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A Case Report: Alcohol-Related Gastro-Esophageal Cancer with Suspected Multiorgan Metastasis

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ABSTRACT

Background: Gastric and esophageal cancer are common and have high incidence mortality. Multiple risk factor such as smoking, alcohol intake, hot food and beverage intake has been related to development of squamous cell carcinoma, while obesity, gastroesophageal reflux (GERD) and *Helicobacter Pylori* (*H. pylori*) infection has been related to development of adenocarcinoma. The aim of this case report is to find out the possible risk factor of gastric and esophageal cancer that occurs in patients with multiorgan metastases.

Case Presentation: A male, 42 years old, Balinese, came to the hospital with complaints of abdominal pain, nausea, fatigue, and weight loss. Patient had history of alcohol consumption, every day for 5 years. On physical examination anemic sclera and ascites were found. Complete Blood Count (CBC) showed anemia (2.6 g/dL). Esophagogastroduodenoscopy (EGD) were performed and found tumor on esophagus and gaster. Abdominal Computed Tomography scan (CT-scan) with contrast and ultrasonography showed a solid mass attached to lien and corpus pancreas that were suspected as malignant, ascites, pericardial effusion and hepatomegaly with multiple nodules, suspected hepatocarcinoma due to metastasis, respectively. Thorax X-Ray showed left pleural effusion, suspected due to metastasis. Patient had received symptomatic therapy and packed red cell transfusion.

Conclusion: The diagnosis of gastric and esophageal cancer begins with history taking, physical examination, supportive investigations. Histopathological examinations were required to select appropriate and proper therapy.

Keywords: Gastric cancer, esophageal cancer, multiorgan metastases

INTRODUCTION

Gastroesophageal cancers including cancers of the the esophagus, gastroesophageal junction (GEJ), and stomach represent the most common cancers worldwide with 1.7 million new case/year.^{1,4} Esophageal and gastric cancers were the fifth and eleven most common cancer in the world and are responsible for high rates of disease, morbidity, and mortality.¹ When combined, they are the third cause for cancer related deaths. Esophageal cancer is classified into 2 main types based on histologic features, squamous cell carcinoma (ESCC) and adenocarcinoma (EAC). In contrast, GEJ and gastric cancers most of adenocarcinomas (ACs).⁴ Multiple risk factor such as smoking, alcohol intake, hot food and beverage intake has been related to development of squamous cell carcinoma, while obesity, gastroesophageal reflux (GERD) and *Helicobacter Pylori* (*H. pylori*) infection has been related to development of adenocarcinoma.²

Diagnosis and staging of these lesions is multimodal. At diagnosis, only 18% of esophageal cancers and 28% of gastric cancers are localized. 40% newly diagnosed of gastroesophageal cancers have distant metastatic spread.³ Treatment is multidisciplinary and combines therapeutic endoscopy, surgery, radiotherapy, and systemic chemotherapeutic tools. The treatment for unresectable or metastatic disease is with palliative systemic therapies.⁴

