Bangladesh Crit Care J September 2024; 12 (2): 175-178

Case Report

A Case of Abdominal Discomfort for Long Duration

Ariful Islam[1], Jinan Bashar[2], Anandita Zaman[3]

DOI: https://doi.org/10.3329/bccj.v12i2.76429

Abstract:

In our regular medical practice, we encounter a lot of patients with abdominal discomfort. Commonly every physician suspects this kind of symptoms as gaseous distension of gastro-intestinal tract or acidity. The most valuable thing is the proper physical examination to rule out any underlying pathology. Most common causes of epigastric pain are associated with gastritis, or hepatobiliary system and pancreas related disorders. Here we will describe a 47-year-old male patient who presented with abdominal discomfort for last 6 months. For last 2 months he developed an epigastric lump which was increasing in size and was associated with weight loss. After proper clinical evaluation and necessary relevant investigations, he was diagnosed having Non-Hodgkin's Lymphoma (NHL). Non-Hodgkins Lymphoma represents monoclonal proliferation of lymphoid cells. The incidence of these tumors increases with age. Clinically the proliferation rate indicates whether it is a high- or low-grade tumor. The patient underwent some investigations like CT guided FNAC from the enlarged abdominal lymph node which confirmed high grade Non-Hodgkins Lymphoma and started with chemotherapy and responded well.

As abdominal discomfort is one of the common complaints, we face during our regular medical practice so routine physical examination including abdominal examination is very crucial and informative for clinical diagnosis and Lymphoma is an important differential diagnosis in case of any abdominal lump.

Key words: *Abdominal Lump, HL, HSCT, Lymph node, Lymphocytosis, NHL.*

Case Report

A 47-year-old male carpenter presented with abdominal discomfort for last 6 months. He stated that the pain started all on a sudden and used to come and went off-on its own with diffuse cramping nature and mild to moderate in severity. Occasionally it was very severe and not relieved by any proton-pump inhibitor (PPI) or other antacid and antispasmodic preparations. Pain substantially increased after food intake and was comparatively less in empty stomach; pain reduced his food intake and for which he lost 3 kg weight in last 2 months. He visited several physicians and all of them prescribed him PPI and antispasmodics with antacid liquid preparations, but pain was increasing day by day. Routine investigations of blood performed 2 months back were normal and no significant pathology was found. He denied any previous history of such kind of pain. Pain was not associated with nausea or vomiting and no alteration of bowel habits, but he felt lethargic and lack of energy all the time. His bladder habit was normal. He had slight weight loss (about 3 kg) due to decreased appetite as his pain increased after food intake. He gave no history of previous surgery or hospitalization. His family history was also insignificant.

On query he expressed that his abdomen seemed to have been swelled up for last 2 weeks and gradually distending more. I asked for any swelling or lumps in any other parts of his body, and he denied.

General physical examination revealed that patient was afebrile, mildly anemic, non-icteric, had no regional lymphadenopathy. Abdominal examination revealed distension over the epigastric area and tenderness present with a palpable mass measuring about 3 × 2 cm in diameter, rounded in shape, freely mobile and soft to firm in consistency.

Among the laboratory investigations, CBC showed Hb% is 11.8%, ESR 107 mm, TC 13,230/mm, N: 39%, L: 47%, Platelet: 285000/cmm. Ultrasound study (Fig-1) of whole abdomen revealed huge abdominal lymphadenopathy (multiple lymph nodes are matted together in peripancreatic, para-aortic and epigastric region) with mild splenomegaly and left sided moderate hydronephrosis. Upper GI Endoscopy (Fig-2) revealed mucosal thickening and mild irregularities at the antrum and incisures with multiple nodules are seen in the fundus and body of stomach. Bulb of duodenum is showing multiple nodularity (Fig-3). Histopathology report from gastric mucosa showed lymphoproliferative disorder. CT guided FNAC from abdominal lymph node (Fig-4) showed monotonous large sized lymphoid cells arranged dispersedly. The cells have clumped chromatin, prominent nucleoli and

1. Consultant Physician, US Embassy Health Unit, Baridhara, Dhaka-1212, Bangladesh
2. Assistant Professor, Dermatology and Venereology, MH Samorita Medical College Hospital, Tejgaon, Dhaka-1208, Bangladesh
3. Associate Professor, Dept. of Microbiology, Bikrampur Bhuiyan Medical College, Bikrampur, Munshiganj, Bangladesh

Corresponding Author:

Dr. Ariful Islam
FCPS (Internal Medicine), MRCP (UK)
Consultant Physician, US Embassy Health Unit
Baridhara, Dhaka-1212, Bangladesh
Email: arifim1@gmail.com
Mob: +8801715550148

Received : July 25, 2024; Accepted : August 23, 2024

scanty cytoplasm. Background shows RBCs and cellular debris, favors high grade Non-Hodgkin Lymphoma (NHL).

