

Apixaban Use in an Atrial Fibrillation Patient with Double Mechanical Heart Valves

건국대학교병원 내과

엄재영, 권창희

Introduction: Warfarin is the only approved oral anticoagulant for long-term prophylaxis in patients with mechanical heart valves. However, in the current case, we describe a 50-year-old woman with atrial fibrillation and aortic and mitral mechanical valves treated with apixaban rather than warfarin. We prescribed apixaban 5mg bid. While on apixaban, there was no evidence of prosthetic valve thrombosis or thromboembolism events during a 22 month period.

Case description: A 50-year-old woman received open-heart aortic and mitral valvuloplasty due to rheumatic valves 12 years ago and occurred post-operative paroxysmal AF and the patient was discharged with warfarin. The patient later complained of side effects including sensory disorders, a skin rash, and nausea, which resulted in her refusal to take warfarin. In December 2018 the patient returned due to ongoing chest pain. Laboratory cardiac enzyme levels were increased, with a CK-MB 191.4 ng/ml (reference ~6.6 ng/ml) and a hs-TnI 39,171 ng/L (reference ~16.1 ng/L). Emergent coronary angiography revealed a floating thrombus in the distal left circumflex artery (Figure 1A). We performed continuous intravenous heparin treatment. Two days later coronary angiography showed decreased thrombus burden (Figure 1B). We prescribed apixaban 5mg bid beginning due to side effects of warfarin. In April 2020, AF was confirmed and persisted. We examined Cardiac CT and confirmed there was no thrombus in coronary arteries (Figure 2) and no thrombus in valve(Figure 3). Electrical cardioversion was performed with biphasic 150J and sinus rhythm was restored (Figure 4). After discharge, there is no evidence of development of stroke or systemic embolism as of the time of this report.

Discussion: The current case demonstrates the efficacy and safety of apixaban to prevent valve thrombosis or systemic embolism in a patient with a mechanical heart valve. Ongoing randomized trials are needed to demonstrate the efficacy and safety of apixaban versus warfarin in patients with a mechanical aortic heart valve.

