Anticoagulation in Lower Risk Atrial Fibrillation: A two Edged Sword

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Implication for health policy/practice/research/medical education:
After publication of the paper by Arya et al. about new treatment options in non-valvular AF, I found it a good opportunity to focus on the challenge of anticoagulation in those with lower risk of embolization.

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However, the issue of optimal anticoagulation in lower risk AF remained unsolved. For instance, in Re-LY study the risk of major bleeding in the low to intermediate-risk subgroup on Dabigatran was approximately 3% per year while the rate of stroke was less than 1%. Also, in ARISTOTLE, nearly the same results have been reported for the lower risk subgroup on Apixaban. The ROCKET AF study for evaluation of Rivaroxaban enrolled a higher risk population with a mean CHADS2 score of 3.5, but the trial did not show a net clinical benefit over warfarin either for efficacy or safety. In a recent meta-analysis of all the three new OACs, there was no clear benefit over warfarin regarding bleeding risk reduction (5). However, the novel agents had a remarkable impact on intra-cranial hemorrhage prevention with a risk reduction of 46% in comparison to warfarin (5). More randomized trials may be needed for a detailed evaluation of all aspects of therapy with the novel OACs.

In the last decade, various left atrial appendage (LAA) occlusion devices have been tested with acceptable procedural safety (6). This approach has a comparable efficacy to warfarin and much higher safety profile in the long run as it obviates the need for an anticoagulation regimen. Currently, these devices are reserved for intermediate or high-risk non-valvular AF especially those with a contra-indication for anticoagulation. But improvements in device technology and higher learning curve of operators may extend the applications of LAA occluders. So, in the near future there might be a role for percutaneous LAA occlusion in patients with low to intermediate risk of embolic events who have a higher chance of bleeding. Until these developments take place, individualized risk stratification should be the basis for any decision regarding the initiation of anticoagulants in this common but challenging category of patients. Combining other risk scores such as CHA2DS2-Vasc and HAS-BLED may be helpful to predict the risks and benefits of therapy more clearly.

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