



Difficult Diagnosis of a Carcinoma Esophagus

Ajmal Sherif P¹, Dhanya KS², Anju Chacko³, Biju IK⁴, Pradeep Kumar P⁴

¹Department of Medical Oncology, American Oncology Institute, Kozhikode, Kerala, India

²Department of Radiation Oncology, American Oncology Institute, Kozhikode, Kerala, India

³Department of Pathology, Baby Memorial Hospital, Kozhikode, Kerala, India

⁴Department of Gastroenterology, Baby Memorial Hospital, Kozhikode, Kerala, India

Address for Correspondence: Dr. Dhanya KS, Department of Radiation Oncology, American Oncology Institute, Kozhikode, Kerala, India. Email: dhanyaprabhas@gmail.com

Abstract

Squamous cell carcinoma (SCC) is the most common type of esophageal cancer worldwide. The overall incidence increases with age, reaching a peak in the seventh decade. SCC occurs equally as often in the middle and lower esophagus, with an incidence that is three times higher in blacks in comparison to whites. Adenocarcinoma of the cervical esophagus is quite an uncommon occurrence. Esophageal adenocarcinomas are usually encountered in the lower esophagus and squamous cell carcinoma of the esophagus is more likely to be seen in the upper esophagus. However, due to the trivial nature of the symptoms of the disease, these patients are likely to present in the later stage. Here we present the case of an elderly male, who presented with complaints of dysphagia to solid foods for 3 months and was diagnosed as a case of upper esophageal adenocarcinoma.

Keywords: carcinoma esophagus, adenocarcinoma

Introduction

Esophageal cancer is considered a serious malignancy with respect to prognosis and mortality rate. Accounting for more than 400000 deaths worldwide in 2005 [1]. Esophageal carcinoma is the eighth most common cancer, and the sixth most common cause of cancer related deaths worldwide with developing nations making up more than 80% of total cases and deaths [2]. Over 490000 new cases of esophageal cancer were reported in 2005. While many other types of cancer are expected to decrease in incidence over the next 10 years by 2025 the prevalence of esophageal cancer is expected to increase by 140% [1]. SCC is the most common type of esophageal cancer worldwide. The overall incidence increases with age, reaching a peak in the seventh decade. SCC occurs equally as often in the middle and lower esophagus, with an incidence that is three times higher in blacks in comparison to whites [3]. Adenocarcinoma of the cervical esophagus is quite an uncommon occurrence. Esophageal adenocarcinomas are usually encountered in the lower esophagus and squamous cell carcinoma of the esophagus is more likely to be seen in the upper esophagus. Esophageal adenocarcinomas typically arise in the lower third of the esophagus with a pathogenesis linked to gastroesophageal reflux disease and subsequent development of Barrett's epithelium. However, primary adenocarcinomas in the cervical esophagus are believed to result from mucosal "cardiac" glands, submucosal glands, or heterotopic gastric mucosa. Adenocarcinoma in the cervical esophagus is a rare tumor with little known about its typical prognosis or optimal therapy,

including ideal surgical management and use of neoadjuvant or adjuvant chemotherapy and/or radiotherapy.

FDG-PET has also been utilized in determining nodal involvement in esophageal cancer. Assessment of local and regional lymph nodes for uptake of FDG is difficult to determine given the intense uptake of FDG by the primary esophageal tumor. However, PET is quite useful in detecting distant metastasis, including metastasis to the abdomen and cervical lymph nodes. Sensitivities were reported as high as 90% in distant lymph node metastasis [4].

Case report

An elderly male, presented with complaints of dysphagia, more for solid food, progressive in nature, of 3 months duration. He also had complaints of dyspepsia, and mild chest pain. He reported no associated hematemesis or weightloss. Routine blood investigations revealed severe anaemia, leukocytosis, increased serum creatinine, hypoalbuminemia and AG reversal.

An OGD scopy was done and it revealed an upper esophageal lesion, grade A GERD and hiatus hernia. Biopsy was done from the lesion and the histopathological examination showed dysplastic glands. Further investigation with CT scan showed an upper esophageal endo exophytic mass. The radiological diagnosis was a leiomyoma. Repeat biopsy also showed dysplasia. A whole body PET CT was done in this case and it revealed FDG avid soft tissue mass in proximal esophagus. Guided biopsy was attempted from FDG avid lesion. Histopathological examination revealed well differentiated adenocarcinoma, proximal esophagus.

