High thrombotic risk and antiphospholipid antibodies: avoid direct oral anticoagulants

● ***Rivaroxaban* is less effective than *warfarin* in preventing thrombosis in patients with antiphospholipid antibodies, a risk factor for thromboembolic events.**

In mid-2019, the French drug regulatory agency, ANSM, advised health professionals not to use direct oral anticoagulants in patients with a history of thrombosis and known to have antiphospholipid antibodies (**a**). Switching to a vitamin K antagonist such as *warfarin* should be considered for such patients who are already taking a direct oral anticoagulant (1).

The presence of antiphospholipid antibodies characterises the most common acquired thrombophilia. These antibodies are detected in 1% to 6% of the population. Persons with antiphospholipid antibodies have a 3- to 15-fold higher risk of venous thrombosis than the general population. They are also at increased risk of arterial thrombosis, including ischaemic stroke (2).

More thromboembolic events with rivaroxaban. This warning is based on the results of a non-blinded clinical trial of *rivaroxaban* versus *warfarin* in 120 patients in whom a history of thrombosis led to the detection of antiphospholipid antibodies. The trial was stopped prematurely due to a higher incidence of thromboembolic events in the *rivaroxaban* group: 12% (4 cases of ischaemic stroke and 3 cases of myocardial infarction), versus no cases in the *warfarin* group (1).

Given that other direct oral anticoagulants could pose the same risk, and in the absence of data to the contrary as of mid-2019, the warning also applies to *dabigatran, apixaban* and *edoxaban* (1).

In practice Direct oral anticoagulants are sometimes an alternative to vitamin K antagonists. However, given the increased risk of thrombosis in patients with antiphospholipid antibodies, it makes sense to avoid direct oral anticoagulants in this situation, and to consider switching to *warfarin*.

Warfarin is the first-choice oral anticoagulant for patients at high risk of thrombosis, but also for those at highest risk of bleeding or drug interactions, because the dose can be adjusted on the basis of INR (international normalised ratio) measurements (3). These are situations faced by many more patients than those with antiphospholipid antibodies.

▶ Translated from *Rev Prescrire* **October 2019**
Volume 39 N° 432 • Pages 736-737

***a-**The direct oral anticoagulants authorised in the European Union are the direct thrombin inhibitor dabigatran and the factor Xa inhibitors (or "xabans") apixaban, edoxaban, and rivaroxaban.*

Sources **1-** ANSM "L'apixaban (Eliquis°), le dabigatran etexilate (Pradaxa°), l'edoxaban (Lixiana°/Roteas°) et le rivaroxaban (Xarelto°) ne sont pas recommandés chez les patients présentant un syndrome des antiphospholipides (SAPL) en raison d'une possible augmentation du risque de récidive d'évènement thrombotique. Lettre aux professionnels de santé" May 2019: 3 pages. **2-** "Thrombophilia. Testing rarely useful after a venous thromboembolic event" *Prescrire Int* 2017; 26 (182): 129. **3-** "Oral anticoagulants in atrial fibrillation. Warfarin or apixaban, depending on the clinical situation" *Prescrire Int* 2019; 28 (205): 159-160.