

Case Report

Oligometastatic recurrence in radically treated stage II lower thoracic ca oesophagus at two drain sites: a treatment challenge?

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ABSTRACT

Ca oesophagus is a dreaded malignancy with less than 15 % cure rate and majority of the patients presenting with advanced unresectable disease. Prognosis remains poor despite advances in combined modality treatments. Most common sites of loco-regional recurrence after surgery remains the mediastinal lymph node clearance area while other common sites are lung liver and bone. Unexpected sites of metastasis have been reported like skin, muscle, eyes etc. We report a case of 66-year-old male patient diagnosed with stage II poorly differentiated squamous cell carcinoma lower oesophagus radically treated with neoadjuvant chemotherapy, trans hiatal esophagectomy followed by adjuvant chemotherapy, who subsequently developed oligometastatic recurrences at two drain sites. Patient was treated with surgical excision followed by radiotherapy and chemotherapy.

Keywords: Oligometastatic ca oesophagus, Drain site recurrence, Trans hiatal esophagectomy

INTRODUCTION

Ca oesophagus is an aggressive malignancy with very less cure rate. Globocan data updated in December 2020 suggests ca oesophagus as 3.1% (604,100 new patients) of all cancers accounting for 5.5% of cancer deaths. Eastern Asia accounts for highest age standardized incidence rate of 12.3 per 100,000 and mortality rates of 10.7 per 100,000.

Oligometastatic is defined as a state of limited number of metastatic burden.¹ Hellman and Weichsel Baum in 1995 defined that oligometastases are mets that are limited in number, site and metastatic potential with a possible chance of cure by radical treatment. They can be synchronous i.e. detected at the time of primary cancer diagnosis or metachronous, which occur following treated primary cancer site.

There have been few studies regarding ca oesophagus with unusual sites of metastasis like skin, eye, muscle, heart,

isolated bones, breast etc but there have been limited number of case reports with oesophageal squamous cell carcinoma seeding to a chest drain site post operatively.²

Drain site seeding has been reported in few case series of head and neck primaries with percutaneous endoscopic gastrostomy tube (PEG) but only one report of drain site mets post hybrid Ivor Lewis oesophagectomy with laparoscopic gastric mobilisation done for adenocarcinoma of ca oesophagus has been reported.³⁻⁵

CASE REPORT

66-year-old male presented with 15-20 days history of difficulty in swallowing solids. However patient could consume semisolids and liquids. There was history of weight loss (undocumented). No history of vomiting, haematemesis, melena. There was history of consumption of red meat, history of smoking since past 50 years and history of alcohol intake for past 30 years.

General physical examination revealed pallor. Systemic examination was within normal limits.

Upper GI endoscopy revealed a friable mass with central ulcer at 34 cm from the incisor and extending downward for about 4 cm. There was narrowing of lumen and difficulty in passing scope beyond. However distal oesophagus was normal with stomach showing patchy erythema of entire gastric mucosa and duodenum.



Figure 1: Patient presenting at 1st F/U post excision of lump at drain site.

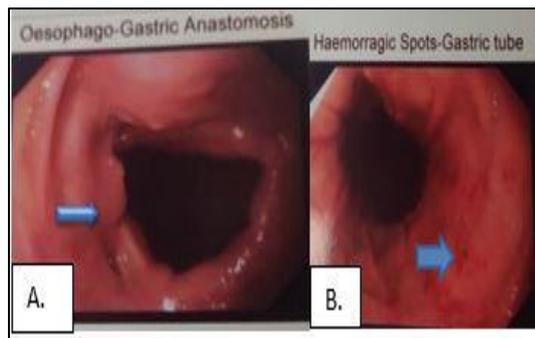


Figure 2: A) Upper GI endoscopy revealing no visible growth with normal esophagogastric anastomosis when patient presented with drain recurrence. B) There is presence of haemorrhagic gastritis in gastric tube (neoesophagus).



Figure 3: Chest drain lump at 11 months post treatment completion.

Oesophageal biopsy revealed moderately differentiated squamous cell carcinoma. His routine investigations including complete hemogram revealed Hb 10.4 gm%,

LFT, RFT, Serum electrolytes, RBS were within normal limits

CECT Chest revealed circumferential mural thickening of oesophagus below carina measuring 13 mm in maximum thickness with luminal compromise. There was presence of one enlarged lymph node of 12 mm at right hilar location. CECT Abdomen revealed no metastasis.

Patient was planned for neoadjuvant chemotherapy followed by surgery and adjuvant chemotherapy. He received total of four cycles of neoadjuvant chemotherapy based on TPF (Taxane, cisplatin, 5FU) and then underwent Trans hiatal esophagectomy at department of surgery. Operative findings revealed a growth of 4×2 cm in middle part of oesophagus with no ascites, no omental deposits, no peritoneal or liver mets. Stomach was identified and mobilized through superior mediastinum. One chest drain and one abdominal drain was kept.

Detailed HPE revealed poorly differentiated squamous cell carcinoma with tumor free margins reaching up to adventitia with no lymphovascular space invasion (LVSI), no perineural invasion (PNI). Patient was staged as ypT3NoMo (Stage II). Patient was given three cycles of adjuvant chemotherapy based on TPF and then he was kept on F/U.