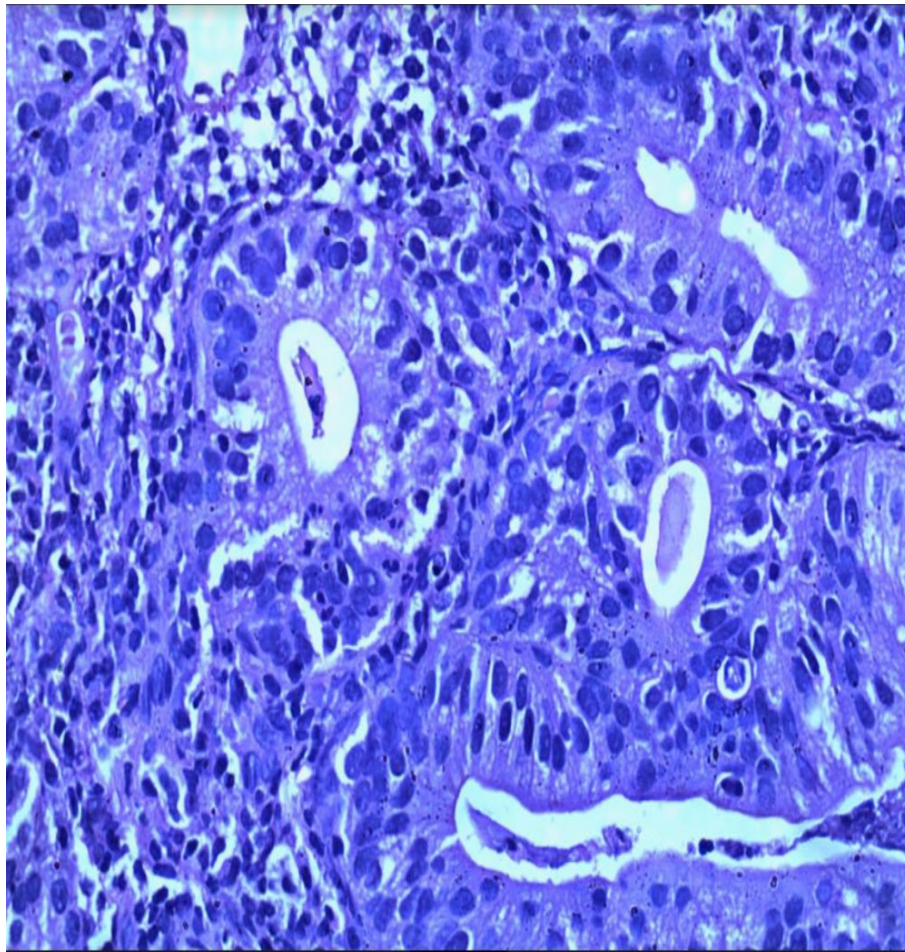


Figure 1: Neoplastic glands lined cells with nuclear atypia and stratification with luminal necrosis. Stroma shows dense lymphoplasmacytic infiltrate.

