ORIGINAL RESEARCH PAPER
Volume - 14 | Issue - 04 | April - 2025 | PRINT ISSN No. 2277 - 8179 | DOI : 10.36106/ijsr
INTERNATIONAL JOURNAL OF SCIENTIFIC RESEARCH

LYMPHOMAS OF THE GIT - A CASE SERIES

Hematology

Dr Lakshmy C.V Assistant Professor, State Cancer Institute, Guwahati

ABSTRACT

The gastrointestinal tract is the commonest site of primary extranodal lymphoma, accounting for 30–50% of cases (Isaacson & Du, 2005). The stomach is the most common site of involvement for primary gastrointestinal lymphoma. MALT lymphomas and DLBCL are the most common histopathological types of gastrointestinal lymphomas. In this case series 5 cases of GI lymphomas are presented that were diagnosed and treated at the State cancer institute from the time period of July 2024 to January 2025.

KEYWORDS

INTRODUCTION

The gastrointestinal tract is the commonest site of primary extranodal lymphoma, accounting for 30–50% of cases (Isaacson & Du, 2005). This is not altogether surprising since the gastrointestinal tract contains more native lymphoid tissue than that collectively present in all other major lymphoid organs (Isaacson & Du, 2005). Permeable mucosal sites of the gastrointestinal tract are particularly vulnerable since they are in direct contact with the external environment, and specialized lymphoid tissues have evolved to protect them (Isaacson & Du, 2005). The stomach is the most common site of involvement for primary gastrointestinal lymphoma, followed by the small intestine, followed by the large intestine. MALT lymphomas and DLBCL are the most common histopathological types of gastrointestinal lymphomas. In this case series, 5 patients who were diagnosed with gastrointestinal tract lymphomas and received treatment at the State Cancer institute, Guwahati during the period of July 2024 to January 2025 are presented.

Case Presentations: Patient 1

55 year old female, presented with complaints of pain in the abdomen for 4 months, loss of appetite, unintentional weight loss of about 10 kg over the past 6 months, vomiting from 2 months. She had been prescribed proton pump inhibitors with which she got temporary relief, but symptoms recurred with progressively worsening severity. As part of evaluation, she underwent upper GI endoscopy which showed an ulcerated polypoid growth in the gastric fundus; biopsy from the growth was however unsuitable for opinion due to improper fixation. She was referred to SCI for further management. On examination she was emaciated, dehydrated, and pale. Rest general and system examination was within normal limits. Upper GI endoscopy was repeated and biopsy from growth was taken. On histopathological examination of the biopsy specimen she was diagnosed with DLBCL. Staging whole body PET CT was done, which showed Lugano stage IV disease. IPI score was 3 and CNS IPI score was 3. She started on R-CHOP protocol. Post completion of 3 cycles interim PET CT showed DS score 3. She received a total 6 cycles of R-CHOP and the end of treatment assessment showed areas of increased uptake in the lungs bilaterally with corresponding CT images more in favour of infective aetiology with complete resolution of FDG uptake at all sites that had showed hypermetabolism in the initial staging scan. She also had recurrent febrile episodes for 2 months and passage of worms in stool with perianal pruritus. On evaluation she was having severe eosinophilia. She was treated with albendazole and is currently being evaluated to rule out other infective causes for eosinophilia. She is planned to be kept on follow up.

Patient 2

A 50-year-old male with no known comorbidities, presented with complaints of pain in the abdomen of 2 months duration. He also had history of malena and had one bout of hematemesis. There was unintentional weight loss of about 9 kg over the last 6 months. At initial evaluation he presented to the emergency department with generalised weakness, dizziness and hematemesis. On initial assessment he was in hypovolemic shock, with haemoglobin levels of 2g/dl. He was transfused 4 units of PRBC and emergency upper gastrointestinal endoscopy revealed a mass in the body and antrum of the stomach. Histopathological examination of the biopsy from the growth showed DLBCL, GCB subtype. He was referred to the State cancer institute for further management.

On examination he was pale, and vague abdominal mass was palpable in the epigastric region of size 4 X 4 cm. Whole body FDG PET CT showed 19 X 5.1cm hypermetabolic extensive nodular wall thickening of the body and antrum of the stomach (SUV max 28.85)and infiltration of the gastro-hepatic and gastro-colic ligaments, a few enlarged gastro-hepatic and gastro-colic lymph nodes. There was moderate ascites and trace bilateral pleural effusion. No increased FDG uptake was noted elsewhere.

He was diagnosed DLBCL, GCB subtype, Lugano Stage 2E, bulk disease and started on R-CHOP chemotherapy with a plan of total 6 cycles and interim assessment post 3 cycles. On the last follow up he has completed 4 cycles of chemotherapy and interim assessment post 3 cycles showed complete metabolic response.

Patient 3

50 year old , male with no known comorbidities, symptomatic for 4 months, presented with complaints of postprandial hurry, pain abdomen, loose stools, passage of blood in stools, generalised weakness, undocumented weight loss, swelling bilateral legs. On initial evaluation abdomen imaging was done with initial ultrasonography and subsequent CT abdomen which showed multiple homogeneously enhancing well defined mass lesions in mesentery in front of aorta and inferior vena cava with complete encasement of bilateral renal arteries and branches of superior mesenteric artery. Multiple lymph node enlargement noted. There was circumferential wall thickening involving ileum. He was referred to SCI for further management.

