Recurrent Abdominal Pain: A Rare Presentation of Childhood Intestinal Lymphoma in a Bangladeshi Child

M S Alam[1], M W Mazumdar[2], M Begum[3], M Benzamin[4], N Haq[5], S Hasan[6], A R Rahman[7], M S Islam[8]

Abstract

In children, primary malignant tumors of the gastrointestinal (GI) tract are rare and accounts less than 5% of all pediatric neoplasms.1 Non-Hodgkin's lymphoma (NHL) remains the most common malignancy of the GI tract in children.2 Moreover small intestine (PLI) is very uncommon. They are different in anatomic distribution and histologic appearance compared to common patterns in adult cases. The disease is rare and having variable clinical presentation that delayed early detection when the possibility of cure exists. The common presentations of PLI are bowel obstruction and intussusception.3,4 NHL of the gastrointestinal tract usually arises in the submucosal lymphoid tissue of the ileocecal region, extendtransmuraly, and involve local mesenteric lymph nodes extensively, forming a bulky abdominal mass. NHL most frequently involved the ileocecal valve (35.8%), followed by the small bowel (31.3%), large bowel (19.4%) and multiple gastrointestinal involvements (13.4%).5

Here we present a case report to show the scenario of a patient suffering from NHL where diagnosis was delayed. The child was suffering from recurrent abdominal pain (RAP) and various treatment was offered but he could not improve. Finally, he was diagnosed as a case of primary non-Hodgkin's lymphoma of the small intestine (PLI). Though PLI is a very uncommon malignancy in childhood.

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[1]Dr. Md Shafiul Alam
Dept. of Pediatric Gastroenterology and Nutrition
Bangabandhu Sheikh Mujib Medical University (BSMMU)

[2]Dr. Md Wahiduzzaman Mazumder
Associate Professor

[3]Dr. Morsheda Begum
HMO, Dept. of Gynae and Obstetrics

[4]Dr. Md Benzamin
Resident

[5]Dr. Nadia Haq
Consultant, Dept. of Pediatrics
Bangladesh Specialized Hospital

[6]Dr. Shariful Hasan
MO

[7]Dr. AZM Raihanur Rahman
Resident

[8]Dr. Md Saidul Islam
Resident

2,3,4,6,7,8
Dept. of Pediatric Gastroenterology and Nutrition, (BSMMU), Dhaka

Correspondence
Dr. Md Shafiul Alam
Dept. of Pediatric Gastroenterology and Nutrition
Bangabandhu Sheikh Mujib Medical University (BSMMU)
email: alam_nizam@yahoo.com

Case report

A 16-year-old boy got admitted (third time)in to the Paediatric Gastroenterology and Nutrition department of Bangabandhu Sheikh Mujib Medical University (BSMMU), Dhaka, with the complaints of- upper abdominal pain for the last four months and vomiting for the same duration.

He had a history of 2 times admission in the same department of BSMMU for the same complaints. During the first time admission - his abdominal pain was diffuse, dull aching in nature aggravated by taking food and relived by leaning forward. He had a history of regular constipation also. Local examination revealed only the epigastric tenderness. Routine blood investigations revealed no significant abnormalities except high ESR (55mm in 1st hour). Sonography of upper GIT revealed normal. Endoscopic biopsy was done, which revealed features of chronic gastritis and he was treated accordingly. He was discharged as a case of functional constipation.

After discharge his condition was not improving. Therefore, he was again admitted in to the same department after 2 weeks of discharge. This time he was found mildly pale, BCG mark was present, WAZ-2.2, ESR higher (90mmin 1st hour) than previous, MT-02 mm. Colonoscopy was done and biopsy material was taken. Biopsy revealed large cauliflower like mass arising from caecum/ileocaecal valve obstructing the major part of the lumen with ulcer and necrosis over the growth, also multiple ulcers was present in the transverse colon (figure-1). Histopathology reveled features of chronic inflammation and no malignant cell was found. He was diagnosed as a case of Intestinal TB and was given anti TB drug and was discharged with proper advice.

Patient's condition was still deteriorating. Therefore, after 3 weeks of discharge he got admitted for the third time in our department

with the history of severe abdominal pain and projectile vomiting for one day. On examination -he was found toxic, vital signs were within normal limit with tender abdomen. Routine laboratory tests report was normal. Then he was referred to surgery department where he was clinically diagnosed as intestinal obstruction due to ileocaecal intussusception. Exploratory laparotomy was done there and biopsy materials was sent to 2 similar standard reputed in both the centers for histopathological examination. Finally, the histopathological report of the biopsy revealed diffuse non-Hodgkin's lymphoma. He was then referred to Paediatric Oncology department for further management.

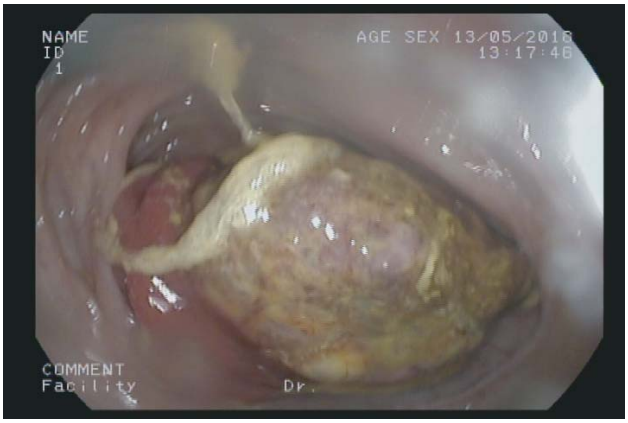

Figure I : Large cauliflower like mass arising from caecum/ileocaecal valve with ulcer and necrosis over the growth obstructing the lumen

Discussion

Non Hodgkin lymphoma is the third most common malignant tumor (10%) in childhood which accounts for nearly 60 % of all lymphomas.[6] Information from Asian population is limited.[7]The peak age is 5–15 years for NHL of GI tract in children.[3] The male to female ratio of childhood GI NHL is from 7:1 to 1.8–2.5: 1.[8,9]

Stomach is the most frequent site in adult patient but in pediatric age group small and large intestines are commonly involved sites.[10] Abdominal pain is the most common presenting symptoms (81.4%), followed by abdominal swelling, vomiting, constipation, diarrhea and intestinal obstruction[9]. In this case the boy was suffering from recurrent abdominal pain (RAP) for four months. For that reason, he was investigated for functional constipation, Intestinal TB-which was not authentically proved.

Frequently used imaging techniques for the diagnosis of gastrointestinal lymphoma includes ultrasound, CT, PET/CT, gallium scintigraphy, and bone scintigraphy. Now a days, in children PET/CT has become the preferred functional imaging techniques both for initial staging and for evaluation of the response to treatment in lymphoma. But the definitive diagnosis of gastrointestinal lymphoma is done by biopsy of the tissue and histopathological examination. In this case finally we did that and confirmed his diagnosis as a case of diffuse non-Hodgkin's lymphoma.

RAP is a common symptom for so many common paediatric problems. But it is also a common and sometimes the only presentation of primary gastrointestinal lymphoma. Therefore in case of RAP Paediatricians should also kept the rare causes in mind.

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