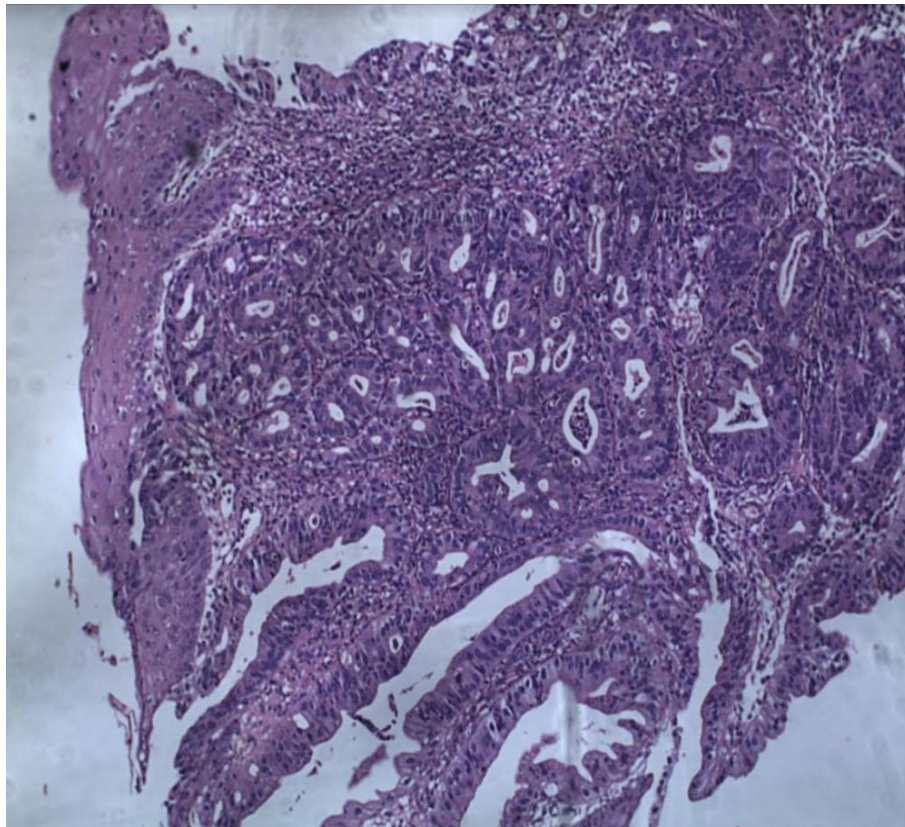


Figure 2: Esophageal mucosa showing villi lined by dysplastic columnar epithelium. Submucosa shows closely packed fused and cribriform glands lined by cells with nuclear atypia and luminal necrosis.

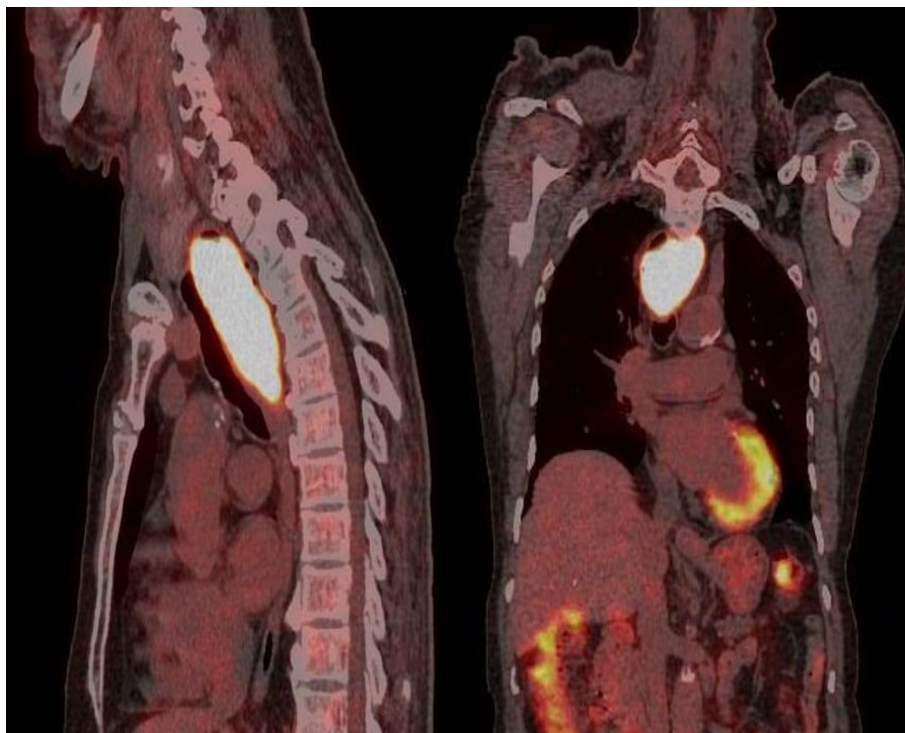


Figure 3: PET CT image showing FDG avid lesion in proximal esophagus.

Surgical feasibility was assessed. However in view of poor general condition and cardiac morbidity of the patient, it was decided that he would benefit best from radical radiation to locoregional site with omission

of chemotherapy. He took radical radiation 5040 cGy in 28 fractions. Patient became symptomatically better after definitive radiation treatment and gained weight and is on follow up.

References

1. Lambert R, Hainaut P Best. The multidisciplinary management of gastrointestinal cancer. Epidemiology of oesophagogastric cancer. Pract Res Clin Gastroenterol. 2007; 21(6):921-45.
2. Daly JM, Fry WA, Little AG, Winchester DP, McKee RF, Stewart AK, Fremgen AM. Esophageal cancer: results of an American College of Surgeons Patient Care Evaluation Study. J Am Coll Surg. 2000 May; 190(5):562-72; discussion 572-3.
3. Herszenyi L, Tulassay Z. Epidemiology of gastrointestinal and liver tumors. Eur Rev Med Pharmacol Sci. 2010 Apr; 14(4):249-58.
4. Lerut T, Flamen P, Ectors N, Van Cutsem E, Peeters M, Hiele M, De Wever W, Coosemans W, Decker G, De Leyn P, Deneffe G, Van Raemdonck D, Mortelmans L. Histopathologic validation of lymph node staging with FDG-PET scan in cancer of the esophagus and gastroesophageal junction: A prospective study based on primary surgery with extensive lymphadenectomy. Ann Surg. 2000 Dec; 232(6):743-52.