

Evaluating Appropriate Dosing of Direct Oral Anticoagulants in a Family Medicine Practice

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Abstract

Objective: To determine if patients are prescribed appropriate doses of direct oral anticoagulants (DOACs) in a large, family medicine, teaching practice.

Methods: This study was an institutional review board approved retrospective chart review. Patients 18 or older who were prescribed dabigatran, rivaroxaban, apixaban, or edoxaban were included. Patients were excluded if these agents were prescribed by outside providers, actively monitored elsewhere, or cared for in a skilled nursing facility. Appropriate doses were determined based on manufacturer prescribing information. The primary outcome was the percentage of patients prescribed inappropriate doses of DOACs. Secondary outcomes included reasons for inappropriate dosing, percentage of patients taking appropriate doses but were borderline for dose change, and number of patients taking interacting medications.

Results: Sixty-four patients taking DOACs met inclusion criteria: 9 taking dabigatran, 37 taking rivaroxaban, 18 taking apixaban, and none taking edoxaban. Fifteen of 64 patients (23%) were found to be on incorrect doses. Of patients taking appropriate doses, 15 of 49 (31%) were considered borderline for dose change. One of 64 patients was found to be taking interacting medications.

Conclusion: DOAC use was suboptimal when prescribed within our family medicine practice. Efforts to improve safe use of these medications are warranted.

Keywords: direct oral anticoagulant, target-specific oral anticoagulant, novel oral anticoagulant, monitoring