

Use of Oral Anticoagulation in the Management of Atrial Fibrillation in Patients with ESRD: Verdict 3

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Debates in the setting of unclear scientific evidence serve two important purposes. First, they help to clarify gaps in knowledge that result in clinical uncertainty, and second, they propose solutions for dealing with that uncertainty. Authors of both pro (1) and con (2) articles are to be congratulated for elegant and focused arguments addressing these two objectives.

The current debate illustrates an important therapeutic dilemma for patients with ESRD. Atrial fibrillation is a common arrhythmia in ESRD and confers a much higher risk of embolic stroke and death than for patients without kidney failure. Unfortunately, the risk of major hemorrhage from anticoagulants in such patients is also disturbingly high, and it remains unclear whether anticoagulation will yield a net benefit in ESRD. Patients on dialysis are caught between the Scylla and Charybdis: all treatment paths seem fraught with danger.

Indeed, both sides of the debate agree that major knowledge gaps exist, particularly regarding the net benefit of stroke prophylaxis with anticoagulants and the relevance to patients with ESRD of risk scores for bleeding and stroke derived in the general population. Both pro (1) and con (2) also acknowledge the need for definitive randomized, controlled trials (RCTs) of anticoagulation strategies in this setting. However, the two sides diverge on how we should advise patients in the face of this therapeutic uncertainty.

The pro side favors cautious anticoagulation using risk scores (Hypertension, Abnormal renal and liver function, stroke, bleeding, labile international normalized ratio, elderly, drugs or alcohol [HASBLED] and congestive heart failure, hypertension, age, diabetes, stroke [CHADS]) and prescribing newer (possibly safe) oral anticoagulants, such as apixaban (1). Their premise is that anticoagulants are efficacious in preventing embolic stroke in ESRD, provided that the excess risk of bleeding can be minimized. The con side questions this premise, arguing cogently that patients on dialysis may have stroke biology inherently less responsive to

anticoagulation (2). In the absence of direct (*i.e.*, RCT) evidence of efficacy, they recommend against routine anticoagulation, even with newer oral anticoagulants, in patients with ESRD and atrial fibrillation.

So which side wins? Both sides make strong cases, but for me, the cons have it. I was convinced most of all by the argument that we can never assume, as has been clearly shown for statins, that vascular disease therapies effective in the general population will work in patients with ESRD. We desperately need an RCT addressing this therapeutic dilemma in ESRD; in the absence of such data, I have to agree with the con side: we should not advise routine anticoagulation in patients with ESRD and nonvalvular atrial fibrillation, except perhaps in patients at extreme risk (*e.g.*, prior embolic stroke or documented atrial thrombus).

An important nuance here: the word advise. Our patients should rightfully be consulted in this decision. Their thoughts and preferences matter always but especially when there is therapeutic uncertainty of this degree. Patients often weigh possible harms and benefits differently from physicians. We owe it to patients to clearly explain the uncertainties of potential harms and benefits and appropriately incorporate their priorities into any final treatment decision.

Disclosures

None.

References

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