertigo and fever. On neurological examination patient was unable to wrinkle the forehead along with inability to shut the left eye, inability to flare the nostril, smile and forcibly show the teeth. There was no webbing of neck when patient is asked to evert the lower lip and taste sensation was intact and there was no hyperacusis in left ear. No cerebellar signs were there and plantars were bilaterally flexor.

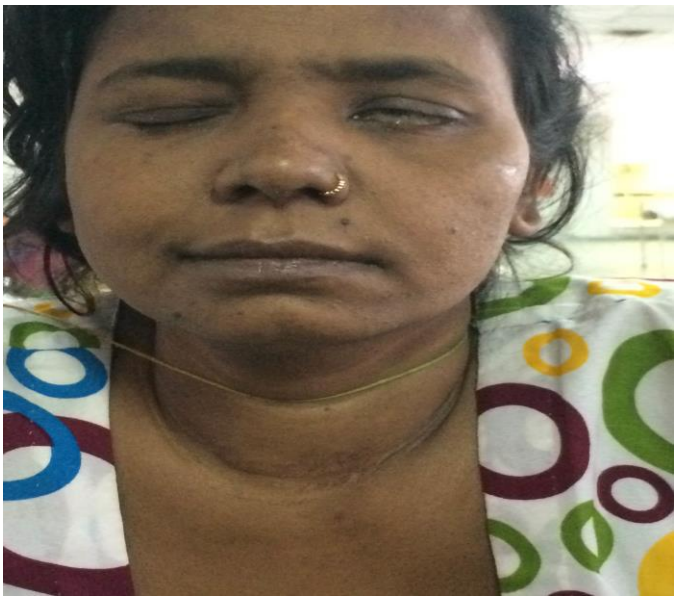

Fig. 1: Patient

Investigation: Haemoglobin-10.3gm%, Platelet count-1,64000/mm, Total leucocyte count-7500/mm, DLC-Neutrophils-65, Lymphocytes-24, Monocytes-4, Eosinophils-07, ESR-59 mm in first hour, Peripheral smear shows normocytic normochromic anemia, Fasting blood glucose-79mg%, Blood urea-46gm%, Serum creatinine-2.01mg%, S.uric acid-8.0mg%, serum calcium-10.4mg%, Serumsodium132.2mEq/L, S.Potassium-2.36mEq/L, Liver function test-within normal limits, Lipid profile-within normal limits, Serum Electrophoresis-shows M band detected in gamma globulin region, Bone marrow aspirate showed 18% plasma cells with immature and binucleate forms, CT scan shows a lytic lesion consistent of myeloma deposit in left temporal bone.

