

The role of laparoscopy in preoperative staging of oesophageal / gastric carcinoma

J.P Rankothkumbura, R.A.A Shaminda, H.K.G.R Anuradha, K.B Galketiya
University Surgical Unit, Teaching Hospital, Peradeniya, Sri Lanka.

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Introduction

Staging laparoscopy (SL) is a recommended method for preoperative staging in oesophageal or gastric carcinoma, in particular to detect and confirm nodal involvement [1,2]. Even after a good radiological evaluation including High-dose contrast-enhanced computed tomography (CECT), Endoscopic ultrasound (EUS), some patients have unresectable disease at surgery. Therefore staging laparoscopy would avoid unnecessary laparotomy. However it involves general anaesthesia and operating time and may delay the definitive procedure. Therefore in Sri Lanka and the region, where patient numbers are overwhelming, it may be used selectively.

We present a patient who was diagnosed to have a squamous cell carcinoma of the oesophagus on endoscopic biopsy but the histopathology of oesophagectomy revealing a lymphoma. A SL would have clearly avoided the surgery.

Case presentation

A 65 year old male presented with loss of appetite and weight and vague left sided abdominal pain for one month duration. Clinical examination was unremarkable. Upper gastrointestinal endoscopy showed a growth at gastro-oesophageal junction (GOJ) with the biopsy revealing an early invasive squamous cell carcinoma (SCC). The CECT chest and abdomen showed a thickening at the gastro-oesophageal junction with multiple enlarged lymph nodes above and below the diaphragm and a moderate splenomegaly. Radiological diagnosis confirmed the GOJ carcinoma but also raised the possibility of a lymphoma. Endoscopic ultrasound scan (EUS) was considered but the facility was not available.

As the patient was fit for surgery, he underwent laparoscopic transhiatal oesophagectomy. The stomach was mobilized

laparoscopically and the oesophagus was mobilized through the hiatus with the laparoscope. Lymph nodes were dissected off enbloc with the specimen. Intra-operative frozen section histology of lymph nodes was not done due to lack of facilities. The cervical oesophagus was mobilized with a neck incision and oesophago-gastric anastomosis was performed.

The histology of the resection specimen showed Non-Hodgkin B cell lymphoma at gastroesophageal junction with negative resection margins. SCC was not detected on this specimen. Patient was referred to oncologist and chemotherapy was started.

Discussion and conclusion

Up to about 40% of lymphomas are seen in sites other than lymph nodes with the gastrointestinal tract being the commonest extra nodal site with preponderance to non-Hodgkin type [3,4]. Stomach is the commonest site (60-75%) though any part of the gastrointestinal tract could be involved [4]. While primary oesophageal lymphoma is hardly found, local spread from gastric lymphoma or secondary deposits from cervical or mediastinal lymph nodes give rise to infrequent (<1%) cases of oesophageal involvement [4]. Further, although NHL presents at a particular site, the tumour is widely disseminated at the time of diagnosis [3]. Surgery, chemotherapy, radiotherapy and radio immunotherapy are the available treatment modalities for gastrointestinal lymphomas either in isolation or in any combination [4].


Staging of oesophageal cancer is mainly by contrast enhanced CT scan. Studies on staging laparoscopy for oesophageal cancer are limited [2]. Unnecessary surgery may be avoided in disseminated disease by utilising SL in selected cases.

In our patient endoscopic biopsy was suggestive of a squamous cell carcinoma of the oesophagus and CECT of chest confirmed it. However as the CECT raised the possibility of a lymphoma, if a diagnostic/ staging laparoscopy and a lymph node biopsy was performed the diagnostic controversy would have been overcome and the patient would be benefited by offering accurate treatment avoiding an unnecessary major surgery. In conclusion, even though staging laparoscopy is not practically possible in all

Correspondence: J.P Rankothkumbura

E-mail: jeewan.med@gmail.com

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 <http://orcid.org/0000-0003-0542-135X>

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patients planned for oesophagectomy, it is indicated when significant lymphadenopathy is detected on pre-operative imaging.

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Learning Points:

- Oesophageal lymphomas (primary or secondary) are a rare cause of oesophageal growths.
- Staging/diagnostic laparoscopy is an important investigation that would alter the management of oesophageal malignancies and should be considered at least in selected cases.