Upon confirmation of diagnosis of NHL (high grade) patient was immediately referred to a Haemato-oncologist who evaluated him further and started chemotherapy with CHOP regimen which includes chemotherapeutic agents Cyclophosphamide, Doxorubicin (Hydroxydaunorubicin), Vincristine (Oncovin) and Prednisolone.

After 8 cycles of chemo, his lymph node size reduced substantially and now, he was able to eat and gained weight. He has been feeling better and following up regularly with oncologist.

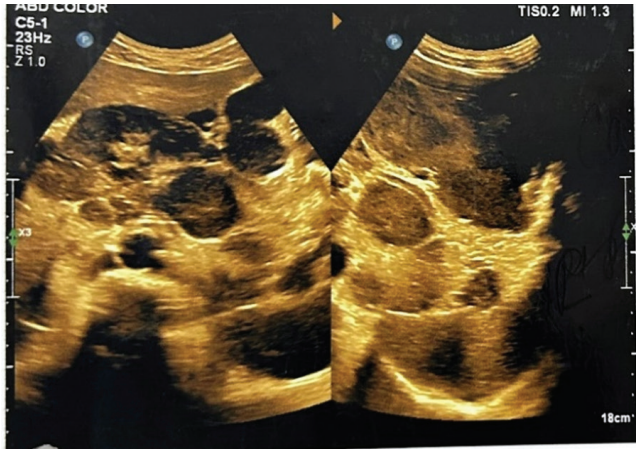

Fig-1: Multiple lymph nodes are matted together in peripancreatic, para-aortic and epigastric region

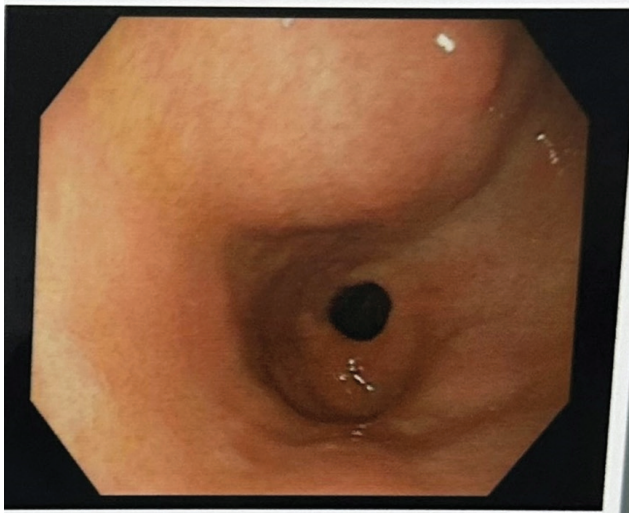

Fig-2: Mucosal thickening and mild irregularities at the antrum and incisure with multiple nodules are seen in the fundus and body of stomach. Bulb of duodenum is showing multiple nodularity.

