

## Black esophagus: complete esophageal necrosis with lower esophageal perforation

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Black esophagus or acute esophageal necrosis is a rare condition, mainly reported as case reports in the literature [1]. Its pathogenesis seems to be multifactorial, with ischemia appearing to be the most common etiology in patients with cardiovascular risk factors and chronic medical conditions [2]. Diagnosis can be suggested by computed tomography (CT) findings but is based on upper gastrointestinal endoscopy. Mortality is high (30%). Treatment is conservative in most cases (75.4%), but endoscopic or surgical interventions can be required (25.6%) [3]. We report the case of a 72-year-old man, with no medical history other than diabetes, which was managed with biguanides, who was admitted to the emergency room because of urinary tract infection with sepsis. He was rapidly transferred to intensive care because of hemodynamic instability.

Biology showed acute inflammation with leukocytosis and hyperlactatemia, and acute renal failure. Blood cultures were positive for *Corynebacterium confusum* and *Streptococcus sanguinis*. *Aspergillus* antigen was also positive. The CT scan with injection and ingestion showed a circumferential hydroaeric infiltration of the distal esophagus, with a suspected esophageal rupture, a left basal pneumonitis, and bilateral pleural effusion (► Fig. 1, ► Video 1).

Upper gastrointestinal endoscopy was performed and showed complete esophageal necrosis, from the upper esophagus to the gastroesophageal junction (► Fig. 2), where the necrosis abruptly stopped. The stomach was unharmed. Opacification showed a perforation in the lower esophagus (► Fig. 3).

The patient had expressed his opposition to intensive care when he was alive. The treatment therefore consisted solely of symptomatic therapy, and the patient died within a few hours.

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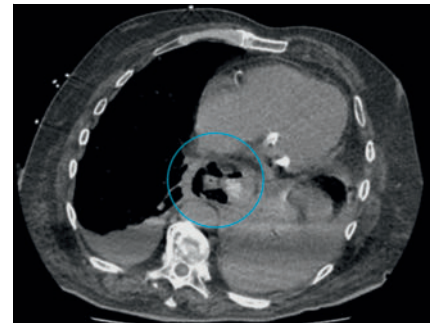
### Conflict of Interest

The authors declare that they have no conflict of interest.

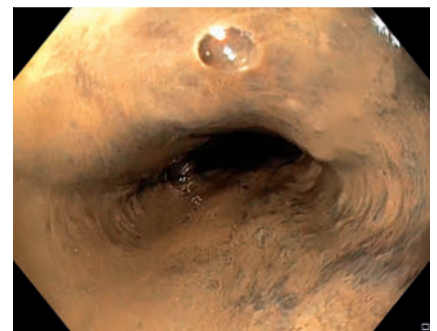
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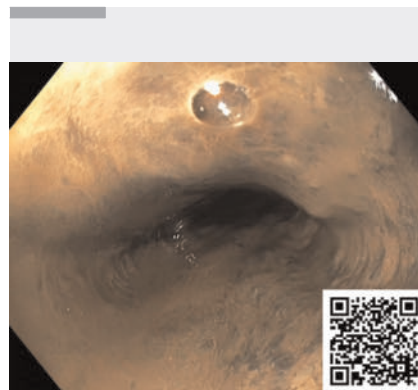
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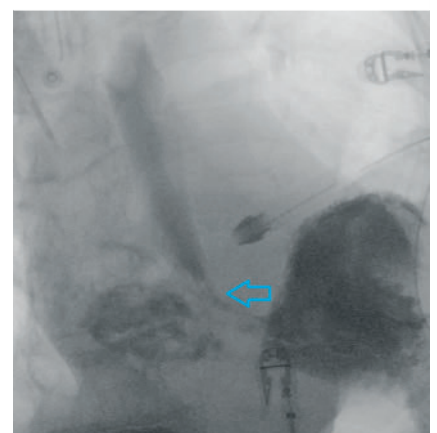
► Fig. 1 Computed tomography scan with injection and ingestion, showing a circumferential hydroaeric infiltration of the distal esophagus, with a suspected esophageal rupture (blue circle)



► Fig. 2 Complete esophageal necrosis.



► Video 1 Complete esophageal necrosis with lower esophageal perforation.



► Fig. 3 Opacification showing the lower esophageal perforation (arrow).

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## References

- [1] Dias E, Santos-Antunes J, Macedo G. Diagnosis and management of acute esophageal necrosis. *Ann Gastroenterol* 2019; 32: 529–540. doi:10.20524/aog.2019.0418
- [2] Gurvits GE. Black esophagus: acute esophageal necrosis syndrome. *World J Gastroenterol* 2010; 16: 3219–3225. doi:10.3748/wjg.v16.i26.3219

- [3] Schizas D, Theochari NA, Mylonas KS et al. Acute esophageal necrosis: a systematic review and pooled analysis. *World J Gastrointest Surg* 2020; 12: 104–115. doi:10.4240/wjgs.v12.i3.104

## Bibliography

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