# Rare case of gastric lymphoma

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#### Abstract

Gastric lymphoma is an RARE disease, may either represent primary malignancy confined to stomach or secondary involvement by systemic disease. Herin, we report a case of gastric lymphoma in a 63 years old male patient presenting with symptoms of upper abdominal pain, melena, vomiting ,loss of appetite for period of 6 months.

Keyword: Gastric lymphoma, Mucosa-associated lymphoid tissue.

#### Introduction

Gastric lymphoma represents the most common site of extra nodal lymphoma, accounting for 25% of all such lymphomas, 50% of all gastro intestinal lymphomas, but comprise only 1-5% of all gastric malignancies. Typically primary gastric lymphoma occurs in adults in the 6<sup>th</sup> decade of life and the presentation is no different from gastric cancer.

### Case Report

63 years old male got admitted with complaints of upper abdominal pain, melena, vomiting, loss of appetite for 6 months On examination patient anaemic, vague epigastric mass, which moves with respiration, no ascitis.

Investigatation done blood Hb 7.9gms liver function test normal, CECT Abdomen and pelvis shows Multiple para aortic and pericaval nodes, suggestes d biopsy to exclude infection versus neoplastic process like lymphoma.

Upper GI scopy done .Biopsy taken –report came as Adenocarcinoma. 8 units of blood transfusion done.

So patient was prepared for surgery. Subtotal gasterectomy done. Intra operative finding –no ascitis, liver normal, multiple celiac nodes seen, growth stomach occupying antropyloric region extending to body and lesser curvature of stomach. Stomach bed free, so proceed with subtotal gasterectomy with gastro jejunostomy done.

Biopsy report –Subtotal gasterectomy specimen shows mucosal ulceration and diffuse infilterating growth measuring 12x11x15 cm growth infilterating into muscle layer and serosal layer. Microscopy report –Gastric mucosa with superficial erosion and necroinflamatory exudates underlying submucosa showing neoplastic arranged diffuse sheats composed of monotonus population of small round cells with scanty cytoplasm and vesicular nucleoli showing prominent nucleoli intervining stroma shows few congested blood vessels admixed with plasma cells. Suggestive of lymphoma, poorly differciated carcinoma

stomach. So we did IHC for this specimen came as Non Hodgkins Lymphoma B cell type. After surgery patient sent for medical oncologist opinion, their opinion was Non Hodgkin lymphoma affecting stomach (isolated involvement of stomach –likely). So CECT –neck, thorax, bone marrow study –not needed, patient was started on CHOP regimen. Now patient is on chemotherapy. Patient is well responding to chemotherapy.



Fig. 1: Intra Operative Picture

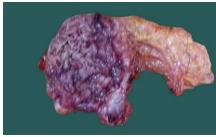


Fig. 2: Specimen

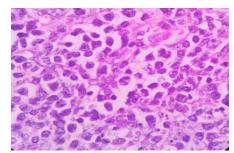


Fig. 3: Histopathology picture of Gastric lymphoma

#### Discussion

Gastric lymphoma is the most common in the sixth decade, the common symptoms being pain, weight loss and bleeding. Three types of gastric lymphoma are recognized 1. Low grade MALT lymphoma: 60% of all primary gastric lymphoma 2. Primary sporadic lymphoma: the vast majority are B- cell non Hodgkins lymphoma 3.Secondary involvement of the stomach by systemic lymphoma (usually high grade)

Mucosa-associated lymphoid tissue (MALT) lymphoma is strongly associated with Helicobacter pylori (85-98% of cases). These are low grade lymphomas and may regress following the treatment of helicobacter infection.

Primary gastric lymphoma remains in the stomach for a prolonged period before involving the lymphnodes. At an early stage, the disease takes the form of diffuse mucosal thickening, which may ulcerate.

Diagnosis is made as a result of endoscopic biopsy. Adequate staging is necessary, primarily to establish whether the lesion is a primary gastric lymphoma or a part of a more generalized process. CT scan of the

Chest, Abdomen and bone marrow aspirate are required, as well as a full blood count.

