Case Report

Intestinal non-hodgkin's lymphoma presenting with sub acute abdomen: a report of two cases

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INTRODUCTION:

Gastrointestinal (GI) tract lymphomas are the most common type of primary extra nodal lymphomas. Primary intestinal lymphomas represent about 15-20% of gastrointestinal lymphomas (1) and new therapeutic approaches are now being devised to treat them aggressively. However in Pakistan, few studies regarding the epidemiology of GI lymphoma have been published (2-3). It is because of not very commonly available diagnostic facilities or partly poor awareness amongst clinicians. We are reporting two patients who presented to our institution in the last six months. Both were labeled as intestinal tuberculosis (TB) but turned out to be primary Non Hodgkin's Lymphoma (NHL) of the gastrointestinal tract.

CASE REPORTS:

Case-1: A 26 years old male presented to Shifa International Hospital with fever and abdominal pain of one and a half month's duration. Fever was initially low grade but then started spiking at 103^{o}F. Abdominal pain was more marked in the right lower abdomen. He also reported a weight loss of 10-12 kg over the past 6 months. He was diagnosed as intestinal TB elsewhere and was on ATT for one month. However, there was no improvement in his symptoms. On examination, he was a young pale looking man in obvious distress with a pulse of 110 and a fever of 100^{o}F. There was no lymphadenopathy. Abdominal examination revealed a mass around 5cm in the right iliac fossa. However, there was no liver or spleen enlargement on palpation. Laboratory data

included a hemoglobin of 7.8 g/dl, a white blood cells (WBC) count of 10,700 /uL, with 88% neutrophils and 10% lymphocytes. Erythrocyte sedimentation rate (ESR) was 137 mm/hr. Liver enzymes were in the normal range whereas there was an elevated prothrombin time with an INR of 1.8. A bone marrow aspiration biopsy was performed which showed normocellular marrow with no evidence of lymphoma cells. Chest x-ray was normal. Computed tomography scan showed enlarged liver with marked thickening of antral part of the stomach, thickening of 1st and 3rd part of duodenum, cecum and ascending colon along with multiple lymph nodes in the para aortic region. Mini-laparotomy was performed and lymph nodes were excised from the right iliac fossa. Histopathology revealed NHL. He was started on CHOPP regimen.

Case-2: This 37 years old male presented to our outpatient with the complaints of incomplete evacuation of bowel and evening pyrexia for 2-3 months. He recently developed abdominal pain and distension for 3-4 days. The pain was acute in onset, mild in character, non radiating, in the form of cramps. There was no history of rectal bleeding, pain on defecation, weight loss, mouth ulcers, dyspepsia, jaundice, hematemesis or melena. He was recently started elsewhere on ATT for possible abdominal TB. On examination, there was no jaundice, pallor, lymphadenopathy or any stigmata of chronic liver disease. Abdominal examination revealed a distended abdomen with an inverted umbilicus. No masses were palpable. Laboratory data included a hemoglobin of 10.10 g/dl, WBC count of 9000/uL and a platelet count of 516,000/uL. Serum electrolytes were normal. Ultrasound of abdomen showed thick walled gut loops in left hypochondrium and a possibility of underlying neoplastic process was suggested. A Upper GI endoscopy was negative. An exploratory laparotomy revealed an exophytic mass in the proximal jejunum. All loops of small bowel were found adherent to thickened mesentery. Histopathology report of the tissue submitted showed Burkitt's lymphoma of jejunal wall with involvement of omental fat by the tumor cells. Patient was started on chemotherapy but developed severe neutropenia with an absolute neutrophil count of 200/uL. He subsequently developed sepsis and died.

DISCUSSION:

Primary GI lymphoma is an aggressive malignancy, with 79% of mortality occurring within the first year of diagnosis with an overall 5-year survival and disease-free survival rates of 47% and 40%, respectively (4). One case series with small bowel lymphomas only, reports a cumulative 5-year survival rate of 29% (5). Stage, extent of surgical resection, response to treatment, serosal involvement, multimodality treatment, and performance status has been found to be important prognostic factors (4-6). Conflicting reports have been cited regarding the stomach (1,6,8-10) or the small intestine (3,4,11) to be the most common site of occurrence. Large bowel, especially the colorectal region, has rarely been implicated in the occurrence of lymphoma (12). Indian authors, over a period of 5 years, have reported a total of eight cases of large bowel lymphoma compared with 57 cases of primary GI lymphoma of other sites, constituting about 12.3 percent (eight of 65) of all GI lymphomas (13). However, investigators from Pakistan have reported the involvement of ileocaecal or colorectal region in about 50% of their cases (3). One of our patients had diffuse involvement of the gastrointestinal tract including the duodenum, cecum and ascending colon. The other one had involvement of the jejunum.

Both of our patients were receiving anti tuberculosis therapy at the time of presentation. Since tuberculosis is endemic in our part of the world (14), patients with ascites and no other identifiable cause would commonly be labeled as intestinal tuberculosis. Also, in high prevalence countries such as Pakistan, use of mantoux test and erythrocyte sedimentation rate cannot be recommended for detection of active TB (14). Therefore, appropriate diagnostic tests should be done to rule out or confirm TB. In one study from Pakistan, a tissue-based diagnosis for TB was established in 70.3 % of the patients with abdominal tuberculosis (15).

In conclusion, especially in younger population, unexplained mass in the abdomen with ascites a diagnosis of lymphoma should be considered. The empirical therapy for tuberculosis would only add to multi drug resistance and delay the diagnosis of intestinal lymphoma. As elucidated above, earlier stage at the time of presentation influences the outcome of these patients. Therefore, it is important to have a high index of suspicion to diagnose primary intestinal lymphomas.

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