Underlying comorbidities leading to a poor outcome of black esophagus: a rare case report

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INTRODUCTION

Acute esophageal necrosis (AEN) or black esophagus is a rare medical condition characterized by the appearance of a circumferential black esophageal mucosa on the esophagogastroduodenoscopy (EGD) [1]. AEN usually affects older men with medical comorbidities, and the most common presentation is an upper gastrointestinal bleed, accompanied by hematemesis or melena in up to 90% of cases [2]. The pathogenesis of black esophagus is not completely known [3]. Treatment varies, but it should focus on supportive care to improve organ perfusion, treatment of underlying conditions and infection, if present [2]. The mortality of AEN is high, with literature rates 32%. However, those are frequently related to underlying conditions and comorbid illnesses; death from AEN is usually lower than 6% and the natural course of black esophagus is spontaneous resolution [3]. We highlight the importance of diagnosing AEN and adjacent diseases in order to improve approaches and outcomes.

CASE PRESENTATION

A 65-year-old man was admitted with severe abdominal pain, malaise and melena. The patient related hypertension, diabetes and benign prostatic hyperplasia. He had a personal history of treated tubular invasive rectal adenocarcinoma and hepatic metastasis. The physical examination revealed good general condition, despite signs of dehydration and jaundice. His abdomen was soft but tender on the ventral region. Under the hypothesis of high digestive bleeding, laboratory tests and image exams were requested. First laboratory tests revealed mixed acid-base disorder, electrolytic and urinary alterations, and hyperglycemia. He was diagnosed with bilateral hydronephrosis, non-obstructive nephrolithiasis on the right kidney and urinary infection. Simultaneously, an EGD was conducted, which revealed an dilated esophagus, recovered by normal tissue until the middle third, from where it showed friable and circumferential darkened mucosa, stopping at the gastroduodenal junction (Figures 1 and 2). The patient underwent treatment for his conditions and the AEN was managed with omeprazole (20mg) 12/12h, fasting orientation and posterior enteral nutrition. After 9 days the AEN had improved, but the patient condition's deteriorated and he passed away due to his overlaying conditions.

DISCUSSION

The exact etiology of black esophagus is unknown, however it is associated with multiple pathological injuries resulting in the necrosis of esophageal mucosa [2]. Our case revealed a patient with severe comorbidities - such as metastatic cancer, acute renal insufficiency and uncontrolled diabetes- who evolved with melena and hematochezia as a consequence of upper gastrointestinal bleeding associated with the presence AEN. The patient's comorbidities, as well as the black esophagus contributed to the poor prognosis, despite an aggressive treatment that relied on correction of underlying medical conditions and monitoring for signs of infection or perforation. Ultimately, the overall state of our patient's health culminated into his death, highlighting the importance of detection and follow up of this rare condition and adjacent diseases in order to improve approaches and guarantee superior outcomes.

FIGURES

Figure 1

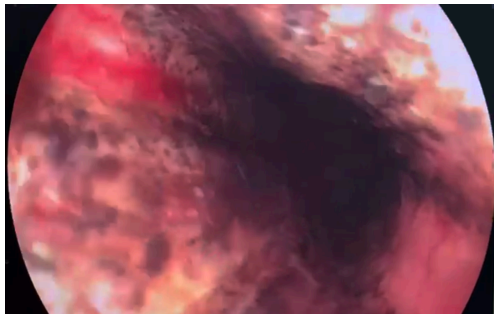
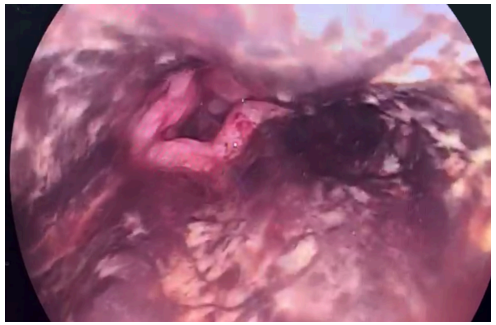


Figure 2



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