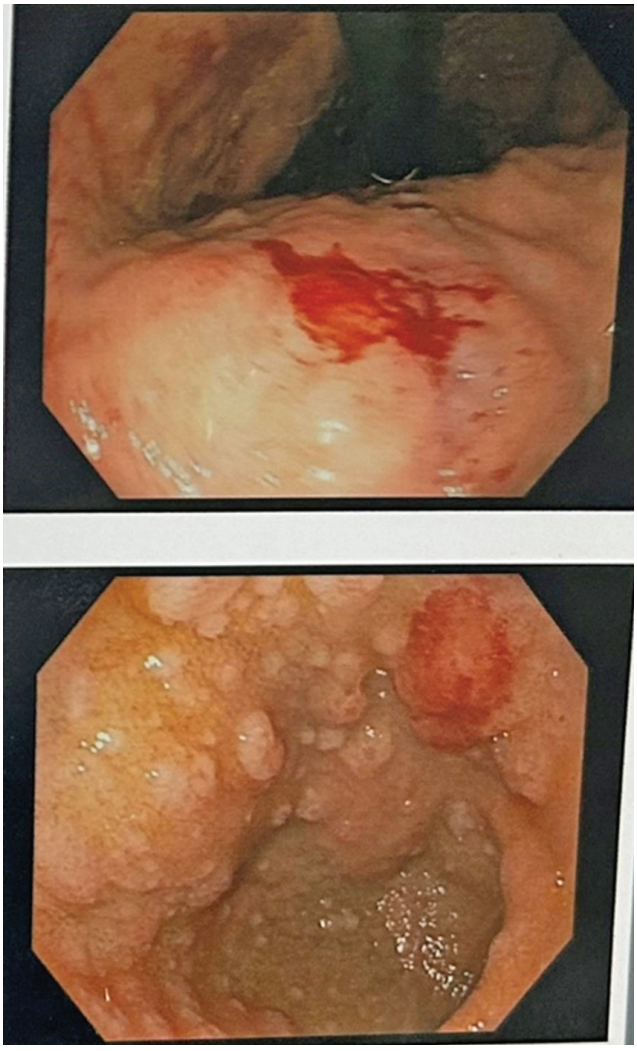

Fig-3: Bulb of duodenum is showing multiple nodularity

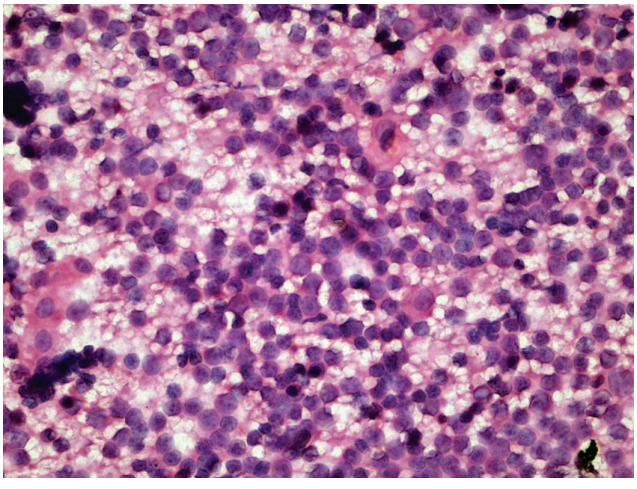

Fig-4: Monotonous large sized lymphoid cells arranged dispersedly, cells have clumped chromatin, prominent nucleoli and scanty cytoplasm, background shows RBCs and cellular debris

Discussion: Patients with abdominal pain usually presents with cramping pain which may or may not be associated with nausea or vomiting, also pain may be occasionally associated with food intake. Abdominal examination is crucial for diagnosis of etiology of any abdominal pain. An epigastric lump with pain/tenderness suggests most commonly carcinoma (Ca) of stomach or enlarged lymph nodes[1].

Non-Hodgkin's lymphoma (NHL) represents a monoclonal proliferation of lymphoid cells of B-cell (90%) origin or T-cell (10%) origin. The incident of these tumors increases with age to 62.8/ million population per annum at age75 years and the overall rate is increasing at about 3% per year[1]. Even a 12-year-old boy has been reported to have NHL[4].

The epidemiology of NHL shows male preponderance with median age of 65-70 years and occasional association of Epstein Barr Virus (EBV) and Human Herpes Virus 8 (HHV8), also Human Immunodeficiency Virus (HIV)[1,2,6,8]. The current WHO classification stratifies according to cell lineage (T or B cells) and incorporates clinical features, histology, genetic abnormalities and concepts related to the biology of the lymphoma. Clinically the most important factor is grade which is reflection of proliferation rate. High grade NHL has high proliferation rates, rapidly produces symptoms is fatal if untreated but is potentially curative and low-grade NHL has low proliferation rates maybe asymptomatic for many months. Of all cases of NHL in the developed world, over 50% are either diffuse large B cell NHL (high grade) or follicular NHL (low grade)[1]. Other forms of NHL including Burkitt's lymphoma, mantle cell lymphoma, MALT lymphoma and T cell lymphoma are individually less common[1,2]. Burkitt's lymphoma is a rapidly proliferating lymphoma of germinal-center B cells. Most patients are cured with chemotherapy and prevention of tumor lysis. Relapse and CNS involvement carry a poor prognosis[2]. Some patients may develop another type or second cancer even after a long duration of completing treatment[3]. Patient with abdominal pain for long duration has also been found to have Cytomegalovirus (CMV) infection involving gastric mucosa[8]. Also, Inflammatory Bowel Disease (IBD) may present with abdominal pain only[1]. Clinical features unlike Hodgkin lymphoma, NHL is often widely disseminated at presentation, including extra nodal sites. Patients present with lymph node enlargement, which may be associated with systemic upset, weight loss, sweats, fever, and itching. Hepatosplenomegaly may be present. Sites of extra nodal involvement include the bone marrow, gut, thyroid, lung, skin, testis, brain and more rarely bone. But with our patient only intra-abdominal lymph nodes were enlarged with compression effects like hydronephrosis[1,2,5].

