Concomitant oral anticoagulant and antidepressant therapy in patients with atrial fibrillation and risk of stroke and bleeding: a population based cohort study

Authors:
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Topic(s):
Oral Anticoagulation

Citation:

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Background: Anticoagulation treatment reduces the risk of stroke but increases the risk of bleeding in atrial fibrillation (AF) patients. Antidepressants use is associated with increased risk for stroke and bleeds.

Objective: To assess the association between antidepressant use in AF patients with oral anticoagulants and bleeding and stroke risk.

Methods: All AF patients newly prescribed with an oral anticoagulant in the Stockholm Healthcare database (n = 2.3 million inhabitants) from July 2011 until 2016 were included and followed for one year or shorter if they stopped claiming oral anticoagulant treatment or had an outcome of interest. Outcomes were severe bleeds and strokes, requiring acute hospital care. During follow-up, patients were considered exposed to antidepressant after claiming a prescription for the duration of the prescription. With a time-varying Cox regression, we assessed the association between antidepressant use and strokes and bleeds, adjusting for confounders (i.e., age, sex, comorbidities, comedication, and year of inclusion). In addition, we performed a propensity score matched analysis to test the robustness of our findings.

Results: Of the 30 595 patients included after claiming a prescription for a NOAC (n = 13 506) or warfarin (n = 17 089), 4 303 claimed a prescription for an antidepressant during follow-up. A total of 712 severe bleeds and 551 strokes were recorded in the cohort. Concomitant oral anticoagulant and antidepressant use was associated with increased rates of severe bleeds (4.7 vs 2.7 per 100 person-years) compared to oral anticoagulant treatment without antidepressant use (aHR 1.42, 95% CI: 1.12 - 1.80), but not significantly associated with increased stroke rates (3.5 vs 2.1 per 100 person-years, aHR 1.23, 95% CI: 0.93 - 1.62). No significant differences were observed between different oral anticoagulant classes (i.e., warfarin or NOAC) or different antidepressant classes (i.e., SSRI, TCA, or other antidepressant). Additional propensity-score matched analyses yielded similar results but showed a significantly increased risk for stroke (HR: 1.47, 95% CI: 1.08 – 2.02).

Conclusion: Concomitant use of an oral anticoagulant and an antidepressant, irrespective of type, is associated with an increased bleeding risk. Increased awareness and a critical consideration for the need of an antidepressant is recommended in this population.
Abstract: P4745
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