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A Rare Cause of Gastrointestinal Bleeding: Acute Esophageal Necrosis

Gastrointestinal Kanamanın Nadir Bir Nedeni; Akut Özefagial Nekroz

Mehmet KAPAN, Etibar MAMMADOV, Mehmet Suat YALÇIN, Murat BAŞARAN, Burak ÖZŞEKER

Muğla Sıtkı Koçman University Medical Faculty, Department of Gastroenterology, Muğla, Turkey

Öz

Özefageal nekroz, diğer bilinen isimleri ile nekrotizan özefajit ve siyah özefajit, ilk kez 1990 yılında tanımlanmıştır. Çeşitli yayınlarda insidansının %0.014 ile %0.0125 arasında olduğu bildirilmiştir. Özefageal nekrozun ölüm oranı ise %32'lere kadar yükselmektedir. Ayrıca, özefageal nekroz, üst gastrointestinal sistem kanamasının nadir nedenleri arasındadır. Yönetiminde alta yatan nedenlerin ortadan kaldırılması ve destek tedavi önerilmektedir. Mortalite oranı yüksek seyretmektedir.

Anahtar Kelimeler: Gastrointestinal Kanama, Gastroskopi, Özofagus Nekrozu

Abstract

Esophageal necrosis, also known as necrotizing esophagitis or black esophagus, was first described in 1990. The incidence of this condition has been reported in various studies to range between 0.014% and 0.0125%. The mortality rate of esophageal necrosis can be as high as 32%. Additionally, esophageal necrosis is among the rare causes of upper gastrointestinal bleeding. Management primarily involves addressing underlying causes and providing supportive care. The mortality rate remains high due to the severity of the condition.

Keywords: Gastrointestinal Bleeding, Gastroscopy, Esophageal Necrosis

Introduction

Esophageal necrosis, also known as necrotizing esophagitis or black esophagus, was first described in 1990 (1). The incidence of this condition has been reported in various studies to range between 0.014% and 0.0125% (2). The mortality rate associated with esophageal necrosis can be as high as 32% (3). The etiology is multifactorial, and no single cause has been identified. Patients typically present with retrosternal pain, upper gastrointestinal bleeding, anemia, dysphagia, and odynophagia (4). In this case report, we discuss a patient who presented with upper gastrointestinal bleeding and was diagnosed with acute esophageal necrosis after undergoing gastroscopy.

Case

A 76-year-old female patient was admitted to our hospital with complaints of dizziness, falling, and bloody vomiting. She had a known history of dementia and hypertension. Initial lab results showed a drop in hemoglobin levels from 8.4 g/dL to 7 g/dL. Hemorrhagic content was noted in the nasogastric tube, and rectal examination was consistent with melena. Additionally, her urea levels were elevated at 104 mg/dL. Kidney function tests, liver function tests, INR value, and CRP levels were found to be within normal limits. The patient was not on anticoagulant or antiplatelet therapy, and there was no history of gastrointestinal ulcers or NSAID use. After an appropriate fasting period, upper gastrointestinal endoscopy was performed. Necrotic gray-black exudates were observed surrounding the entire lumen of the esophagus from the entrance to the distal part (Figure 1A-1B). The procedure was completed without complications. The patient was discharged after supportive treatment and clinical improvement, with a follow-up recommendation.

Since the patient is 76 years old and has dementia, it was not appropriate to take written informed consent directly from her. Consent was instead obtained from her legal guardian on 31.10.2024.

Discussion

Esophageal necrosis, also known as necrotizing esophagitis or black esophagus, was first described in 1990 (1). Incidence rates range from 0.014% to 0.0125% (2). The pathogenesis is multifactorial, and the exact mechanisms of necrosis are not yet fully understood, although reflux and hypoperfusion are considered key factors. It is observed approximately four times more frequently in men (5), with an average age of 67 years in reported cases (6). Other risk factors include heart failure, atherosclerosis, diabetes mellitus, renal failure, medical therapies, and malignancies. The condition most commonly affects the distal esophagus and typically spares the gastroesophageal junction (7). Patients usually present with melena, hematemesis, dysphagia, and epigastric pain.

	ORCID No
Mehmet KAPAN	0000-0002-6778-5338
Etibar MAMMADOV	0000-0003-4206-1015
Mehmet Suat YALÇIN	0000-0003-1054-1882
Murat BAŞARAN	0000-0002-8168-6096
Burak ÖZŞEKER	0000-0001-5429-513X

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Adres / Correspondence : Ali ALKAN
Muğla Sıtkı Koçman University Medical Faculty, Department of Gastroenterology, Muğla, Turkey
e-posta / e-mail : mehmet.kapann@gmail.com

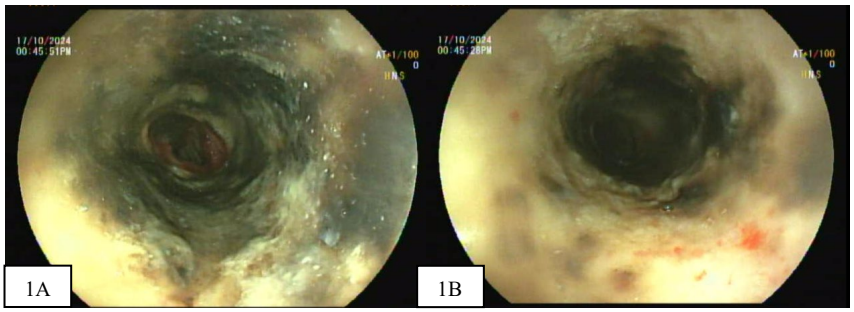

Figure 1. A-B. Necrotic gray-black exudate surrounding the entire lumen of the esophagus, from the entrance to the distal segment.

The laboratory findings in our case, including a significant drop in hemoglobin and elevated urea levels, are consistent with the severity of the condition as described in the literature. These findings highlight the importance of thorough evaluation and prompt intervention. Additionally, the patient's advanced age and underlying comorbidities, such as dementia and hypertension, likely contributed to her susceptibility to esophageal necrosis. Dementia may have delayed symptom recognition, emphasizing the role of caregivers and regular medical follow-ups in such populations.

Management of acute esophageal necrosis remains challenging due to its multifactorial etiology. In our case, supportive care and addressing the potential triggers were sufficient to achieve clinical improvement. However, other cases in the literature have reported the necessity for more aggressive interventions, including surgery, in patients with complications such as perforation or severe infection. Preventing recurrence by managing underlying risk factors, such as hypertension and ensuring adequate nutrition, is also critical in long-term care.

Finally, the high mortality rate associated with acute esophageal necrosis underscores the need for early diagnosis and multidisciplinary management. Collaboration between gastroenterologists, intensivists, and nutritionists can optimize outcomes for these complex cases.

Conclusions

Acute esophageal necrosis is a rare and potentially fatal condition. It should be suspected in elderly patients (aged 60-70) with comorbidities who present with hematemesis or melena. Early diagnosis and treatment can reduce the mortality rate.

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Conflict of interest statement

There is no conflict of interest.

Written consent: The study was conducted in accordance with the Declaration of Helsinki. Consent was obtained from the patient's legal guardian on 31.10.2024.

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