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Prikaz slučaja

Optimal non-vitamin K antagonist oral anticoagulant choice in a patient at higher risk of treatment complications

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Introduction

Thromboprophylaxis with either optimally managed vitamin K antagonists (VKAs) or non-VKA oral anticoagulants (NOACs) should be regarded as mandatory for the secondary stroke prevention in patients with a stroke of cardioembolic origin, such patients with atrial fibrillation (AF). Although NOACs offer a more stable anticoagulant effect owing to their predictable pharmacological properties, and are deemed as a more convenient therapeutic option compared to VKAs, appropriate choice of the NOAC and management of NOAC therapy should consider specific individual patient characteristics in terms of age, medical co-morbidities and concomitant medications.

Case Report

We present a case of an 74 year old female who was prescribed with dabigatran 150 mg BID for secondary stroke prevention. The patient was initially prescribed with a VKA after the first ischemic stroke, when paroxysmal AF was also first diagnosed. Besides AF, medical comorbidities included: controlled arterial hypertension and moderate chronic kidney dysfunction (creatinine clearance - CrCL, 52 mL/min). The second ischemic stroke occurred 4 months following the first event, most likely due to inability to achieve tight control of the International Normalized Ratio, which prompted the decision to "switch" from a VKAt to dabigatran 150 mg BID. After dabigatran prescription, the patient was medically followed, but renal function and blood counts were not checked. Six months on dabigatran, the patient (75 years old) presented with anemia (hemoglobin, 86 g/L; MCV, 74 fL) without overt bleeding, but with a positive occult blood test. Endoscopy of the gastrointestinal tract has not revealed manifest pathology except increased hyperemia of the stomach mucosa. At that time, CrCl was 37 mL/min. Considering patient's advanced age and declining renal function, it was decided to substitute dabidatran, which is highly dependent on renal excretion, with apixaban 5 mg BID, which is less renally excreted. Anticoagulation therapy was not interrupted and appropriate anemia treatment was recommended along with regular blood count and renal function controls. During follow-up, the patient's hemoglobin level normalized and she has not suffered further complications. However, a slow decline in renal function was present during follow-up (last CrCl, 30 mL/min).

Conclusions

As illustrated by the present case, the choice of the appropriate NOAC should account for individual patient characteristics, including thromboembolic and bleeding risk factors, co-morbidities and co-medications, as well as NOAC properties and dosages that influence their use in particular clinical settings. Regular clinical follow-up should be recommended to all patients on NOACs, but more intensive follow-up is warranted for subjects at higher risk of treatment complications, such as the elderly and patients with kidney dysfunction.