## Oral ulcer due to dabigatran capsule

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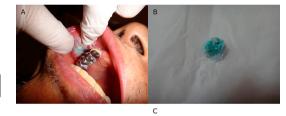
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DESCRIPTION

An 80-year-old man with cerebral infarction and no neurological deficits was hospitalised for right empyema. Although the patient's condition improved with antimicrobial therapy and right thoracic drainage, a swelling in his right cheek was observed during clinical rounds. Oral examination revealed ulceration on the right buccal mucosa (figure 1A) with an embedded blue solid matter (figure 1B), which was removed. After confirming the history of prescribed medications, the removed matter was determined to be a dabigatran capsule (figure 1C), and oral ulcer due to dabigatran was suspected. With conservative measures, re-epithelialisation was achieved within 2 weeks.

Dabigatran is currently used as an alternative to warfarin for venous thromboembolism





**Figure 1** (A) Oral ulcer on the right buccal mucosa, (B) the removed solid matter, (C) the dabigatran capsule.

and non-valvular atrial fibrillation. Dabigatran is formulated with tartaric acid, the acidity of which increases drug absorption.<sup>1</sup> Although we did not perform a component analysis for the removed matter, exposure of the oral cavity to a strong acid from the dabigatran capsule was the likely cause of the oral ulcer in the current patient. Given that vascular dementia and swallowing problems are common in the elderly, prescribing dabigatran to these patients should be reconsidered.

## Learning points

- Dabigatran capsule may cause oral ulcer due to its strong acidity.
- Prescribing dabigatran in patients with vascular dementia and swallowing problems should be reconsidered.

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## REFERENCE

 Stangier J, Stähle H, Rathgen K, et al. Pharmacokinetics and pharmacodynamics of the direct oral thrombin inhibitor dabigatran in healthy elderly subjects. *Clin Pharmacokinet* 2008;47:47–59.

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