Atrial fibrillation (AF) during hospitalization for sepsis has been shown to be associated with increased risk of ischemic stroke and mortality; however, as these patients have been excluded from randomized clinical trials and not well studied, very little is known regarding current management patterns, the role of standard AF risk scores, and the potential benefits and risks of using anticoagulation for AF during hospitalization for sepsis. Current guidelines for management of AF do not address this population despite the frequency with which these patients are encountered in clinical practice. In this issue of JAMA Cardiology, Walkey and colleagues begin to address this knowledge gap by evaluating practice patterns and patient outcomes associated with the use of anticoagulation for AF during sepsis using enhanced claims data. They find that anticoagulation for AF was used in only one-third of patients and varied widely by hospital. Among propensity-matched patients, while use of anticoagulation was associated with a modest increased risk of bleeding, there was no association with lowered risk of ischemic stroke. The CHA2DS2-VASc score (congestive heart failure, arterial hypertension, diabetes mellitus, prior stroke or TIA, vascular disease, age 75 years or older, and sex category) may help guide anticoagulation decisions in these high-risk patients.

Editor’s Note

Exploring the Potential Benefits and Risks of Anticoagulation for Atrial Fibrillation During Hospitalization for Sepsis

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Anticoagulation for Atrial Fibrillation During Sepsis

REFERENCES


hypertension, age ≥75 years [doubled], type 1 or 2 diabetes, stroke or transient ischemic attack or thromboembolism [doubled], vascular disease [prior myocardial infarction, peripheral artery disease, or aortic plaque], age 65-75 years, sex category [female]) also performed very poorly in this patient cohort, with a C statistic of only 0.526 for discriminating risk of ischemic stroke.

As there are potential unmeasured confounders, particularly with claims data, and other limitations with observational analyses, caution is needed in interpreting these findings. Furthermore, the analyses of patients with preexisting AF found that initial use of oral anticoagulants was associated with lower risk of stroke. Thus, there may be certain patients with AF and certain anticoagulation strategies for which the benefit to risk ratio is favorable during hospitalization for sepsis. However, as also seen in recent randomized clinical trials of bridging anticoagulation therapy, there may also be clinical circumstances in which increased risks of bleeding are not offset by a large enough reduction in risk of stroke. Additional studies, ideally including randomized clinical trials, are warranted to further evaluate the benefits and risks of anticoagulation for AF during hospitalization for sepsis, as well as to better guide the timing for initiation or reinitiation of anticoagulation therapy. The study by Walkey and colleagues helps highlight the fact that there remains much to learn in terms of optimal management strategies for AF in many of the clinical settings in which this increasingly common and challenging arrhythmia is encountered.

Conflict of Interest Disclosures: Dr Fonarow has completed and submitted the ICMJE Form for Disclosure of Potential Conflicts of Interest. Dr Fonarow reported serving as a consultant to AstraZeneca, Janssen Pharmaceutical, and Novartis. No other disclosures were reported.