### Radiographic features

**Fluoroscopy:** barium meal- Appearances vary from normal, to grossly abnormal possible appearances include bull's eye appearance due to central ulceration, filling defects, thickened gastric rugae, linitis plastic. CT findings: Typically gastric lymphoma demonstrates marked thickening of the stomach wall with a large lateral extension of the tumour (i.e. along the wall of the stomach) representing submucosal spread. In some instances the subhmucosal spread encompasses the majority of the stomach, giving it a linitis plastic appearance. Extensive retroperitoneal and local nodal enlargement is often seen.

The treatment of primary gastric lymphoma is surgery alone in a case of localized disease process, although some oncologist contend that primary gastric lymphoma can be treated by chemotherapy alone. Chemotherapy alone is appropriate for patient with systemic disease. Early gartric lymphomas may regress and disappear when the Helicobacter infection is treated.

The two common complications are bleeding and perforation.

Table 1: Staging of gastric lymphoma

Stage	Lugano staging system	Tnm staging	Anna arbor	Tumor involvement
		system (modified	staging	
		for gastric	system	
		lymphoma)		
I	Confined to GI tract (single	T1 NO MO	Ig	Mucosa, submucosa
	primary or multiple,	T2 NO MO	Ig	Muscularis propria
	noncontiguous)	T3 NO MO	Ig	Serosa
II	Extending into abdomen	T1-3 N1 Mo	IIg	Perigastric or peri-
	II a – local nodal involvement	T1-3 N2 MO	IIg	intestinal lymph nodes
	IIb - Distant nodal involvement			More distance regional
				lymph nodes
III	Penetration of serosa to involve	T4 NO MO	Ig	Invasions of adjacent
	adjacent organs or tissue			structures
IV	Disseminated extra nodal	T1- 4 N3 MO	IIIg	Lymph node on both
	involvement or concomitant	T1 – 4 N0-3 M1	IVg	side of the diaphragm
	supra diaphragmatic nodal			Distant metastases (e.g
	involvement			bone marrow or
				additional extra nodal
				sites)

#### Conclusion

Gastric lymphoma is an interesting disease, unlike gastric carcinoma, the lymphoma seems to be increasing. These patients are having a very good response when treated with surgery and chemotherapy.

#### References

Dawson IM, Cornes JS, Morson BC (July 1961).
"Primary malignant lymphoid tumours of the intestinal tract. Report of 37 cases with a study of factors influencing prognosis". Br J Surg. 49:80–9.
doi:10.1002/bjs.18004921319. PMID 13884035.

- Aisenberg AC (October 1995). "Coherent view of non-Hodgkin's lymphoma". J. Clin. Oncol. 13 (10):2656–75. PMID 7595720.
- Koch P, del Valle F, Berdel WE, et al. (September 2001). "Primary gastrointestinal non-Hodgkin's lymphoma: I. Anatomic and histologic distribution, clinical features, and survival data of 371 patients registered in the German Multicenter Study GIT NHL 01/92". J. Clin. Oncol. 19(18):3861–73. PMID 11559724.
- Thirlby RC (January 1993). "Gastrointestinal lymphoma: a surgical perspective". Oncology (Williston Park, N.Y.). 7 (1): 29–32, 34; discussion 34,37–8. PMID 8420540.

- Parsonnet J, Hansen S, Rodriguez L, et al. (May 1994). "Helicobacter pylori infection and gastric lymphoma". N. Engl. J. Med. 330 (18):1267–71. doi:10.1056/NEJM199405053301803. PMID 8145781.
- Bayerdörffer E, Neubauer A, Rudolph B, et al. (June 1995). "Regression of primary gastric lymphoma of mucosa-associated lymphoid tissue type after cure of Helicobacter pylori infection. MALT Lymphoma Study Group". Lancet. 345 (8965):1591–4. doi:10.1016/S0140-6736(95)90113-2. PMID 7783535.
- Hammel P, Haioun C, Chaumette MT, et al. (October 1995). "Efficacy of single-agent chemotherapy in lowgrade B-cell mucosa-associated lymphoid tissue lymphoma with prominent gastric expression". J. Clin. Oncol. 13 (10):2524–9. PMID 7595703.