Patient was symptom free for 4 months and reported late for F/U. At 1st F/U he presented post excision of hard lump 2×2 cm at abdominal wall drain site on right side (Figure 1) which was resected in department of surgery. Biopsy of drain site swelling (Lump) in gross examination revealed focal ulcerated area in centre of mass measuring 0.7×0.5 cm. Microscopic examination revealed malignant cells infiltrating the underlying subcutaneous tissue focally reaching up till deep resection margin with focal LVSI and PNI positivity. Diagnosis of well differentiated squamous cell carcinoma was made.

Patient was symptom free for dysphagia. He was reinvestigated with UGIE showing no visible mass and only haemorrhagic gastritis (Figure 2). USG abdomen and pelvis within normal limits with normal routine blood investigations. Patient was planned for single fraction of radiation 6 Gray to the scar site only to address the local disease.

Patient was put on close follow up and was symptom free for five months. He again developed swelling at scar site which 2×2 cm and was again excised. Biopsy again revealed well differentiated squamous cell carcinoma from excision of the swelling.

He also complained of hard lump at chest wall drainage site (Figure 3). FNAC from chest drain site lump revealed undifferentiated carcinoma. Patient was investigated to know the extension of the disease in chest as well as abdomen with the help of CECT chest which revealed mildly enhancing nodules in right upper lobe apical

segment with mild pleural effusion and CECT abdomen was within normal limits. Patient is currently planned on Chemotherapy and excision of chest wall lump. He is having no symptoms of dysphagia.

DISCUSSION

Oesophageal carcinoma is an aggressive carcinoma with very less 5-year survival rate of less than 25%.⁶ Patients presenting with oesophageal cancer rarely present with early disease and often present with locally advanced disease with many having metastatic presentation at the time of initial diagnosis. Extra-nodal metastases are seen in 20% of cases, with liver and lungs are the most common sites.⁷

Metastasectomy for lung oligometastases has become an effective modality for selected patients with renal cancer, colorectal cancer and other malignancies; however, there are limited studies for oesophageal carcinoma. Kobayashi et al reported series of 23 patients with oesophageal cancer who underwent pulmonary metastasectomy and concluded that extrapulmonary metastases before pulmonary metastasectomy, poor differentiation of primary oesophageal carcinoma, and short disease-free interval are unfavourable prognostic factors.

There has been only one report by Wen et al with chest drain recurrence in Ca oesophagus (poorly differentiated adenocarcinoma (diffuse type) with scattered signet ring cells) following radical treatment.

In this patient the initial resected specimen of oesophagus revealed poorly differentiated squamous cell carcinoma and there was short disease-free interval from resection and recurrence at drain site. In resource limited centre availability and affordability for better investigations like PET CT for metastatic workup remains a challenge for the patient which may delay the diagnosis and affect outcome.

CONCLUSION

Drain site mets in Ca oesophagus is a rare entity and requires extra effort to select an appropriate treatment for the same due to lack of specific guidelines. Treatment for oligometastatic disease needs to be tailored based on many factors like site, disease free interval, histology etc. In centres with resource constraints like ours affordability issues for costly investigations like PET scan remains a challenge especially when the patient is symptom free for dysphagia. No doubt oligometastases at drain site in radically treated early-stage Ca oesophagus poses a unique challenge for the clinicians.

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REFERENCES

1. Weichselbaum R, Hellman S. Oligometastases revisited. *Nat Rev Clin Oncol.* 2011;8:378-82.
2. Shaheen O, Ghibour A, Alsaïd B. Esophageal Cancer Metastases to Unexpected Sites: A Systematic Review. *Gastroenterol Res Pract.* 2017;2017:1657310.
3. Wen D, Collantes E, Sgromo B. Oligometastatic recurrence of an oesophageal adenocarcinoma at a chest drain site following radical treatment: palliative treatment or resection?. *Clin J Gastroenterol.* 2018;11:470-75.
4. Huang AT, Georgolios A, Espino S. Percutaneous endoscopic gastrostomy site metastasis from head and neck squamous cell carcinoma: case series and literature review. *J of Otolaryngol - Head & Neck Surg.* 2013;42:20.
5. Ananth S, Amin M. Implantation of oral squamous cell carcinoma at the site of a percutaneous endoscopic gastrostomy: a case report. *Br J Oral Maxillofac Surg.* 2002;40(2):125-30.
6. Then EO, Lopez M, Saleem S, Gayam V, Sunkara T, Culliford A et al. Esophageal Cancer: An Updated Surveillance Epidemiology and End Results Database Analysis. *World J Oncol.* 2020;11(2):55-64.
7. Khurana R, Mishra H, Malhotra KP, Shukla S. Carcinoma of the oesophagus, with multiple cutaneous metastases. *BMJ Case Rep.* 2015;2015:bcr2015211653.
8. Kobayashi N, Kohno T, Haruta S, Fujimori S, Shinohara H, Ueno M et al. Pulmonary metastasectomy secondary to esophageal carcinoma: long-term survival and prognostic factors. *Ann Surg Oncol.* 2014;21(3):S365-9.

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