

GASTRIC MALTOMA: A CASE REPORT AND LITERATURE REVIEW

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ABSTRACT

This is a report of a 75 year old woman wrongly diagnosed and managed as a case of abdominal tuberculosis and peptic ulcer disease with no improvement in symptoms before a definitive diagnosis of low grade B-cell lymphoma was made with immunohistochemistry. She was completely free of symptoms after two of four courses of R-CVP (Rituximab-Cyclophosphamide, Vincristine, and Prednisolone). A plea is made for appropriate investigation in order to avoid wasteful spending of patient's resources and undue exposure of patient to poor management.

KEY WORDS: Gastric Maltoma.

Pak J Med Sci July - September 2010 Vol. 26 No. 3 726-728

How to cite this article:

Akinbami AA, Durojaiye IO, Oshikomaiya BI, Ismail KA. Gastric Maltoma: A case report and literature review. Pak J Med Sci 2010;26(3):726-728

INTRODUCTION

Mucosa associated lymphoid tissue lymphomas (MALT lymphomas or MALTomas) account for approximately 7.5% of NHLs.¹ The most common site of MALT lymphoma (MALToma) is the stomach, but it could also be found in the lungs, salivary gland, thyroid, skin, and other soft tissues.²⁻⁷ MALT lymphomas are often preceded by an inflammatory or autoimmune condition e.g. Sjogren syndrome and Hashimoto thyroiditis, and in the case of gastric MALToma, chronic antigenic stimulation by *H. Pylori* gastritis is frequently the preceding

event.⁸ Indeed, the standard initial treatment for early-stage disease now is antibiotic therapy to eradicate the infection; regression of lymphoma occurs in some patients.^{9,10}

The aim of this report is to highlight cases that are wrongly diagnosed as abdominal tuberculosis, and peptic ulcer disease (PUD), particularly those that are *H.pylori* negative and fail to respond to anti-*H.pylori* regimen.

CASE REPORT

A 75 year old widow, presented with one year history of abdominal swelling and weight loss, and five day history of difficulty in breathing and leg swelling. There was associated history of poor appetite and easy satiety. There was no history of fever, cough, nausea, vomiting or bleeding diathesis.

She was treated for abdominal tuberculosis with anti-Koch's therapy for eight months in a private hospital, but there was no improvement in symptoms. There was no family history of cancer, hypertension or diabetes. She neither smoked nor took alcohol.

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* Received for Publication: February 12, 2010

* Accepted: April 9, 2010

At presentation, she was chronically ill-looking, moderately pale, with submandibular and supraclavicular lymphadenopathy and pitting pedal edema. She was dyspnoeic at rest, with tachypnoea and bilateral crepitations in the mid and lower lung zones. Abdomen was grossly distended, soft, doughy and with moderate ascites. Liver was tipped. The spleen was not enlarged. There was no abdominal tenderness.

There was left ventricular hypertrophy on echocardiography. Chest X-ray showed widespread nodular opacities with hilar lymphadenopathy. Chest CT scan differentials included unresolved TB, metastatic lung disease and sarcoidosis. Abdominal CT scan findings were suggestive of (1) disseminated TB, (2) intra-abdominal malignancy with lung metastasis and (3) lymphoma. Liver and renal function tests were normal.

Fine needle aspiration cytology of submandibular lymph node revealed reactive lymph node without malignant cells. Inguinal lymph node biopsy showed lymphadenitis with no malignant cells seen. Tumour markers CA-125, CA-19.9 were normal and alpha fetoprotein was marginally raised.

She later had one episode of haematemesis and bleeding per vagina, with severe anaemia. She was transfused with four pints of blood and placed on *H. Pylori* eradication regimen (omeprazole, ciprofloxacin and metronidazole) for six weeks. The anaemia resolved, and haematemesis and bleeding PV did not recur. She had an upper gastrointestinal endoscopy done two months after presentation. The findings on macroscopy were suggestive of gastric adenocarcinoma. Biopsies were taken for histology and immunohistochemistry. A month after, gastric fluid washout cytology was done which showed malignant cells suggestive of Non-Hodgkin lymphoma of the stomach.

Result of immunohistochemistry of the previous gastric biopsies showed: "infiltrate of small B-lymphoid cells (CD20 positive). Lymphoid cells express Bcl-2, but negative for CD10, CD23, cyclin D1 and CD5. Ki-67 index was about 5%. Features were those of Low Grade B-Cell Lymphoma of MALT Type".

Based on the immunohistochemistry diagnosis, she was started on four courses chemotherapy with R-CVP (Rituximab, Cyclophosphamide, Vincristine and Prednisolone).

Presently, she's had two courses of four R-CVP with marked improvement in symptoms. Cough subsided, haematemesis or bleeding PV had not recurred, appetite improved remarkably, abdominal swelling reduced and patient gained weight.

DISCUSSION

Anti- *H. Pylori* regimens have an *H. Pylori* eradication rate of about 90%. There is regression of gastric MALToma in about 75% of cases, with a complete response rate of approximately 50%.^{6,8-13}

Patients who do not respond or have partial response to antibiotic therapy may require surgery, chemotherapy or radiotherapy.^{14,15} Due to the multifocal nature of gastric MALToma, the surgical procedure is a total gastrectomy with its associated complications. When the tumor is incompletely excised, radiotherapy may be appropriate and has excellent results.¹⁵ In the minority of patients presenting with disseminated disease, systemic chemotherapy is effective.

Chemotherapy has not been studied sufficiently in MALT lymphoma. A phase II study of 24 patients reported a complete response rate of 75% with continuous monotherapy with either cyclophosphamide or chlorambucil.¹⁶ Rituximab has been evaluated in a phase II study of both untreated patients and patients who had relapsed after chemotherapy, including 14 with gastric and 20 with extragastric MALT lymphoma. In the untreated patients, overall response rate was 85% and complete response rate was 48%. In patients that relapsed after chemotherapy, overall response rate was 45% with complete response rate of 36%.^{17,18}

This patient was given a combination of Rituximab an anti CD 20 regimen and cyclophosphamide, vincristine and prednisolone, probably that explains the rapidity at which she recovered.

In order to avoid wrongly diagnosed cases of gastric lymphoma in the future, immunohistochemistry should be considered an important diagnostic tool of any gastric biopsy. Once the correct diagnosis is made treatment is simple and effective.

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