

Warfarin-induced skin necrosis: a 'novel' solution to an old problem

Varfarine bağlı cilt nekrozu: Eski bir soruna yeni bir çözüm

Emir Cantürk
Oğuz Karaca#
Onur Omaygenç#
Filiz Kızıllırmak#
Ekrem Güler#

Department of Cardiovascular
Surgery, Medipol University
Faculty of Medicine, Istanbul;
#Department of Cardiology,
Medipol University Faculty of
Medicine, Istanbul

We present two cases of skin necrosis occurring after initiation of warfarin therapy, both of which were safely treated with novel oral anti-coagulants (NOACs). The first case is a 52-year-old male, seen after a transient ischemic event. He had non-valvular atrial fibrillation with a high CHA2DS2-VASc score.

The patient was started on warfarin to prevent recurrent ischemic events. On the 3rd day of therapy, the patient developed new-onset painful skin lesions in both legs (Figure A). A dermatology consult and skin biopsy revealed non-inflammatory thrombosis with focal necrosis. Warfarin therapy was discontinued and the patient was started on dabigatran 150 mg twice daily. Skin lesions were followed conservatively and seen to disappear in a few

days, without any recurrence under dabigatran therapy. A search for genetic mutations in the patient revealed no deficiency of protein C and S. The second case involved a 64-year-old male with acute deep venous thrombosis (DVT). This patient was started on warfarin. In the second week of follow-up, the patient admitted with purpuric and painful lesions in his hands (Figure B) with appropriate INR level. A skin biopsy proved that the lesions were suggestive of warfarin-induced skin necrosis. After termination of warfarin, the patient was started on rivaroxaban 15 mg twice daily for 3 weeks, followed by 20 mg once daily as required. A search for genetic deficiencies of protein C and S revealed no mutations. The lesions diminished with discontinuation of warfarin and did not require debridement. We report two cases of warfarin-associated skin necrosis emphasizing that novel anti-coagulants can be safely used in this relatively rare but serious clinical situation. However, no such complications would have been encountered if NOACs were used as the 'first choice' drugs, instead of the 'old habit' of preferring warfarin.



Figures– (A) Patient skin lesions in case 1. Note the well-demarcated focal necrosis along with purpuric lesions on the leg. **(B)** Demonstration of the biopsy-proven skin necrosis in case 2. Lesions were painful and hemorrhagic.