

Case Report

A rare cause of bleeding gastric ulcer: multiple myeloma

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ABSTRACT

The causes of GI bleed are many and varied with peptic ulcers accounting for about 50% cases. Multiple myeloma is the most common lymphoid neoplasm in older adults and accounts for approximately 10% of all hematologic malignancies. Extraosseous manifestations are said to be present in less than 5% of patients with Multiple Myeloma with GI ulcers only being described rarely. In this report we describe a case of a 58 year old lady presenting with weakness, palpitations, gum bleeding with recent onset melena. She had severe anaemia with thrombocytopenia and markedly elevated ESR. An UGI endoscopy revealed a 1x0.5 cm ulcer infiltrated by lymphoplasmacytic cells and histiocytes with a few neutrophils. Serum globulin fraction was markedly high and Serum protein electrophoresis revealed it to be a case of multiple myeloma with Ig λ secreting monoclonal cells. Bone marrow aspirate revealed 40 % plasma cells with some binucleate and trinucleate forms. The patient was diagnosed as stage III multiple myeloma (International staging system) and treated with dexamethasone, zoledronic acid and thalidomide. Our case highlights a very atypical presentation of multiple myeloma and alerts the clinician to keep an eye of suspicion in dealing with peptic ulcer cases especially in the elderly.

Keywords: Bleeding, Gastric ulcer, Multiple myeloma

INTRODUCTION

The causes of GI bleed are many and varied with peptic ulcers accounting for about 50% cases. Other causes may include varices, Mallory-Weiss tears, gastroduodenal erosions, erosive esophagitis, neoplasms or vascular ectasias. The incidence of gastrointestinal bleeding has been reported as 10-30% of patients with neoplastic diseases of the hematopoietic organ.¹ The pathogenesis of gastrointestinal bleeding in these diseases is usually multifactorial and may be caused by direct malignant hematopoietic cell infiltrations, mucosal changes ensuing from bone marrow suppression, immunodeficiency states, infections due to various organisms, or preceding peptic ulcers.¹

Multiple myeloma represents a malignant proliferation of plasma cells derived from a single clone. It is the most common lymphoid neoplasm in older adults and accounts

for approximately 10% of all hematologic malignancies.^{2,3} Most common presentations of multiple myeloma include bone pain, anemia, renal failure, recurrent infections and hypercalcemia. Extraosseous manifestations are said to be present in less than 5% of patients with MM. Liver, spleen and lymph nodes are the most frequent sites of occurrence in approximately two-thirds of these patients. Involvement of the GI tract has rarely been described. In this report we describe a case of upper GI bleeding in a 58 year old lady which was eventually diagnosed to be a case of multiple myeloma.

CASE REPORT

A 58 year old lady presented to the Internal Medicine OPD with a 5 day history of melena. The patient had been chronically ill for the last 7 years with weakness, palpitations and lethargy. She also complained of episodes of recurrent gum bleeding for the last 2 years.

The patient had a past episode of acute pain over her lower back while getting up from squatting position which subsided with analgesics.

On examination she was pale and cachectic. She had severe pallor and multiple ecchymoses over her trunk and lower limbs. No significant lymphadenopathy was detected. Sternal tenderness was present but no hepatosplenomegaly could be identified. CNS and CVS examination was within normal limits.

At the initial examination, laboratory results were as follows: Hb - 3.0 gm% (12-16 gm%), PCV - 10.9%, platelets - 70000/cu.mm, WBC - 5200 (N67, L28, M03, E02, B00), ESR - 152 mm/Hr (0-10mm/h).

Biochemical examination revealed the following results: Serum protein >10 g/dL(high), albumin - 1.8 g/dL, uric acid - 9.0 mmol/L. serum urea - 37 mg/dL, serum creatinine - 1.2 mg/dL, serum Ca - 7.82 mg/dL, phosphate - 4.3 mg/dL. serum Fe - 67, TIBC - 151. Hepatitis B, Hepatitis C and HIV viral markers were negative. Lactate dehydrogenase (LDH), electrolytes, glucose, fat and liver function tests were all normal, and the Bence-Jones protein was not detected in the patient's urine. Direct and Indirect Coombs' tests were negative.

Stool for occult blood test tested positive.

