



Acute abdomen as a clinical presentation of lymphoma: A case report

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ARTICLE INFO

Article history:

Received 7 January 2019

Revision 21 February 2019

Accepted 1 March 2019

Available online 20 March 2019

Keywords:

Lymphoma
Acute
Abdomen
Presentation

ABSTRACT

Rationale: Acute abdomen is a medical emergency that requires prompt diagnosis and management. Lymphoma is a rare cause of acute abdomen. **Patient concerns:** A 54 year old patient complained of repeated episodes of acute abdominal pain over the past 3 months. **Diagnosis:** Mantle cell lymphoma. **Interventions:** Chemotherapy and stem cell transplantation. **Outcomes:** Abdomen pain disappeared and the patient was discharged uneventfully. **Lessons:** Although it is a rare cause of acute abdomen, lymphoma should be included in the differential diagnosis workup of patients with unexplained and unusual acute abdomen.

1. Introduction

Acute abdomen is an important complaint in medical practice. It means the acute problem occurring at the abdominal part of patients, especially for acute pain. In general practice, acute abdomen is an important clinical presentation that requires good clinical diagnosis and management. There are several etiologies of acute abdomen. Lymphoma is a possible but rare cause of acute abdomen. Good history taking and physical examination both are important for diagnosis of acute abdomen. Basically, to obtain the history patients should give history on time without any interruption[1]. Then a gentle good physical examination should be done[1]. The importance of the good diagnosis is to reach the decision for management of the patient. Sometimes, the surgical management is needed and this is usually after the good diagnosis of acute abdomen[1].

Nevertheless, the unusual causes of acute abdomen are also possible and this situation might be easily

misdiagnosed. Sometimes, acute abdomen might be the clinical presentation of malignancy[2]. The intraabdominal pathology due to malignancy can be the underlying cause of acute abdomen. Among several kind of malignancy, lymphoma is an interesting possible cause. In this brief clinical review, the authors reported and discussed on the acute abdomen as clinical presentation of lymphoma, an important hematological malignancy.

2. Case report

This report was approved by ethical committee of the medical center (MedAcad C08-2018). A 54 years old male patient presented

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How to cite this article: Joob B, Wiwanitkit V. Acute abdomen as a clinical presentation of lymphoma: A case report. J Acute Dis 2019; 8(2): 86-88.

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to the physician with chief complaint of acute abdominal pain. This case gave the history of repeated episode of acute abdominal pain within the past 3 months. The physical examination showed soft abdomen without tenderness or guarding. The patient gave no history of diarrhea or abnormal stool passing. Then additional clinical work up in the patient was performed. X ray acute abdomen series showed no significant finding; the complete blood count, blood glucose, liver function test, renal function test and stool examination results were normal. To get the definitive diagnosis, abdominal CT scan was finally done and the enlarged lymph nodes within abdominal cavities could be detected. The positive CT finding was multiple enlarged round lymph nodes with uniform density and clear margin in abdominal cavity. Finally, the surgical approach was done for lymph node biopsy and the final clinical diagnosis of mantle cell lymphoma was derived. The patient was treated with chemotherapy and stem cell transplantation treatment.

3. Discussion

3.1. Lymphoma as a cause of acute abdomen

Lymphoma is a common hematological malignancy that is observable worldwide, and is the malignant change of lymphoid cells in lymphoid organs. Lymphoma can exist at several organs including gastrointestinal organs. Hence, it is no doubt that there might be gastrointestinal symptoms in cases of gastrointestinal lymphomas. Acute abdomen is a possible clinical manifestation of gastrointestinal lymphoma. The rooted cause of the acute abdomen problem might be due to several pathophysiological processes such as ischemia[3] and intussusception[4-6]. Regarding infarction, the direct vascular involvement combining with thrombotic event induced by lymphoma is the main pathogenesis[3]. Focusing on intussusception, lymphoma lesion might be the starting point for intussusception development[4]. The mentioned lymphoma lesion usually occurs at the small intestine area[4]. This problem is rare but is well documented. In pediatrics, there is a well-known condition namely "Norwich paediatric triad" that consists of malrotation, intussusception and small intestinal lymphoma[7].

Finally, HIV patients might have increased risk for lymphoma development, and HIV infected patients might have abdominal lymphoma and firstly presented with acute abdomen complaint[4,8].

3.2. Types of lymphoma that can cause acute abdomen

Several types of lymphoma can cause acute abdomen problem. Non-Hodgkin's lymphoma is the main group of lymphoma that might be associated with acute abdomen problem, and Burkitt's lymphoma can result in intussusception and acute abdomen problem as well[4,9]. The problematic lesion usually occurs at ileocecal area and easily mimics the acute appendicitis[9-13]. The primary B

cell lymphoma can also occur at appendix and it can result in the clinical problem as a case of perforated appendicitis[14,15]. Similarly, mantle cell lymphoma can also present as an acute appendicitis-like clinical manifestation[16]. In the case with intestinal perforation, peritonism usually occurs and leads to acute abdomen problem. It should also be noted that the primary organs causing peritonism might not only include the gastrointestinal tract but also genital tract organs. In females, lymphoma of ovary might invade adjacent colon and result in perforation that further results in acute abdomen problem[17]. In case with peritonism, CT scan investigation can show pneumoperitoneum and free intraperitoneal fluid[18].

4. Conclusion

Lymphoma can cause acute abdomen problem. Although it is a rare cause of acute abdomen, lymphoma still should be included in the differential diagnosis list of unexplained and unusual patients presenting with acute abdomen.

Conflict of interest statement

The authors report no conflict of interest.

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