On examination he was emaciated, frail coarse dry skin, pale, had bilateral pitting pedal oedema and generalised lymphadenopathy including bilateral cervical, axillary and inguinal nodes. Liver was just palpable, the spleen was enlarged to 4 cm below the costal margin. Vague nodular masses were palpable in the left lumbar region. He was referred to our institute where he was further evaluated. Colonoscopy done showed multiple sessile polyps in the caecum and descending colon. Biopsy from the polyps showed submucosal nodular lymphoid hyperplasia. Ultrasound guided biopsy from the nodal mass in abdomen on histopathological examination showed mantle cell lymphoma. FDG PET CT whole body was done for staging showed multiple hypermetabolic supradiaphragmatic and infradiaphragmatic lymphadenopathy and extensive nodular wall thickening of the jejunal and ileal loops with high grade metabolism, suggestive of bowel involvement by lymphoma. He was started chemotherapy with a plan of 6 cycles of chemotherapy with R-CHOP alternating with R-DHAP with added Ibrutinib along with R- CHOP component of chemotherapy. On the last follow up he completed 5 cycles of chemotherapy and interim assessment with whole body FDG PET CT showed partial metabolic response with a DS score of 4.

Patient 4

61 year old, male with known comorbidity of systemic hypertension presented with complaints of pain in the abdomen for 4 months which became more persistent and of progressively increasing severity. He presented with features of acute abdomen 1 month back. CECT abdomen showed extensive ileocecal intussusception extending upto the hepatic flexure and transverse colon extending a length of 143 mm. The invaginated structures included distal ileum, ileocecal junction and its mesenteric vessels and fat. He underwent emergency

exploratory laparotomy with diversion ileostomy on 15-11-24. Ileocecal growth was noted intraoperatively and biopsy was done. Histopathological examination showed DLBCL. He was referred to state cancer institute for further management. Repeat imaging at SCI showed Ileocecal intussusception extending to right hepatic flexure with a mass measuring 9 X 5.6 X 7 cm. Laparotomy with right hemicolectomy was planned and done on 18-12-24. Intraoperatively findings showed interbowel adhesions, caecal mass with colo-colic intussusception. Biopsy from colectomy specimen showed mass in the caecum and ascending colon, microscopy and IHC showed - DLBCL non-GCB type. Whole body FDG PET done after surgery showed no evidence of hypermetabolic uptake at any site. He was planned for 6 cycles of chemotherapy with R-CHOP and first cycle he received on 6-2-24.

Patient 5

67-year-old female presented with complaints of pain abdomen for 4 months. Other complaints included unintentional non-documented weight loss, loss of appetite, nausea and vomiting. On initial evaluation an ultrasound abdomen showed a nodal mass in the abdomen. Ultrasound guided biopsy of the mass on histopathological examination showed DLBCL. Whole body FDG PET CT showed stage IV bulk disease with FDG avid asymmetric circumferential thickening in the distal ileum, ileocecal junction and caecum with focal extra serosal infiltration into the right colic mesentery. The mass measures 6.5 X 6.4 X 9.6cm (AP X TR X CC) with SUV max of 29. Also multiple FDG avid discrete and conglomerate right colic, middle colic, mesenteric, retroperitoneal superior mesenteric, bilateral retrocrural lymph nodes were noted with extra nodal extension of large retroperitoneal nodal mass into the left adrenal gland and posterior wall of pancreas, measuring 8.4 X 8.8 X 9cm (AP X TR X CC) with SUV max of 29.4. She was referred to State cancer institute for further management. On examination she was pale, emaciated, lethargic, and the left supraclavicular lymph node was palpable. Abdomen was distended and shifting dullness was present. Moderate volume ascites was present. Blood investigations showed hypercalcemia with corrected calcium levels of 14 and hypoalbuminemia. PTH levels were within normal limits. She was started on supportive treatment and intravenous hydration and steroids. With a diagnosis of DLBCL, non-GCB subtype and stage IV bulk disease and paraneoplastic hypercalcaemia a treatment plan of 6 cycles of R-CHOP with interim assessment post 3 cycles, consolidative radiotherapy to sites of bulk post chemotherapy and intrathecal methotrexate with each cycle. First cycle of chemotherapy was administered on 11-2-24, post chemotherapy she clinically improved.

DISCUSSION

In this case series, 5 patients were diagnosed and treated for gastrointestinal lymphomas in the time period of the study, of which, 4 were DLBCL, one was Mantle cell lymphoma. Review of literature reveals that most non-Hodgkin lymphomas involving the GI tract are of B-cell lineage, of which diffuse large B-cell lymphoma is the most common subtype, irrespective of location (Isaacson & Du, 2005). In this case series diagnosis was delayed in all cases due to non-specific symptoms at onset, with average time to diagnosis from symptom onset being about 3.8 months. As per literature review, patients with gastrointestinal malignancies often present in the advanced stages due to significant delays in diagnosis and treatment (Humphrys et al., 2020). In this study, in 2 patients the primary site was the stomach, in 2 cases the primary site was the small intestine and in one patient it was the colon. As per literature, the stomach is the most common site of involvement for primary gastrointestinal lymphoma, followed by the small intestine, followed by the large intestine (Isaacson & Du, 2005). This case series highlights the various issues in GI lymphomas like the varied presentations, complications and the delay in diagnosis that is frequently encountered in this spectrum of patients.

REFERENCES

1. Humphrys, E., Walter, F. M., Rubin, G., Emery, J. D., Johnson, M., Richards, A., Fitzgerald, R. C., Viswanath, Y. K., & Burt, J. (2020). Patient symptom experience prior to a diagnosis of oesophageal or gastric cancer: A multi-methods study. BJGP Open, 4(1). https://bjgpopen.org/content/4/1/bjgpopen20X101001.short
2. Isaacson, P. G., & Du, M. (2005). Gastrointestinal lymphoma: Where morphology meets molecular biology. The Journal of Pathology, 205(2), 255–274. https://doi.org/10.1002/path.1703