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Managing patients who are receiving warfarin or a direct oral anticoagulant and need an elective surgery or procedure

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Abstract

The perioperative management of patients receiving warfarin is an increasingly common clinical problem as the prevalence of conditions, such as atrial fibrillation, requiring long-term anticoagulant therapy with warfarin or a direct oral anticoagulant (DOAC) increases due to an aging population. Elderly patients are also more likely to require a surgery/procedure than younger patients. The approach to the perioperative management of such patients involves addressing the following questions: (1) is anticoagulant interruption needed; (2) is heparin bridging needed for patients who interrupt warfarin; and (3) how should DOACs be interrupted and resumed perioperatively? Additional relevant management issues include how to bridge patients during warfarin interruption and what the role of coagulation function testing is in perioperative management. Anticoagulant interruption may not be needed for several minor dental, skin, eye, and cardiac device procedures/surgeries as they are considered to have minimal bleed risk. Heparin bridging can be considered in a minority of warfarin-treated patients with atrial fibrillation, in most patients with a mechanical prosthetic heart valve, and infrequently in patients with venous thromboembolism. For patients who are receiving a DOAC, management is anchored on surgery/procedure-related bleed risk; thromboembolic risk is less important because of the rapid offset and onset of DOACs. Patients having a low/moderate-bleed-risk surgery/procedure require 1 full day off of DOACs before and after the surgery/procedure whereas those having a high-bleed-risk surgery/procedure require 2 full days off of DOACs before and after the surgery/procedure. Perioperative heparin bridging and coagulation function testing are not needed for perioperative DOAC management.

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The complete text of this *Blood Advances* Talk is available as a data supplement.

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