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### **Case Presentation**

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# Asymptomatic Presentation of Invasive Adenocarcinoma of the Esophagus: A Case Report

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#### ABSTRACT

Esophageal and gastroesophageal junction cancers are of the malignancies that are often associated with a poor prognosis, making it one of the most common causes of cancer-related death worldwide. Common symptoms include dysphagia, odynophagia, cough, regurgitation of solid food, and weight loss. This case outlines a rare presentation of a large esophageal adenocarcinoma.

**Case Presentation:** An 84-year-old male with a history of colonic polyps was scheduled for esophagogastroduodenoscopy and colonoscopy for evaluation of right upper quadrant pain, dyspepsia due to dysmotility, and frequent bowel movements. There were no complaints of dysphagia, pain, or unexplained weight loss. A 1.5-1.8-centimeter nodule at the gastroesophageal junction was discovered and biopsied. The pathology report showed adenocarcinoma with scattered signet rings on a background of acute inflammatory changes. The patient was subsequently referred to an otolaryngologist for further evaluation and management.

**Discussion:** Esophageal adenocarcinoma may present in a variety of ways, and in some early cases show no signs or symptoms. This patient presented with a large malignant nodule with no signs or symptoms related to the lesion. Maintaining a broad differential diagnosis in patients with vague, unexplained symptoms may help lead to the discovery of serious disease.

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#### Introduction

Esophageal and gastroesophageal junction adenocarcinoma is one of the malignancies that is often associated with a poor prognosis Esophageal carcinoma can be classified in a variety of ways including location, depth of invasion, and histological features all of which are related to prognosis and overall outcomes. In particular, adenocarcinoma with signet ring cell features on pathological evaluation has been reported to be a poor prognostic marker. Patients with signet ring cell histology in adenocarcinoma of the esophagus or gastroesophageal junction typically show a lower response to induction therapy and have a decreased overall survival when compared to patients with non-signet ring cell histology [1].

Patients with esophageal carcinoma in the advanced stages, typically present with progressive dysphagia and weight loss. Approximately 6-10% of patients are asymptomatic at the time of diagnosis, which is likely representative of early or superficial esophageal cancers [2].

Dysphagia may initially be subtle, but overtime will usually progress from solids to liquids. Patients may also experience regurgitation of saliva or food boluses, aspiration pneumonia, cough, and hoarseness particularly if the recurrent laryngeal nerve is affected.

#### **Case Presentation**

An 84-year-old male with a history of colonic polyps was scheduled for esophagogastroduodenoscopy and colonoscopy for evaluation of right upper quadrant pain, dyspepsia due to dysmotility, and frequent bowel movements. The patient denied cough, dysphagia, pain, regurgitation of food, and unexplained weight loss. Outpatient workup for persistent abdominal pain was inconclusive, leading to the recommendation for esophagogastroduodenoscopy. Due to the patient's history of colonic polyps, colonoscopy was also recommended at that time.

Prior to the procedures, the patient underwent physical examination. Esophagogastroduodenoscopy was performed first with the scope being advanced from the hypopharynx to the second part of the duodenum. The proximal duodenum, gastric mucosa, and esophagus were all well examined. The exam revealed a 1.5-1.8-centimeter nodule at the gastroesophageal junction, Barrett's esophagus measuring 2-centimeters, mild diffuse gastritis, and a periampullary diverticulum. Biopsies of the Barrett's esophagus and gastroesophageal junction nodule were taken. Next, the patient was repositioned, and the equipment was set up for colonoscopy. Digital rectal examination was performed prior to the procedure, and the colonoscope was advanced to the cecum from the rectum. Colon preparation was determined to be adequate. The scope was gradually withdrawn while conducting

careful inspection of the colonic mucosa. The colonoscopy revealed polyps in the descending colon, sigmoid colon, and rectum which were removed via cold snare. Additionally, diffuse left-sided diverticulosis and minimal internal hemorrhoids were noted.

The pathology report of the esophageal biopsies demonstrated Barrett's esophagus without dysplasia or malignancy. The gastroesophageal junction nodule biopsy was significant for invasive adenocarcinoma with scattered signet ring cells and acute inflammatory changes. Gastric pathology report showed no metaplasia, dysplasia, or malignancy of the gastric mucosa. There were no inflammatory changes nor the presence of helicobacter pylori like organisms. A tubular adenoma and hyperplastic colonic polyp both without dysplasia, along with evidence of mild chronic inflammation were noted on colonoscopy.

#### Discussion

Esophageal and gastroesophageal junction adenocarcinoma is one of the malignancies that is often associated with a poor prognosis. It is currently the sixth most common cause of cancer related death and the eighth most commonly diagnosed cancer worldwide [3,4]. There are two main histological variants of esophageal cancer, esophageal squamous cell carcinoma and esophageal adenocarcinoma. Esophageal squamous cell carcinoma is the type associated with 90% of cases worldwide, however esophageal adenocarcinoma has been on the rise in Europe and North America for the past 40 years [5,6]. Most cases of adenocarcinoma are located near the gastroesophageal junction and arise from Barrett's esophagus. Risk factors such as smoking, a high body mass index, gastroesophageal reflux disease, and diets low in fruits and vegetables accounted for roughly 80% of esophageal adenocarcinoma cases in the United States [7]. Esophageal adenocarcinoma may present in a variety of ways, and in some early cases show no signs or symptoms [8,9]. Although advanced cancer in asymptomatic patients is guite rare, there are various documented cases [10]. The symptoms of dyspepsia and right upper quadrant pain were most likely associated with mild, diffuse gastritis. This patient presented with a large malignant nodule with no symptoms of dysphagia, regurgitation, weight loss, or cough, which is abnormal for a tumor of that size. This case demonstrates the importance of understanding that esophageal cancer may present in atypical manners. Also, this case, consistent with other studies, shows the significance of further investigation in patients with unexplained upper gastrointestinal symptoms [10, 11].

#### Implications

Our case highlights the importance of keeping a wide differential diagnosis and using diagnostic algorithms appropriately in order to provide quality patient care. With cancer, and many other medical illnesses, symptomatology in any particular patient may not align with the expected presentation, and in cases such as this one, a missed diagnosis may be fatal.

#### Limitations

As with all case reports, there are many limitations. We are unable to make any generalizations about similar patients, as this solely represents the clinical account of a single patient. Additionally, no causal relationships, statistically significant evidence, or external validity is present due to the nature of the study design.

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Conflicts of Interest/Competing Interests The authors have declared that no competing interests exist.

#### **Consent for Publication**

Verbal consent was obtained from the patient, and all efforts have been made to remove patient identifying information.

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