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Case Study

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A CASE REPORT ON NON HODGKIN'S LYMPHOMA PRESENTING AS ACUTE INTESTINAL OBSTRUCTION

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ABSTRACT

Non-Hodgkin's Lymphoma (NHL) is a type of extranodal lymphoma (30%-50% of all extranodal lymphomas), that occur in the gastrointestinal tract, with the extra-nodal site being most commonly affected. We present the case of a 69 year old male patient, with a history of hypertension (HTN) and Benign Positional Vertigo (BPV). He was admitted with the complaints of abdominal pain and vomiting. On examination the patient had a right lumbar region mass palpable (immobile) and right lower quadrant (RLQ) tenderness, pallor (+).Blood occult report was positive, Contrast-enhanced computed tomography (CECT) scan of abdomen and pelvis was done. The patient was diagnosed as Non- Hodgkin's Lymphoma, possibly malt lymphoma. The patient underwent Ileocecal resection, Ileostomy and Colostomy under spinal anaesthesia (SA). Ileocecal resection specimen was sent for biopsy evaluation (HPR) and the report revealed lymphoproliferative lesion suggestive of Non- Hodgkin's Lymphoma, possibly malt lymphoma.

KEYWORDS: Non-Hodgkin's Lymphoma (NHL), Extranodal Lymphoma, Gastrointestinal (GI) tract.

INTRODUCTION

Acute obstructive abdomen is a state of emergency clinical situation caused by interruption of gastro intestinal circulation. It is associated with high morbidity and mortality rate (20%), particularly in the case of late diagnosis or treatment delay.[1]

Non Hodgkin Lymphoma (NHL) is the type of extranodal lymphoma (30% - 50% of all extranodal lymphomas) that occur in the gastrointestinal tract, with the extra-nodal site being most commonly affected, followed by stomach, small intestine, ileocecal region and colorectal.[2] Diffuse large B-cell lymphoma is the common pathological subtype of NHL. The etiology is not yet known, but several factors have been linked to its pathogenesis, including infection with *Helicobacter pylori*, Human Immunodeficiency Virus (HIV), celiac diseases, *Campylobacter jejuni*, *Epstein-Barr virus*, hepatitis B virus and immunosuppression.[3,4] The abdominal tumours are often associated with symptoms of pain, nausea and vomiting resulting from intestinal obstruction caused by direct compression of the bowel lumen or by intussusception.[5]

CASE REPORT

We present the case of a 69 year old male patient, with a history of HTN and BPV. He came to the emergency department with complaints of abdominal pain and vomiting. On physical examination, patient had right lumbar region mass palpable (immobile), right lower quadrant (RLQ) tenderness and pallor (+).

On the day of admission the vitals were in normal range (Temperature 98.6°F, Pulse 80beats/min, Respiration 18breath /min, Blood Pressure 120/80mmHg). Initial laboratory data shows anemia with haemoglobin (8.9gm%) and was treated with one unit blood transfusion, Lymphocytes (18.9%) was low. ESR (104mm/hr) and C - Reactive Protein (CRP-36.6mg/L) was elevated and others were with in normal range. Echo

summary shows no echocardiographic regional wall motion abnormalities (RWMA), good left ventricular (LV) systolic function. Blood occult report was positive, No obvious bowel obstruction at present and suggestive for complicated Meckel's diverticulum with thick walled abscess, small bowel neoplasm.

On the first day the patient was treated with empirical antibiotic therapy on injection Cefoperazone Sulbactam (1.5gm, BD), analgesics and other supportive measures. CECT scan of abdomen and pelvis were done.

