

Circulation

Warfarin Use and the Risk for Stroke and Bleeding in Patients with Atrial Fibrillation Undergoing Dialysis

Mitesh Shah, Meytal Avgil Tsadok, Cynthia A Jackevicius, Vidal Essebag, Mark J Eisenberg, Elham Rahme, Karin H Humphries, Jack V Tu, Hassan Behlouli, Helen Guo, Louise Pilote

2014 Mar 18; 129(11):1196-203.

DOI: [10.1161/CIRCULATIONAHA.113.004777](https://doi.org/10.1161/CIRCULATIONAHA.113.004777)

Abstract

Background:

Current observational studies on warfarin use and the risk for stroke and bleeding in patients with atrial fibrillation (AF) undergoing dialysis found conflicting results.

Methods and results:

We conducted a population-based retrospective cohort study of patients aged ≥ 65 years admitted to a hospital with a primary or secondary diagnosis of AF, in Quebec and Ontario, Canada from 1998 to 2007. The AF cohort was grouped into dialysis (hemodialysis and peritoneal dialysis) and nondialysis patients and into warfarin and no-warfarin users according to the first prescription filled for warfarin within 30 days after AF hospital discharge. We determined the association between warfarin use and the risk for stroke and bleeding in dialysis and nondialysis patients. The cohort comprised 1626 dialysis patients and 204 210 nondialysis patients. Among dialysis patients, 46% (756/1626) patients were prescribed warfarin. Among dialysis patients, warfarin users had more congestive heart failure and diabetes mellitus, but fewer prior bleeding events in comparison with the no-warfarin users. Among

dialysis patients, warfarin use, in comparison with no-warfarin use, was not associated with a lower risk for stroke (adjusted hazard ratio, 1.14; 95% confidence interval, 0.78-1.67) but was associated with a 44% higher risk for bleeding (adjusted hazard ratio, 1.44; 95% confidence interval, 1.13-1.85) after adjusting for potential confounders. Propensity score-adjusted analyses yielded similar results.

Conclusions:

Our results suggest that warfarin use is not beneficial in reducing stroke risk, but it is associated with a higher bleeding risk in patients with AF undergoing dialysis.

Keywords: atrial fibrillation; dialysis; hemorrhage; stroke; warfarin.

Circulation

2014 Mar 18; 129(11):1196-203.

Epub 2014 Jan 22

PMID: 24452752

DOI: 10.1161/CIRCULATIONAHA.113.004777