ATHENA - HEALTH & RESEARCH JOURNAL

2026 • Volume III • Special Issue Nº 2

Direct oral anticoagulants and oral procedures: an integrative review

Anna Nelli [1] 0009-0003-2410-0823
Rashed Azizi [1] 0009-0004-7920-1646
Teresa Moreira [2] 0000-0002-2554-697X
Maria João Begonha [1,3] 0000-0003-3354-3098

[1] Faculty of Health Sciences, Fernando Pessoa University, Porto, Portugal
[2] RISE Health, Fernando Pessoa School of Health, Porto, Portugal
[3] Faculty of Medicine, University of Porto (FMUP), Porto, Portugal

ARTICLE INFO

Received 19.05.2026
Accepted 01.07.2026

Keywords:
direct oral anticoagulants
oral surgical procedures
anticoagulants
blood coagulation disorders
bleeding

Corresponding Author:
Anna Nelli; Fernando Pessoa University - Faculty of Health Sciences, Porto, Portugal;
2022120781@ufp.edu.pt

DOI: 10.62741/ahrj.v3iSuppl.2.226

ABSTRACT

Introduction: Direct oral anticoagulants were introduced as alternatives to vitamin K antagonists for atrial fibrillation and venous thromboembolism. These drugs offer advantages: no need for routine monitoring, fewer side effects, and fewer drug interactions. However, no universally accepted guidelines exist for the dental management of patients receiving direct oral anticoagulants therapy.
Objectives: The objective was to assess hemorrhagic risk in patients receiving direct oral anticoagulants during oral surgical procedures, compared with patients who interrupted therapy, received other anticoagulants, or had no coagulation disorders.
Methodology: This integrative review followed the Joanna Briggs Institute Reviewer's Manual and PRISMA-ScR guidelines. The protocol was registered on the Open Science Framework (10.17605/OSF.IO/NPVYS). A literature search was conducted on March 22, 2025, in PubMed, ScienceDirect, and Scopus using PICO-based keywords related to direct oral anticoagulants, oral surgery, anticoagulation, coagulation disorders, and bleeding. English-language studies published between 2020–2025 were included. Methodological quality was assessed using the JBI checklist.
Results: The analysis of the included studies showed that bleeding in patients continuing direct oral anticoagulants therapy was generally mild, manageable with local hemostatic measures, and not higher than in other groups. No increase in severe bleeding was reported compared with therapy interruption or other anticoagulants. Discontinuation should be avoided due to thromboembolic risk.
Conclusion: Based on the available evidence, therapeutic continuity appears to be a safe strategy that prevents thromboembolic events associated with therapy interruption while ensuring safety in low- to moderate-risk surgical procedures. Regarding high hemorrhagic-risk surgical

Contributions: Conceptualization: AN and MJB; Data curation: AN, RA, TM and MJB; Formal Analysis: TM and MJB; Funding acquisition: Not applicable; Investigation: RM and MJB; Methodology: RA, TM and MJB; Project administration: TM and MJB; Resources: TM and MJB; Software: Not applicable; Supervision: TM and MJB; Validation: TM and MJB; Visualization: AN and MJB; Writing – original draft: AN and RA; Writing – review & editing: TM and MJB.

Please cite this article as: Nelli A, Azizi R, Moreira T, Begonha MJ. Direct oral anticoagulants and oral procedures: an integrative review. *Athena Health & Research Journal*. 2026; 3(Suppl. 2). doi: 10.62741/ahrj.v3iSuppl. 2.226

procedures, the results suggest an individualized and multidisciplinary approach.