Bone marrow involvement is more common in low grade (50%-60%) than high grade (10%) of the disease[1,5,6]. CNS involvement is more common in high grade NHL. Patients may present with symptoms of gut obstruction, spinal cord compression, Superior vena cava (SVC) obstruction, and ascites[1,5].

The same staging system (Ann Arbor classification) is used for both HL and NHL, but NHL is more likely to be stage III or IV at presentation[1].

Management of high-grade NHL patients with diffuse large B cell need treatment at initial presentation. The preferred treatment is chemotherapy[1,5,6]. The majority treated with intravenous combination chemo. The chemotherapy typically with the CHOP that includes cyclophosphamide, doxorubicin/hydroxydaunorubicin, vincristine/oncovin and prednisolone, 4-6 cycles are recommended. Radiotherapy is currently indicated for residual localized site of bulky disease after chemotherapy and for spinal cord and other compression syndrome. Autologous Hematopoietic Stem Cell Transplantation (HSCT) benefits patients with relapse disease that is sensitive to salvage immunotherapy[1]. Immunohistochemistry testing is indicated but our patient couldn't afford it, so was not done.

Prognosis: NHL runs an indolent remitting and relapsing course with an overall median survival of 12 years. Transformation to a high-grade NHL occur in 3% and associated with poor survival. In diffuse large B cell NHL treated with R-CHOP, (R stands for Rituximab) some 75% of patients overall respond initially to therapy and 50% will have disease free survival at 5 years. Prognosis for patients with high grade NHL is further refined according to the international prognostic index (IPI). For high grade NHL, 5-year survival ranges from over 75% in those with low-risk scores (age < 60 years, stage I or I, one or fewer extra nodal sites, normal LDH and good performance status) to 25% into with high-risk scores (increasing age, advanced stage, concomitant disease and raised LDH). Relapse is associated with the poor response to further chemotherapy (<10%, 5-year survival) but in patient under 65 years HSCT improves survival[1-3, 5]. The awareness of an increased risk of second cancer remains crucial for survivors of Hodgkin's lymphoma[3].

Conclusion: Abdominal pain or discomfort is a common presentation of several intra-abdominal and systemic diseases. Proper history taking and through physical examination along with abdominal examination is crucial for making a provisional diagnosis and plan the steps of necessary investigations. Sometimes performing only relevant physical examination helps to make the provisional diagnosis which eventually reduces sufferings of the patient in the long run and helps initiating early treatment prevent disease progression.

References:

1. Ian D Penman and Stuart H. Ralston and Mark W J Strachan and Richard Hobson, Davidson's Principles and Practice of Medicine, 24th Edition. Elsevier. P 973-975.
2. Roschewski M, Staudt LM, and Wilson WH. Burkitt's Lymphoma: Review Article. N Engl J Med 2022; 387:1111-1122
3. Schaapveld M, Aleman BMP, van Eggermond AM et al. Second Cancer Risk Up to 40 Years after Treatment for Hodgkin's Lymphoma. N Engl J Med 2015; 373:2499-2511
4. Schwartz KR, El Saleeby CM, Nimkin K, Friedmann AM, Moon A and Zukerberg LR. A 12-year-old Boy with Malaise, Fevers, Abdominal Pain, and Pallor. N Engl J Med 2016; 374:1466-1476.

5. Lewin K, Ranchod J, Dorfman M. Lymphomas of the GIT: a study of 117 cases presenting with gastrointestinal disease. Cancer 1978; 42: 693–707.

6. Sharma A, Raina V, Gujral S, Kumar R, Tandon R and Jain P. Burkitt's lymphoma of stomach: A case report and review of literature. Am J Hematology. 2001; 67: 48-50.

7. Biller JA, Butros SR, Chan-Smutko G, Abrams AN, Chung DC and Hagen CE. A 10-year-old Boy with Abdominal Cramping and Fevers. N Engl J Med 2016; 374:772-781.

8. Lalazar G, Doviner V, and Ben-Chetrit E. Unfolding the diagnosis. N Engl J Med 2014; 370:1344-1348.