Update: Direct oral anticoagulants (DOAC) – their use and clinical management remain a challenge

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The worldwide increase in the aging population and the associated increase in the prevalence of atrial fibrillation and venous thromboembolism as well as the widespread use of direct oral anticoagulants (DOAC), also designated non-vitamin K antagonist oral anticoagulants (NOAC), requires increasing knowledge and skills on how to manage difficult clinical situations in patients who need anticoagulation.

The current issue of Hämostaseologie – Progress in Haemostasis therefore provides updated reviews on the use of DOAC:
- in cancer patients with venous thromboembolism (Voigtlaender et al. [1]),
- when life-threatening bleeding occurs, emergency surgery or invasive interventions need to be performed despite ongoing treatment with DOAC (Lindhoff-Last [2]),
- in elective surgery (Koscielny et al. [3]),
- in patients undergoing cardioversion of non-valvular atrial fibrillation (Benetos et al. [4]), and
- in patients with chronic kidney disease with or without dialysis (Küçükköylü and Rump [5]).

The review presented by Koscielny et al. (3) also discusses drug interactions and provides data about frequency and causes of non-adherence to the long-term use of DOAC.

Treatment with DOAC agents is currently not routinely monitored because of their specificity, predictability, and wide therapeutic window, which allow for fixed dosing. However, measurements of DOAC plasma levels may be helpful in certain clinical settings such as trauma, urgent surgery, or recent stroke. Specifically, drug monitoring has the potential to guide and optimize clinical management. Therefore, another review presents an update on laboratory assessment of DOAC (Gosselin et al. [6]).

In addition, this issue also contains a case report on a patient with paroxysmal atrial fibrillation who experienced pulmonary embolism upon discontinuation of oral anticoagulation (Göndör and Stöllberger [7]). The significance of this contribution is critically discussed in an expert editorial by Konstantinides (8).

As editors, we wish to thank the authors, who spared no effort to present updated articles in fact. We are also grateful to our critical referees for their comments and relevant input. Thus, we trust that this theme issue on DOAC (or NOAC) provides our readers with essential information required to ensure or improve daily care of patients on DOAC (NOAC).

References