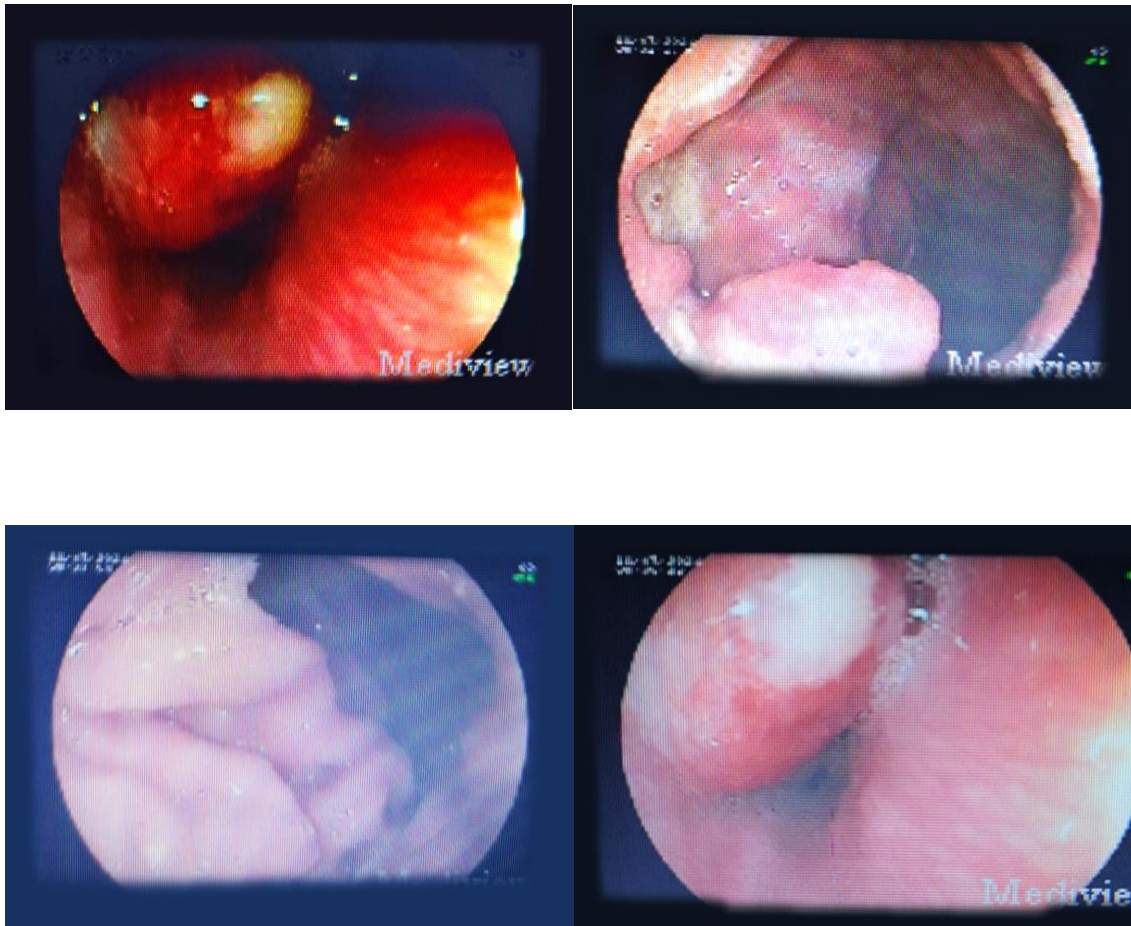
CASE PRESENTATION

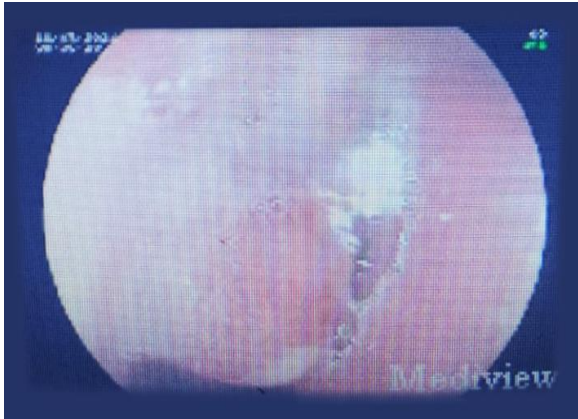
A male, 42 years old, Balinese, came to the hospital with chief complaint of abdominal pain for the last few months prior to hospital examinations. The pain was felt on the center of the abdomen, after eating reported bloated in the night. Pain was reported sharp and not radiating, felt worse in the last month. Patient also felt nausea and vomiting every time he's eating and feeling fatigue. Patient had history of alcohol consumption, > 50gr / day every day for about 5 years. Patient had history of weight loss about 15 kg in 2 months with normal diet and no apparent reason. History of previous illness and chronic disease was denied. History of gastric cancer or chronic disease in family was denied. History of using NSAID was denied.

Based on physical findings we found stable blood pressure, 103/51 mmHg, respiratory rate 20 times/minute, pulse rate 123 beat/minute. Physical examinations found anemic sclera on both eyes, with no icteric sclera found. Abdominal examination revealed pain on palpation of gastric area, inspection, and auscultation were within normal limits. Laboratory results were reported

with increased white blood cell (WBC) 13.39×10^3 gr/dl, decreased hemoglobin level 2.6 gr/dl, and increased platelet 792×10^3 gr/dl. Liver function and kidney function tests were found within normal limits.