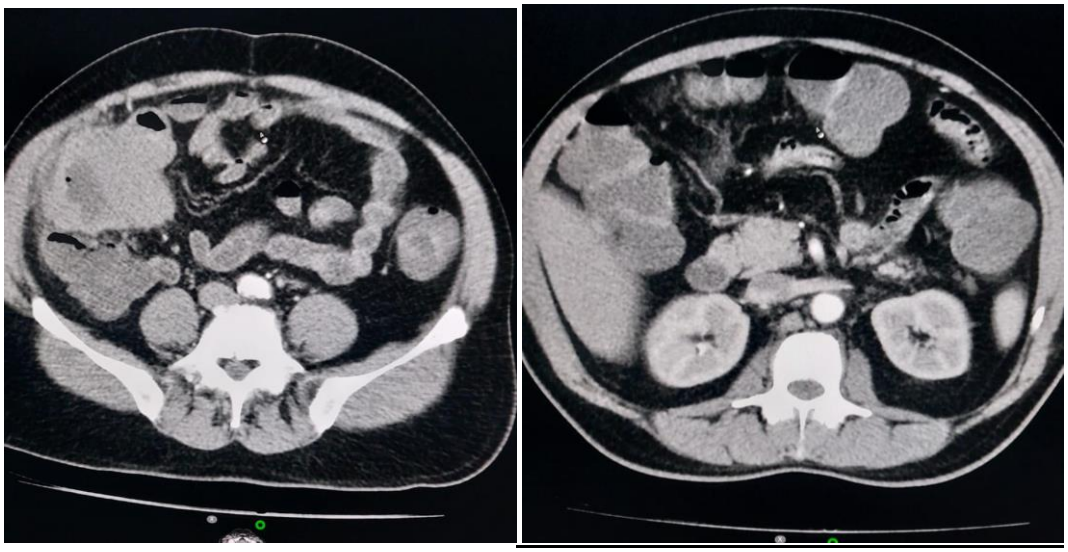

Figure 1: Computer tomography scan of abdomen and pelvis shows hetrogenous enhancing lesion involving right lower lumbar and iliac region with peripheral enhancing solid components and central fluid with air pockets within few hyperdense foci.

On the second day, haemoglobin (8.7 gm%) was declined, stool occult blood test (OB) seems to be positive. Gastroentrology consultation was taken regarding abdominal pain and stool occult (+). The same treatment was continued on second day.

On the third day after Pulmonology, Cardiology and Anesthesia clearance he underwent Ileocecal resection, Ileostomy and Colostomy under SA. The procedure finding includes distal ileal mass about 8cm proximal to ilocolic junction with ileal loop adherent over mass and adhesions to asending colon. No ascites and other organs were normal. The patient was in post operative ICU for 2 days.

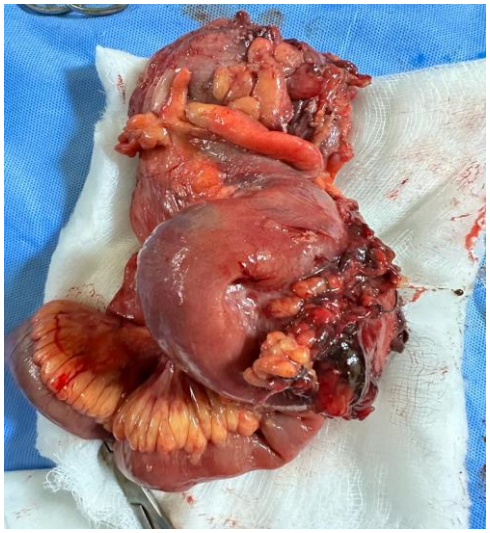

Figure 2: Right ileocecal mass.

The figure 2 shows resected segments of small intestine measures 38cm in length and 2.5 cm along resection margin. Overlying mucosa appears ulcerated with cobule stroma pattern, Attached caecum with portion of ascending colon measures10.0cm in length and 3.0cm in greatest dimention.

On the fourth day antibiotic therapy was initiated with injection Cefoperazone Sulbactam (1.5gm, BD) and the drain was removed. Ileocecal resection specimen was sent for the biopsy evaluation and report indicates Non-Hodgkin's Lymphoma, possibly Malt Lymphoma. The

patient was symptomatically better and discharge medications include Tab Zerapod (200mg, BD), Tab Rabimond (20mg, BD), Tab Ultranise (TDS), Tab Softeron gold (OD).

DISCUSSION

NHL is rare when it occur in the gastrointestinal (GI) tract, with the extra-nodal site being most commonly affected.[6] About 5-20% of extra-nodal lymphomas occur in the GI tract followed by common sites such as stomach, small intestine, ileocecal region and colorectal. This condition is associated with high morbidity and mortality rate, especially in the case of late diagnosis or treatment delay. Sometimes it may reach about 20% mortality.[7]

The main causes of high intestinal obstruction include internal hernia and large stomach tumors. Colorectal disease, volvulus and stenosis from intestinal inflammatory disease (terminal ileum) are causes of low intestinal obstruction.[1]

The etiology is not yet known, but several factors have been linked to its pathogenesis, including infection with *Helicobacter pylori*, human immunodeficiency virus, celiac disease, *Campylobacter jejuni*, *Epstein-Barr virus*, hepatitis B virus and immunosupression.[3]

The preoperative diagnosis of the disease is difficult, considering the clinical manifestations that many times cause late search for specialized medical attention. The proper diagnosis can only be obtained after the histo-morphological and immune-histochemical analysis of the condition.[8]

Primary management of localized lymphoma involves intravenous administration of IV antibiotics, resection of the affected segment and its adjacent mesentery. Surgery plays an important role when tumor is completely resectable, the tumor burden is low and helps in the exact histo-pathological diagnosis. Surgery has limited application in case of diffuse lymphoma.[9]

Common complications of GI lymphomas are intestinal perforations and peritonitis. 59% occurs in the small intestine when compared to the stomach (16%) and colon (22%).[9]

CONCLUSION

The small bowel neoplasms are rare and the benign types are more frequent. It is difficult to suspect the diagnosis in a timely manner because the signs and symptoms are vague and unspecific. However, this disease condition should always be remembered and considered in the differential diagnosis of various intestinal symptoms.

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