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Rare case of intramural esophageal hematoma associated with betel nut consumption

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A 47-year-old man who experienced sudden retrosternal pain and dysphagia for 2 days was admitted to the emergency room. While his physical examination and laboratory results were unremarkable, results of esophagogastroduodenoscopy revealed a longitudinal, purplish-red, and cystic submucosal emanation throughout the esophagus, fluctuating with respiration (▶ **Fig. 1 a**, ▶ **Video 1**). Mucosal erosion was noted but without obvious rupture. We therefore suspected an esophageal intramural hematoma.

The patient had no medical or trauma history. Right before the onset of symptoms, the patient ingested betel nut juice for the first time. After careful consideration, we identified betel nut consumption as the most probable cause of the observed symptoms.

The patient was administered famotidine and provided with basic nutritional support while oral intake was completely prohibited. One week later, his symptoms gradually improved, and oral feeding was allowed. Computed tomography revealed that the hematoma had disappeared, but residual edema remained (▶ **Fig. 1 b**). Repeat endoscopy revealed extensive esophageal erosion without hematoma (▶ **Fig. 1 c**); biopsy specimens suggested inflammatory necrosis and squamous epithelial hyperplasia (▶ **Fig. 1 d**). During the 1.5-year follow-up, the symptoms did not recur.

To our knowledge, gastrointestinal mucosal lesions caused by ingestion of betel nut are common and typically accompanied by mucosal fibrosis or even cancer [1]. This is the first case report of such acute mucosal injury due to betel nut consumption, highlighting the importance of proper management of betel nut processing and commercialization.

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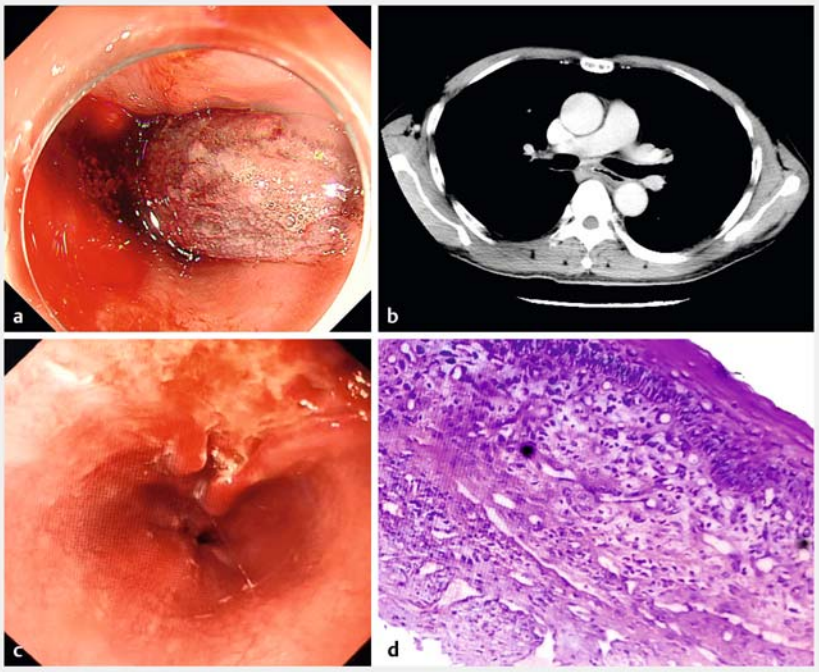
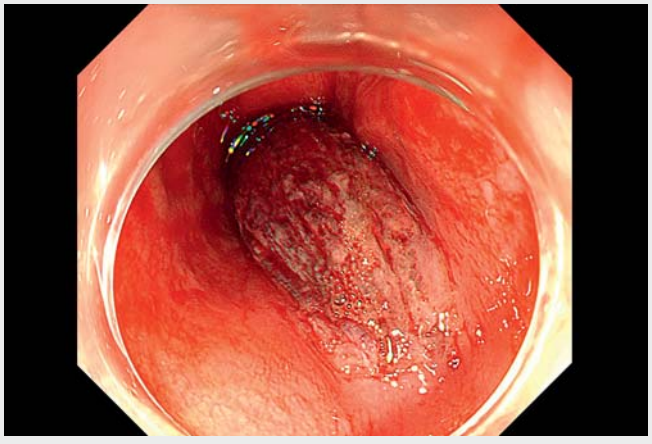


▶ **Fig. 1** Characteristics of esophageal intramural hematoma. **a** Initial endoscopic feature showing 15-cm esophageal submucosal hematoma. Follow-up images 1 week later: **b** computed tomography scan showed residual edema but without hematoma; **c** repeat endoscopy revealed extensive esophageal erosion; **d** histology showed inflammatory necrosis and squamous epithelial hyperplasia.



Video 1 A longitudinal, purplish-red, and cystic submucosal hematoma throughout the esophagus caused by betel nut ingestion.

Competing interests

The authors declare that they have no conflict of interest.

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Reference

[1] Mehrtash H, Duncan K, Parascandola M et al. Defining a global research and policy agenda for betel quid and areca nut. Lancet Oncol 2017; 18: E767–E775

Bibliography

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