A upper GI study revealed a small ulcer 1.0x0.5 mm with adherent clot, everted margins and normal surrounding mucosa. Biopsies were taken to rule out malignancy. The biopsy revealed an oedematous lamina propria infiltrated by lymphoplasmacytic cells and histiocytes with a few neutrophils.

Bone marrow aspirate revealed 40% plasma cells with some binucleate and trinucleate forms. No lytic lesions could be identified on the skull and chest X-rays. An X-ray LS spine showed collapse of L4-L5 vertebrae.

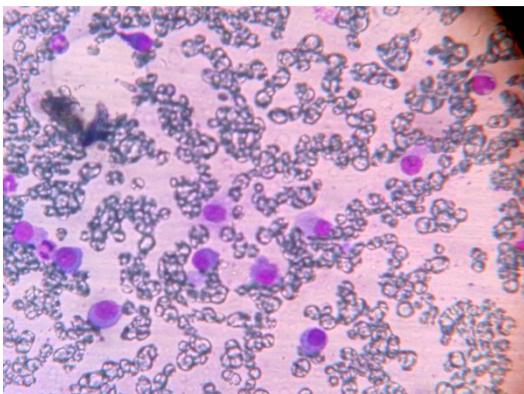


Figure 1: Bone marrow aspiration cytology.

A serum protein electrophoresis showed: Total protein: 11.80 g/dL (6.40-8.30), albumin 2.02 g/dL (3.50-5.78), gamma globulin - 8.76 g/dL (0.62-1.57). The M-spike in

the gamma globulin region was identified as an IgG with IgA secreting monoclonal cells. Serum beta2 microglobulin level was 7675 ng/mL (609-2366). The patient was diagnosed as a stage III multiple myeloma (International staging system) and treated with dexamethasone, zoledronic acid and thalidomide.

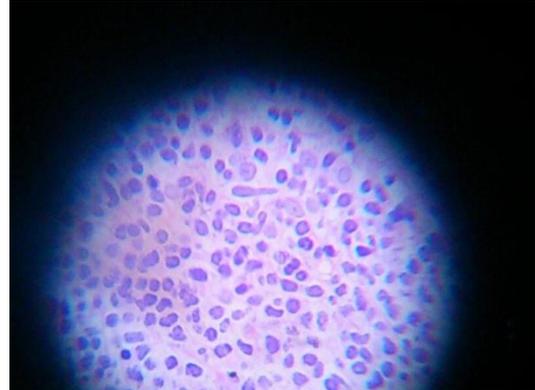


Figure 2: Gastric ulcer biopsy.

DISCUSSION

MM is the second most prevalent haematological malignancy, representing 2% of all cancer mortality. Extramedullary plasmacytoma is an uncommon entity that most commonly involves nasopharynx or upper respiratory tract. Involvement of the gastrointestinal tract occurs in approximated 5% of cases. The small bowel is most commonly involved followed by the stomach, colon and oesophagus. Endoscopically, gastric plasmacytomas usually present as ulcers or an ulcerated mass, occasionally as irregular thickened folds, and, rarely, as fungating type polyps or multiple small haemorrhagic friable plaques. However presentation of multiple myeloma as an upper g.i bleed is rare.

One such case was reported by Nicola Mumoli and Giovanni Niccoli in 2009.⁴ Daram et al.⁵ reported a case of a 53-year-old female diagnosed with MM in 2005. The patient presented with acute upper GI bleeding in the form of hematemesis, and underwent chemotherapy and stem cell transplantation.

GI bleeding has been identified in 10-30% of patients with neoplastic diseases of the hematopoietic organ, including MM. Talamo et al. identified 24 patients with involvement of the GI system documented in a database of 2584 patients with MM of which only two cases presented with GI hemorrhage. Maza et al.⁶ reported an uncommon case of rectal bleeding and anemia with polypoid lesions and ulcerations in the colon, as the presenting symptom of amyloidosis and light chain MM.

In conclusion, MM is a systemic disease which may be rarely presented with GI involvement. Our case report identified a 58 year old lady who sought care for her GI bleeding rather than skeletal lesions. While commoner

causes should always be sought first, the physician must keep in mind the possibility of MM in a case of gastrointestinal bleed, especially in an elderly patient.

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