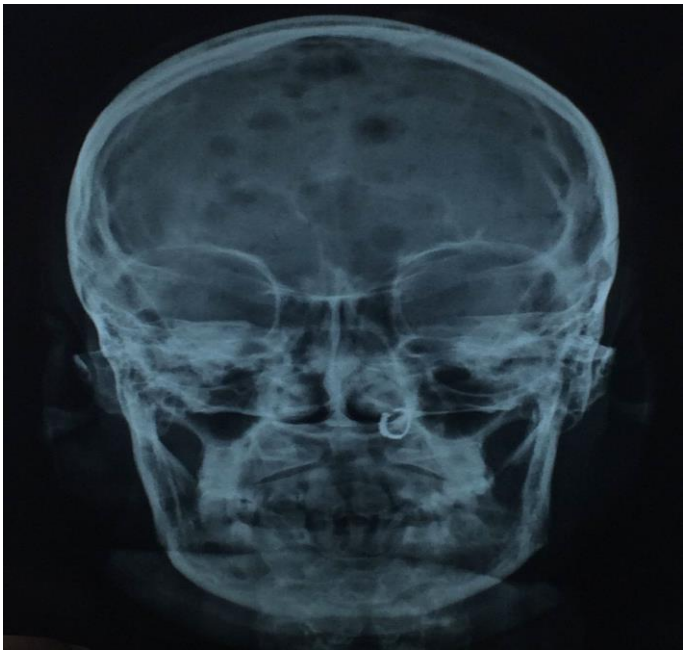

Fig. 2: Xray Skull

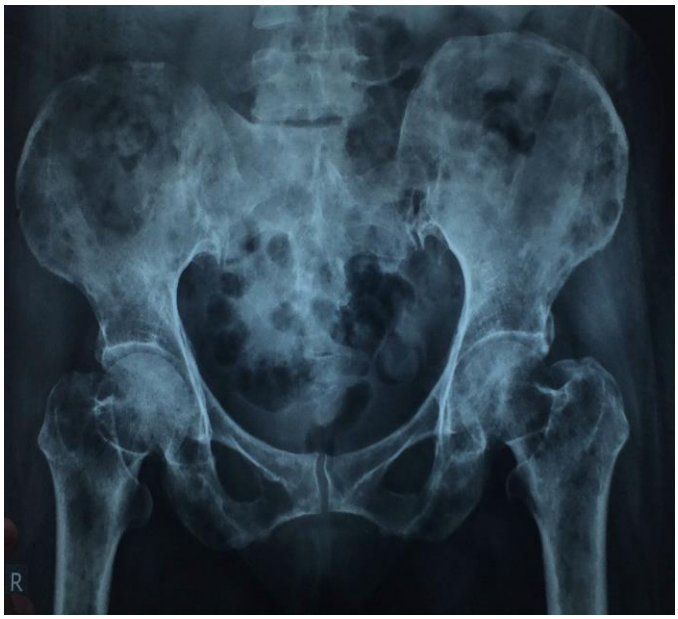

Fig. 3: X ray Pelvis

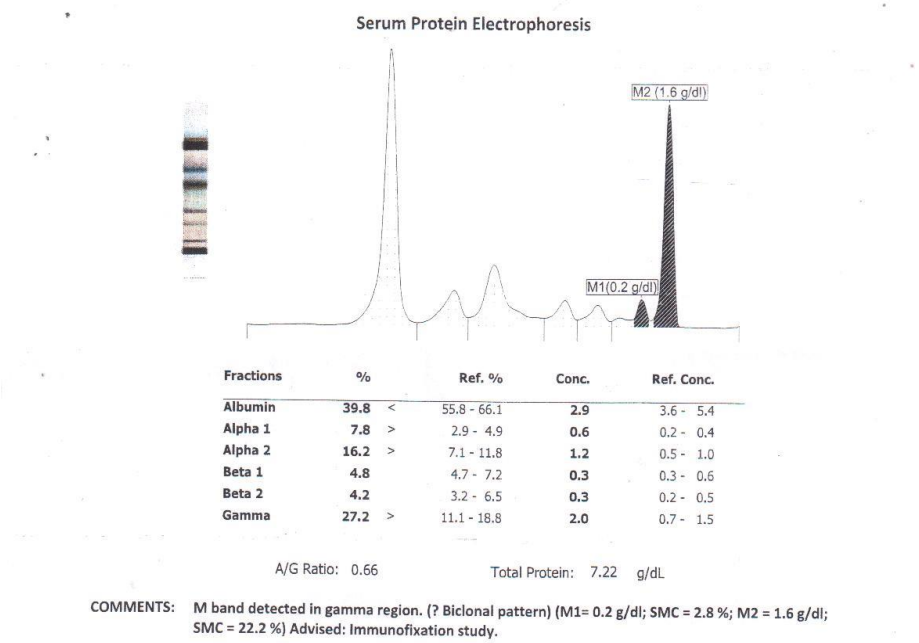

Fig. 4: Serum Protein Electrophoresis

DISCUSSION

Multiple myeloma is a malignant proliferation of plasma cells. In India, the median age of patients presenting with myeloma is 55 years, a decade earlier than that in the USA. Intracranial multiple myeloma is an uncommon condition; overall incidence of CNS involvement is only about 1%. Presenting symptoms of CNS involvement most commonly includes headaches, limb weakness, mental changes and cranial nerve palsies. On review of literature, till date these cases one by Shone GR[1] and other by Heejin Kim[2] and Chan EH[3]had been reported of facial palsy due to multiple myeloma of the temporal bone. Battacharya B, Chattopadhay B et al[4] also reported a case of multiple cranial nerve palsies in a case of intracranial plasmacytoma and multiple myeloma. Funakubo T, et al[5] reported a case of myeloma with facial palsy. It is not easy to diagnose multiple myeloma of temporal bone in the early stage, as it presents with non-specific otologic symptoms. Both the cases that were reported earlier had some otologic involvement but this case has no otologic manifestation. This case has lower motor neuron type of facial palsy with intact taste sensation over anterior 2/3rd of the tongue and without any hyperacusis in the left ear. Only 10% patients with myeloma will have an indolent course demonstrating only very slow progress of the disease over many years. Multiple myeloma involving the temporal bone area is considered to be in its terminal stage. Medical management of multiple myeloma is of two sorts-systemic therapy to control the progression of multiple myeloma and symptomatic supportive care to prevent serious morbidity from the complications of the disease. Systemic therapy for older patients consists of thalidomide combined with the alkylating agent melphalan and prednisolone. In younger patients, standard treatment includes first line chemotherapy to maximum response and then autologous stem cell transplantation, which improves quality of life and prolongs survival.

CONCLUSION

Multiple myeloma is a malignant proliferation of plasma cells. Patient was diagnosed to have multiple myeloma on the basis of classic triad of myeloma i.e. marrow plasmacytosis(>10%),lytic bone lesions and Serum M components. Such presentation suggests involvement of the 7th nerve close to stylomastoid region of temporal bone on left side.

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