

Exfoliative esophagitis and esophageal ulcer induced by dabigatran

A 79-year-old Japanese man was diagnosed as having atrial fibrillation at a private hospital 5 days before coming to our clinic, where he was prescribed dabigatran at 110 mg twice daily. Approximately 10 minutes after taking dabigatran with about 50 ml of water – one-third of his usual amount – on the morning of the third day, the patient had odynophagia, retrosternal burning pain, and dysphagia. He reported to our clinic 2 days later.

Endoscopy of the upper gastrointestinal tract showed longitudinal sloughing mucosal casts in the mid esophagus, a circumferential ulcer in the lower esophagus, and sloughing casts just above the esophago-gastric junction (● Fig. 1–3). The patient was placed on a liquid diet, dabigatran was discontinued, and rabeprazole (10 mg twice daily) was prescribed. The symptoms disappeared within 1 week. After 1 month, endoscopy showed that the casts and the ulcer in the esophagus had disappeared (● Fig. 4 and ● Fig. 5). Warfarin has interactions with many drugs and foods, and requires frequent laboratory monitoring [1]. The new anti-coagulant agent, dabigatran, does not have these weak points and has been shown to have at least the same efficacy as warfarin in reducing stroke for patients with atrial fibrillation [2].

This is the first report of exfoliative esophagitis and esophageal ulcer induced by dabigatran. Dabigatran capsules contain dabigatran-coated pellets with a tartaric acid core [2]. It is likely that exposure of the esophageal lumen to the strong acid contained in the capsule was the cause of this patient's esophageal lesions. Elderly patients tend to be at risk for drug-induced esophagitis because of the lack of an adequate liquid bolus, spending long periods in the recumbent position, and decreased saliva production [3–5]. It is important, especially for elderly patients, that dabigatran be taken with sufficient water and in an upright position to prevent esophageal lesions.

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Competing interests: None



Fig. 1 a Sloughing esophageal casts distributed longitudinally in the mid esophagus. b Distal view of the same lesion.



Fig. 2 Circumferential ulceration of the lower esophagus.



Fig. 3 Esophageal casts just above the esophago-gastric junction.



Fig. 4 The mucosal dissection and ulceration of the mid and lower esophagus have disappeared.



Fig. 5 The esophageal casts just above the esophago-gastric junction have disappeared.

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