

**Title:**

**Beyond dabigatran: recognizing direct oral anticoagulants as a cause of exfoliative esophagitis**

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**Beyond dabigatran: Recognizing direct oral anticoagulants as a cause of exfoliative esophagitis** Celada-Sendino M<sup>1</sup>, Fernández-de la Varga, M<sup>1</sup>, Ordieres-Díaz C<sup>1</sup>, Álvarez-Posadilla M<sup>1</sup>, Huergo-Fernández, A<sup>1</sup>, Amor-Martín P<sup>1</sup>.

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*Dear Editor,*

The new direct-acting oral anticoagulants (DOACs) have emerged as safe and effective alternatives to traditional anticoagulants in the management of thromboembolic diseases. However, they are not devoid of potential gastrointestinal adverse effects.

**Case 1:**

An 86-year-old woman, on dabigatran therapy since 2021 for atrial fibrillation, was referred due to dysphagia to solid foods of less than one year's duration. Upper

endoscopy revealed a nearly circumferential mucosal cast exhibiting necrosis and sloughing in the mid-esophagus, surrounded by normal-appearing mucosa, suggestive of superficial dissecting esophagitis (Figure 1A). Based on the endoscopic findings and after excluding other potentially causative medications, despite the absence of histological confirmation, high-dose proton pump inhibitor therapy was initiated, and dabigatran was replaced with an alternative oral anticoagulant. The patient experienced progressive improvement in dysphagia following this therapeutic adjustment.

### **Case 2:**

An 86-year-old male, with multiple comorbidities and cognitive impairment, anticoagulated with apixaban for atrial flutter since 2022, was admitted due to general deterioration. Given a history of progressive dysphagia over several months, upper endoscopy was performed, revealing partially detached mucosal lamellae in the mid-esophagus, with underlying erythematous and friable mucosa. These endoscopic findings were consistent with exfoliative esophagitis (Figure 1B). After evaluating the risk-benefit profile and potential causal relationship, anticoagulation was discontinued, and omeprazole therapy was intensified. The patient subsequently demonstrated good oral tolerance in the weeks following drug withdrawal.

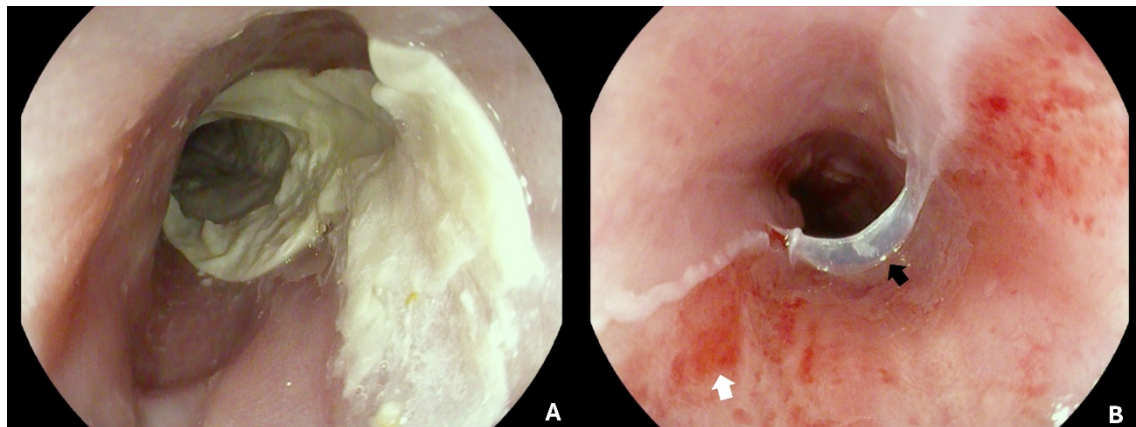
### **Discussion**

Exfoliative esophagitis, also known as esophagitis dissecans superficialis, has been extensively documented in the literature in association with dabigatran use. This adverse effect is primarily attributed to the local mucosal irritation caused by tartaric acid, a component of dabigatran's formulation<sup>1</sup>. It may occur in up to 20% of dabigatran-treated patients, either symptomatically or as an incidental finding<sup>2</sup>. The characteristic endoscopic appearance includes longitudinal mucosal sloughing and, in some cases, whitish or grayish membranes overlying erythematous mucosa. Clinical outcomes are generally favorable within a few weeks following drug discontinuation.

In contrast, similar esophageal injury has been reported only rarely with other DOACs such as apixaban. It has been proposed that sodium lauryl sulfate, found in the coating of some apixaban formulations, may exert irritant effects on esophageal mucosa, thus contributing to the etiopathogenesis of esophagitis<sup>4,5</sup>.

## References:

1. Cuadros Martínez M, Froilán Torres C, Gonzalo Bada N. Symptomatic exfoliative esophagitis induced by dabigatran. *Rev Esp Enferm Dig.* 2018; 110:743-744.
2. Toya Y, Nakamura S, Tomita K, et al. Dabigatran-induced esophagitis: The prevalence and endoscopic characteristics. *J Gastroenterol Hepatol.* 2016; 31:610-4.
3. Tajima H, Narasaka T, Akutsu D, et al. The Risks of Exfoliative Esophagitis in Patients with Atrial Fibrillation: A retrospective observational study. *Medicine (Baltimore).* 2020;99: e21681.
4. Kono Y, Miyahara K, Nakagawa M. A case of esophagitis induced by apixaban. *J Gastrointestin Liver Dis.* 2020; 29:471.
5. Coseru AI, Ciortescu I, Nemteanu R, et al. Apixaban-Induced Esophagitis Dissecans Superficialis-Case Report and Literature Review. *Diseases.* 2024; 12:263.



**Figure 1: A.** Endoscopic image showing a necrotic-appearing mucosal cast, nearly circumferentially affecting the mid-esophagus, consistent with exfoliative esophagitis likely induced by dabigatran. **B.** Endoscopic image of the mid-esophagus demonstrating partially detached mucosal lamellae (black arrow) with underlying erythematous and friable mucosa (white arrow), probably related to apixaban use.