Bleeding risk evaluation

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Balancing the risk of bleeding against the benefit from using oral anticoagulant therapy (OAC) for stroke prevention in patients with atrial fibrillation (AF) is an integral part of optimal stroke risk management in patients with AF.

In clinical practice, bleeding risk in AF patients taking OAC is best assessed using a clinical risk score-based approach rather than reviewing and addressing modifiable bleeding risk factors only. Indeed, the purpose of a clinical bleeding risk assessment score is to identify both modifiable bleeding risk factors (which are to be addressed and managed) and non-modifiable bleeding risk factors (eg, age, prior bleeding etc.), thus flagging-up high-risk patients who are to be scheduled for a closer, more frequent clinical follow-up.

The risk score-based bleeding risk assessment has been associated with significantly better patient outcome in comparison to addressing modifiable bleeding risk factors only, and the most extensively evaluated bleeding risk score among patients with AF is the HAS-BLED score (H - hypertension [uncontrolled or poorly controlled, systolic blood pressure above 160 mmHg], A – advanced renal and/or liver disease, S – prior stroke/TIA, B = prior bleeding event, L – labile INR [when taking a vitamin K antagonist], E – elderly [65 years or more] and D – drugs [concomitant use of aspirin or non-steroidal anti-inflammatory drugs]).

Importantly, bleeding risk assessment in patients with AF needs to be performed responsibly, as increased bleeding risk (that is, a high HAS-BLED score) is not in itself the reason to deny OAC to AF patients at increased risk of stroke but serves as a structured "guide" for identification and management of modifiable bleeding risk factors, as well as the identification of high-risk patients who need a closer clinical follow-up during OAC therapy.

Both stroke and bleeding risk are highly dynamic, change over time (with ageing and development of comorbidity) and, hence, need to be reassessed regularly. Bleeding risk should be indeed re-evaluated at every clinical visit.

Reference

2020 ESC AF Guidelines, Eur Heart J 2020.