

## Anti-coagulation in Atrial Fibrillation: Warfarin Vs NOACs

I read with interest the editorial: "Paradigm Shift in Anti-Coagulating Patients with Non-Valvular Atrial Fibrillation" by Prof. Bushra Moiz in your prestigious journal.<sup>1</sup> Scientific literature about anti-coagulation in atrial fibrillation also resonates with the facts stated in the editorial. I wish to add to this topic by sharing some important points. Firstly, it is recommended to commence warfarin initially (whether for atrial fibrillation or venous thromboembolism) with unfractionated heparin or low molecular weight heparin (LMWH) until international normalized ratio (INR) becomes therapeutic,<sup>2</sup> which is also a reason some patients prefer novel oral anti-coagulants (NOACs) over warfarin. Secondly, if anti-coagulation in atrial fibrillation is contraindicated, then it is important to offer a combination of aspirin and clopidogrel.<sup>3</sup> Thirdly, there is limited data regarding the comparison between warfarin and NOACs, looking at effectiveness and safety, in Asians,<sup>4</sup> more so amongst the population of Indian subcontinent. So, it is imperative that a multi-centre national research effort is undertaken to bring out the facts regarding our population cohort.

### CONFLICT OF INTEREST:

Author declared no conflict of interest.

### AUTHOR'S CONTRIBUTION:

BHM: Conceived, written and submitted the manuscript.

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### Author's Reply:

I thank the reader for taking interest in the editorial "Paradigm shift in anti-coagulating patients with non-valvular atrial fibrillation" published in JCPSP, January

2019 issue. The reader has raised several important issues regarding novel oral anticoagulants (NOACs) for which my response is as follows:

1. Vitamin K-antagonists (VKAs) take 48 to 72 hours for their onset of action and, therefore, require bridging with heparin for anticoagulating patients. Unlike VKAs, anticoagulation effect of NOACs is observed within 3 hours of their administration; hence, they are given directly without prior heparinization.<sup>1</sup>

2. We should be mindful of the fact that dual antiplatelet therapy (DAPT) and oral anticoagulation bear a comparable bleeding risk. Therefore, a patient who is not a candidate for oral anticoagulation because of bleeding risk cannot be a candidate for DAPT. DAPT may be a reasonable alternative to therapy with aspirin alone in the occasional high-risk patient with atrial fibrillation who cannot be treated with anti-coagulation because of patient or physician preferences.<sup>2</sup> With the availability of the NOAC agents, this condition should be extremely exceptional.

3. The three clinical trials for evaluating safety and efficacy of NOACs randomised a total of 44,563 subjects. The studies were global and multi-centric; for example, in dabigatran trial, patients were recruited from 951 clinical centres residing in 44 countries including India.<sup>3</sup> Similarly, 14,264 patients were enrolled in the double-blind multi-national study on rivaroxaban and included patients from Asian countries such as China, India, Turkey, Taiwan, Hong Kong, Thailand and so on.<sup>4</sup> These studies did not show differences in their endpoints for ethnicity. In light of these evidences and in my personal experience, NOACs are effective in our population.

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