



## Internal Medicine Flashcard

An unusual esophageal endoscopic appearance<sup>☆</sup>Jean-Philippe Le Mouel<sup>\*</sup>, Mathurin Fumery, Richard Delcenserie

Department of Hepato-Gastroenterology, Amiens University Hospital, Amiens, France



A 44-year-old man, with medical history of chronic alcoholic intoxication and smoking, presented with suspicion of infected pancreatic necrosis, 5 weeks after severe acute alcoholic pancreatitis. The physical examination revealed asthenia, diffuse abdominal pain and fever (38.4 °C). Laboratory results showed elevated inflammatory markers, anemia (hemoglobin 8.5 g/dL) and malnutrition with hypoalbuminemia (25 g/L). Abdominal CT-scan showed a 8 cm walled-off pancreatic necrosis. A necrosis puncture was positive for *Escherichia coli*. Before initiation of treatment of the infection, the patient experienced melena. Upper gastrointestinal endoscopy (UGE) showed pale and necrotic esophageal mucosa with coffee-ground exudates, from 28 cm from dental arches (DA) to the gastro-esophageal junction (Fig. 1). Proton pump inhibitor has been introduced; then, treatment of the infected pancreatic necrosis was performed by endoscopic transgastric

drainage and antibiotic. Three weeks later, dysphagia for solids occurred. A new upper endoscopy showed impassable esophageal stricture with inflammatory mucosa and fibrinous exudates. Balloon dilation was performed 3 times during 4 months with good clinical efficacy.

What is the diagnosis?

Answer: Acute esophageal necrosis or “Black esophagus”.

The acute esophageal necrosis (AEN) or “black esophagus” is a rare disease, with a low incidence, estimated about 0,2% in a prospective study, diagnosing 8 patients from 3900 UGE [1]. A recent literature review including 112 cases, reported a mean age at diagnosis of 68 years; with a male to female ratio of 4:1 [2]. AEN occurred generally in patients with significant comorbidities including cardiovascular risk factors, cancer, chronic pulmonary disease, alcohol abuse or liver cirrhosis [3]. Acute conditions are often associated including shock and hypotension, acute liver failure or infection. The main clinical presentation includes upper gastrointestinal bleeding (hematemesis or coffee ground vomit) occurring in two third of cases. Melena, epigastric pain, and dysphagia are less common. Endoscopic examination reveals diffuse necrotic mucosa affecting, in most cases, the lower third of the esophagus with respect of gastro-esophageal junction [2]. The mechanism of AEN remains unclear, probably multifactorial where hypoperfusion in patients with comorbidities seems the key factors. Associated gastric outlet obstruction could also increase lesions by prolonged esophageal acid reflux (cardia preserved) [1–3]. Reported mortality rate of 38% is probably overestimated because occurring in patients with acute and severe life-threatening failure. Mucosal healing is observed in the most of cases but stricture can occurred and is reported in less than 10% of cases, accessible to endoscopic dilatation [2].



Fig. 1. Upper gastrointestinal endoscopy. Pale and necrotic esophageal mucosa with coffee-ground exudates.

## References

- [1] Ben Soussan E, Savoye G, Hochain P, Hervé S, Antonietti M, Lemoine F, et al. Acute esophageal necrosis: a 1-year prospective study. *Gastrointest Endosc* 2002 Aug;56(2):213–7.
- [2] Day A, Sayegh M. Acute oesophageal necrosis: a case report and review of the literature. *Int J Surg* 2010;8(1):6–14. <http://dx.doi.org/10.1016/j.ijsu.2009.09.014>. [Epub 2009 Oct 1].
- [3] Gurvits GE, Shapsis A, Lau N, Gualtieri N, Robilotti JG. Acute esophageal necrosis: a rare syndrome. *J Gastroenterol* 2007 Jan;42(1):29–38. [Epub 2007 Feb 16].

<sup>☆</sup> No personal conflict of interest and no financial relationships with a commercial entity producing health-care related products and/or services relevant to this article.

<sup>\*</sup> Corresponding author.

E-mail addresses: [jeanphilippe.lemouel@wanadoo.fr](mailto:jeanphilippe.lemouel@wanadoo.fr) (J.-P. Le Mouel), [delcenserie.richard@chu-amiens.fr](mailto:delcenserie.richard@chu-amiens.fr) (R. Delcenserie).