PLASMA CELL MYELOMA PRESENTING AS ACUTE CONSTIPATION

Lt Col RS GULATI*, Lt Col PC SANCHETEE⁺,
Air Cmde SK DHAM[#], VSM

MJAFI 1997; 53: 305-306

KEYWORDS:

Introduction

Plasma cell myeloma or multiple myeloma is an uncontrolled proliferation of plasma cells in the marrow. The neoplastic cells synthesise abnormal amount of monoclonal immunoglobulins or alpha or lambda light chains [1]. Clinical manifestations of myeloma vary and include bone pains, hypercalcaemia, anaemia, hypogammaglobulinemia, and spinal cord compression etc. [1,2]. We report here one such case who had an unusual presentation of acute constipation.

Case Report

A 45-year-old male patient first presented with acute constipation and pain rectal region of 3 days duration. Initially he attributed it to acute exacerbation of fissure-in-ano which he developed 5 years ago. However, clinical examination including per rectal and proctoscopic examination was normal. For next 5 days he was managed with repeated glycerine enema and laxatives but without any relief. At this stage he was subjected to a detailed evaluation. Endoscopic examination of colon, stomach and duodenum failed to detect any abnormality. He was also evaluated for underlying psychiatric disorder but without any positive finding. In view of intractability of symptoms he was referred to us on eleventh day of his illness.

A detailed history revealed that at onset he had transient vague pain over the chest at the level of nipple for 2 days. He also gave history of numbness and paraesthesia over lower limbs and hesitance for micturition of 3 days duration. There was no history of pain in the spine or other bones, fever, headache, weight loss, recurrent infections, bleeding diathesis or trauma. There was no history of hypertension, diabetes mellitus or tuberculosis in the past. Clinical examination revealed him to be obese with height 165 cms and weight 80 kgs. There was no pallor, lymphadenopathy or bony tenderness. Neurological examination revealed hypoaesthesia below D6 dermatome (right side being affected more than left side) and weakness in lower limbs. Deep tendon reflexes were sluggish in lower limbs. Abdominal reflexes and plantar reflexes were absent on both sides.

There was no papilloedema or signs of meningeal irritation. Tenderness was present over D4 and D5 spine. Examination of other systems was within normal limits.

Investigations revealed Hb 12.4 gm per cent, TDLC 6700/cmm with P 59 L38 M2 E1 per cent, ESR 120 mm fall first hour, blood urea 29 mg per cent, serum creatinine 1.0 mg per cent, blood uric acid 8.0 mg per cent and serum calcium 9 mg per cent. Radiograph of chest PA view and 12-lead electrocardiogram were normal. Radiograph of skull, pelvis and long bones in the limbs showed multiple punched out lytic lesions. Serum electrophoresis showed monoclonal gammopathy, Monoclonal (M) spike in the beta-gamma interzone alongwith hypoalbuminemia and hypogammaglobulinemia. Bone marrow study showed marked infiltration by plasma cells (>30%) with reduction in erythroid and myeloid cells. Magnetic resonance imaging (MRI) of spine demonstrated altered signal intensity of D4-D6 vertebrae. There was an intraspinal soft tissue mass on right side extending from D2 to D5 vertebrae compressing the spinal cord and thecal sac anteriorly at that level. There was a paraspinal extension of the mass through intervertebral foramina at D3-4, D4-D6. Radionuclide bone scan showed patchy increased uptake in skull, spine, ribs and major bones of the limbs suggestive of extensive skeletal involvement.

Diagnosis of multiple myeloma with myelomatous neuropathy was made. He was managed with palliative chemotherapy (vincristine, cyclophosphamide, adriamycin, steroids) and radiotherapy. However, his condition rapidly deteriorated and he died 3 months later.

Discussion

Plasma cell myeloma is uncommon. However, it accounts for more than 10 per cent of all haematological emergencies [2]. It is predominantly a disease of middle and old age with peak incidence between 40 years and 60 years. An incidence of only 2 per cent has been reported below 40 years of age [3].

A number of neurological syndromes have been described in myeloma patients. Spinal cord compression, a serious complication of this disease, is

*Classified Specialist (Medicine), Military Hospital, Kirkee 411020; ⁺Reader (Medicine) and Neurologist, Armed Forces Medical College, Pune 411040; [#]PMO, HQ South-Western Air Command, C/o 56 APO

observed both during initial illness and during relapse [4]. The reported incidence of spinal cord compression in multiple myeloma varies between half per cent to 15 per cent [5,6]. Compression of spinal cord results from either ingrowth of tumour from involved vertebra or by compression fracture of vertebra. A paraspinal mass or destructive lesion of the vertebra are early warning signs of impending cord compression.

Sometimes patients with multiple myeloma may present with neurological involvement such as paraplegia, sensory deficit or retention of urine [4-6]. History of bone pains, unexplained anaemia and raised ESR often suggest the possibility of multiple myeloma. Early recognition of spinal cord compression with the help of conventional myelography, CT myelography and MRI is key to successful diagnosis in early cases [2,4,7]. Acute severe constipation and proctodynia as presenting features of multiple myeloma are quite rare. In fact, our patient was initially investigated for fissure-in-ano, gastrointestinal malignancy, ischaemic heart disease and psychiatric ailment which delayed the diagnosis. Neurological diagnosis was considered only when he developed weakness in

limbs. This patient deteriorated very fast before definitive treatment could be contemplated. The aim is to highlight acute constipation as a presenting feature of multiple myeloma.

REFERENCES

1. Bergsagel DC. Plasma cell myeloma. In: Williams WJ, Bentler E, Erslev AJ, et al. Haematology. 4th Ed. New York: Mc Graw Hill Publishing Company, 1991; 1114-40.
2. Agrawal S, Avasthi R, Gupta V, Ram BK. Multiple myeloma presenting as acute paraplegia. *J Assoc Physicians India* 1993; 41: 393-4.
3. Bhattacharya SK, Singh NK, Srivastava PK, et al. Multiple myeloma. *J Indian Medical Association* 1984; 92ii: 394-7.
4. Salmon SE, Cassady Jr. Plasma cell neoplasm. In: Devita VT Jr, Hellman S, Rosenberg SA, editors. *Principles and Practice of Oncology*. 3rd edition. Philadelphia: JB Lippincott Company 1989; 1953-95.
5. Venu Gopal P, Rajini, Gopal R, et al. Multiple myeloma: analysis of fifty cases. *J Assoc Physicians India* 1989; 37: 367-70.
6. Advani SH, Soman CS, Talwalkar GV, et al. Multiple myeloma: review of 231 cases. *Indian J Cancer* 1978; 15: 55-61.
7. Ludwig H, Tscholakoff D, Neuhold A, et al. Magnetic resonance imaging of spine in multiple myeloma. *Lancet* 1987; 2: 364-6.