Correspondence

Letter by Llau and Ferrandis Regarding Article, “Bridging Evidence-Based Practice and Practice-Based Evidence in Periprocedural Anticoagulation”

To the Editor:

Nowadays, the number of patients scheduled for surgery who are being treated with an anticoagulant drug is increasing day by day. In the perioperative period, it is necessary to balance the benefits of the anticoagulation with the risk of bleeding. With this aim, the classical bridging strategy, replacing warfarin or acenocoumarol by a low-molecular-weight heparin (at therapeutic or prophylactic doses depending on the thrombotic risk), although it is controversial, continues to be the practice of choice, as the American College of Chest Physicians stated last year.¹

New direct oral anticoagulant (DOAC) agents have been recently introduced for chronic anticoagulation in patients with atrial fibrillation or for the treatment of venous thromboembolism. For them, the controversy to bridge or not to bridge in the preoperative period is an unsolved subject. Some articles have been recently published in Circulation advocating the withdrawal of these agents without bridging; the most recent one was published by Gallego et al.²

In this article, the authors propose a stop of the DOAC before surgery for 5 or 7 days in the case of dabigatran, and for 3 or 5 days in the case of rivaroxaban, depending only on the creatinine clearance. We respectfully, but also deeply, disagree, because this proposal takes into consideration neither the bleeding risk of the scheduled surgery nor the thrombotic risk of the patient (as they propose for the discontinuation of warfarin). In 2011, a French multidisciplinary group,³ more recently a Spanish anesthesiology group (belonging to the Spanish Society of Anesthesia),⁴ and other articles⁵ have suggested the need for a stratification in the management of DOAC before elective surgery. The main recommendations can be summed up as follows:

• In patients with normal renal function (creatinine clearance >50 mL/min) and a low hemorrhage and thrombosis risk (CHADS² score 0–2), only a stop of the DOAC 24 to 48 hours before surgery is proposed.

• If renal function is impaired (creatinine clearance <50 mL/min) or the hemorrhage/thrombosis risk is moderate to high (surgery with a high transfusion rate or in which the bleeding can risk the surgery or the life; CHADS² score 3–5), a bridging therapy with a low-molecular-weight heparin and the withdrawal of the DOAC from 5 days before the surgery are proposed.

The rationale for these recommendations is based on the lack of experience in the management of DOACs in the perioperative scenario, the possible increase of surgical bleeding without having appropriate antagonists, the unsuitable standardized laboratory monitoring, and the highly variable pharmacokinetics between patients treated with a DOAC. All in all, these recommendations ensure the patient’s safety during and immediately after surgery.

We think that these recommendations summarize the optimal management in all patients scheduled for elective surgery, both with safety and with antithrombotic efficacy.

Disclosures

Dr Llau has participated as member of Advisory Boards or as speaker in educational programs for Sanofi-Aventis, Bayer, Boehringer, Bristol-Myers-Squibb. Dr Ferrandis has participated as speaker in educational programs for Bayer, Boehringer.

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References


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