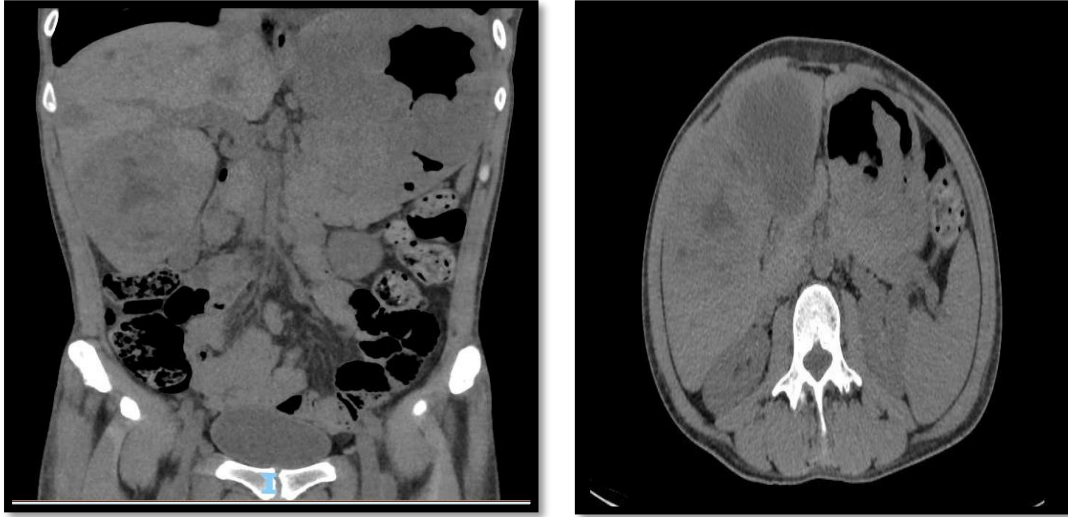
The patient was then planned to undergo an Esophagogastroduodenoscopy (EGD) examination. On EGD we found mass on the esophagus, esophageal junction and gastric antrum, the mucosa was found to be paler, some small erosions and hyperemia were found in the gastric antrum with the conclusion of esophageal and gastric tumor. (Figure 1)





(Figure 1) Esophagogastroduodenoscopy (EGD) Examinations

Patient then planned to undergo an Abdominal Computed Tomography scan (CT-scan) with contrast. On CT-scan showed a solid mass attached to lien and corpus pancreas that were suspected as malignant, ascites, pericardial effusion and hepatomegaly with multiple nodules, suspected hepatocarcinoma due to metastasis, respectively (Figure 2).



(Figure 2) Abdominal Computed Tomography scan (CT-scan)

DISCUSSION

Diverse neoplasms involving mucosal and submucosal tissue layers including gastric and esophageal cancer, which also includes less frequent tumors such as squamous cell carcinomas, adenocarcinomas, spindle cell neoplasms, neuroendocrine tumors, and marginal B cell lymphomas [1]. Over a long period of time, researchers have been examining the risk factors for gastric cancer. The risk variables were found to include alcohol intake, smoking, diet, hot food and beverages, obesity, and gastroesophageal reflux. It is commonly known that excessive alcohol consumption contributes to the development of gastro-esophageal carcinoma. According to certain research, there is a substantial correlation between alcohol consumption and a higher risk of gastric cancer (2). In this case, the patient had history of heavy alcohol consumption, >50gr/day for about 5 years.

Endoscopy with high-definition white light imaging, is the gold standard for identifying and documenting mucosal or submucosal lesion existence. A successful diagnosis depends on targeted biopsies from endoscopically suspected sites or using the updated Sydney procedure. Once a lesion is identified, cross-sectional imaging with contrast-enhanced Computed

Tomography (CT) imaging or Positron Emission Tomography (PET) imaging is important to evaluate for metastatic disease (1). In this case, endoscopy and CT-scan were done and found the gastric cancer with hepatic and lung metastase.

With approximately 26% of patients having metastases to a single site and 13% to multiple sites, metastatic gastric cancer is a very rare. Hemodynamic factors and the anatomic site of primary tumor development affected spread and progression of the tumors (3). Hepatic metastase occur because of the most gastrointestinal venous drainage carried by liver portal vein (4). In lung metastase, pleural effusion commonly occurs when the exudates that form as a result of inflammatory changes in an organ brought on by the presence of a tumor, or transudates that form as a result of venous blockage (5).

CONCLUSION

This case report presents a 42-year-old male with gastric and esophageal cancer with suspected multiorgan metastasis due to heavy alcohol consumption. The diagnosis of gastric and esophageal cancer begins with history taking, physical examination, supportive investigations. Histopathological examinations were required to select appropriate and proper therapy. Patient in this case was managed with palliative systemic therapies.

CONFLICT OF INTEREST

The authors affirmed that there were no conflicts of interest in this study.

FUNDING

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ETHICAL CLEARANCE

Authors have secured informed consent regarding patient medical records for this case report.

AUTHOR CONTRIBUTION

All authors contributed equally in this research and publication of this manuscript.

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