

# Capsule Commentary on Paradise et al., Outcomes of Anticoagulation Therapy in Patients with Mental Health Conditions

Ankur Gupta, MD

Division of Cardiovascular Disease, Department of Medicine, The University of Alabama at Birmingham, Birmingham, AL, USA.

J Gen Intern Med 29(6):892  
DOI: 10.1007/s11606-014-2798-9  
© Society of General Internal Medicine 2014

In this study,<sup>1</sup> Paradise et al. compared the outcomes of warfarin therapy between patients with and without mental health conditions (MHCs).<sup>2,3</sup> They found that patients with specific MHCs (bipolar disorder, depression, non-schizophrenic psychotic disorders) experienced slightly worse anticoagulation control and patients with any MHC had a slightly increased hazard for major hemorrhage (HR 1.19,  $p < 0.001$ ). They concluded that this magnitude of difference is unlikely to be clinically significant, and thus, appropriately selected patients with MHCs may safely receive therapy with warfarin.

This study is a significant contribution to the existing paucity of literature on anticoagulation control in patients with MHCs, in an attempt to change the notion that MHCs are a contraindication to warfarin therapy. But the results of this study should be placed in context and applied carefully in clinical practice. The study only included patients who had been on warfarin therapy for at least 6 months; thus, they were highly selected patients who had demonstrated compliance. Thus the results of this study cannot be used to bolster our confidence in safely initiating warfarin therapy in patients with MHCs. The study excluded patients with valvular heart disease and mechanical valves. Females, black population and patients with schizophrenia and bipolar disorders were under-represented. Of patients in whom average global assessment of functioning scores were available, less than 1 % of patients had scores corresponding to severe impairment with hallucinations or suicidal symptoms, and thus nonsignificant data on ‘major hemorrhage’ as outcome in these patients have limited validity.

Overall, patients with MHCs did have worse anticoagulation control (percent time in therapeutic range of 57.1 % vs 63.2 %,  $p < 0.001$ ) and had slightly increased hazard of ‘major hemorrhage’. Thus, future studies on anticoagulation therapy in patients with MHCs should focus on identifying the patient groups with worse outcomes and those groups in whom it is relatively safe to initiate anticoagulation therapy. Impact of social support on these outcomes should be studied as well. It would be of clinical interest to compare the use of and outcomes with newer anti-coagulants such as dabigatran and rivaroxaban with warfarin therapy in patients with MHCs.

---

**Conflict of Interest:** The author declares no conflict of interest.

**Corresponding Author:** Ankur Gupta, MD; Division of Cardiovascular Disease, Department of Medicine, The University of Alabama at Birmingham, Boshell Diabetes Building, Room D-201, 1808 7th Avenue South, Birmingham, AL 35294, USA (e-mail: [ankurgupta@uabmc.edu](mailto:ankurgupta@uabmc.edu)).

## REFERENCES

1. Paradise HT, Berlowitz DR, Ozonoff A, et al. Outcomes of Anticoagulation Therapy in Patients with Mental Health Conditions. *J Gen Intern Med.* 2014; doi:10.1007/s11606-014-2784-2.
2. Rose AJ, Hylek EM, Ozonoff A, Ash AS, Reisman JI, Berlowitz DR. Patient characteristics associated with oral anticoagulation control: results of the Veterans Affairs Study to Improve Anticoagulation (VARIA). *J Thromb Haemost.* 2010;8(10):2182–91.
3. Rose AJ, Hylek EM, Ozonoff A, Ash AS, Reisman JI, Berlowitz DR. Risk-adjusted percent time in therapeutic range as a quality indicator for outpatient oral anticoagulation: results of the Veterans Affairs Study to Improve Anticoagulation (VARIA). *Circ Cardiovasc Qual Outcomes.* 2011;4(1):22–9.