# Anticoagulant-induced breast hematoma

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### ABSTRACT

Warfarin is the most commonly used oral anticoagulant and is widely prescribed to prevent thromboembolic events. Warfarin-dependent spontaneous breast hematoma is a very rare complication. Presently described is rare case of warfarin-induced breast hematoma.

Keywords: Anticoagulant; hematoma; warfarin.

Warfarin inhibits the vitamin K-dependent clotting factors in the liver; the most important complication of warfarin use is excessive bleeding.<sup>[1]</sup> Warfarin-induced spontaneous breast hematoma is a very rare complication.

A 58-year-old female patient was hospitalized in cardiology clinic of the hospital with diagnosis of heart failure. Consultation was requested because of left breast swelling, redness, and pain. There was no history of trauma. Mitral and aortic valve replacement had been performed 17 years earlier. For the last year, she had been in follow-up due to right heart failure. She was taking warfarin 5 mg/day on a regular basis.

Physical examination was notable for hypotension and tachycardia. Left breast volume was considerably larger than the other breast, and markedly ecchymosed and tender (Figure 1). Laboratory investigations revealed high international normalized ratio (3.8 sec), and prolonged prothrombin time (25 sec) and activated partial thromboplastin time (40 sec). Red blood cell levels were fairly low: hemoglobin: 6.9 gr/dL and hematocrit: 19%. White blood cell and platelet counts were within normal ranges.

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Copyright 2017 TJTES Breast ultrasonography revealed collection area beginning from level of anterior axillary line that encompassed the left breast and spread to the anterior thoracic wall. Computerized tomography also revealed widespread hematoma in the left breast and left pectoral region (Figure 2).

The patient underwent surgery and 1000 mL of defibrinated blood was drained from hematoma via supramammary incision. Transfusion of 3 units of red blood cells and 3 units of fresh frozen plasma was administered. Packing was applied to fill the pouch due to continuous oozing-type bleeding from the wound bed. Depacking was performed after 24 hours, and no bleeding was observed in the hematoma bed. A tight bandage was applied, and the patient was transferred to the cardiology department on second postoperative day. Tight bandage was removed on postoperative day 7. Written informed consent was obtained from the patient for the publication of this case report and accompanying images.

Warfarin can lead to severe, life-threatening bleeding in some patients as result of the narrow therapeutic range of the drug, despite its antithrombotic benefits. Hemorrhagic complications are seen in approximately 10% of those under anticoagulant therapy. Bleeding is usually encountered in the skin, or genitourinary, gastrointestinal, spinal, or intracranial regions. Hematomas due to anticoagulant therapy occurring in extremely rare locations have been reported in the literature, such as retropharyngeal hematoma,<sup>[2]</sup> rectus sheath hematoma,<sup>[3]</sup> esophageal hematoma<sup>[4]</sup> and breast hematoma.<sup>[5]</sup>

Breast hematoma is extremely rare in patients without history of trauma. Thrombocytopenia, coagulation disorders, or history of anticoagulant therapy should be investigated in such cases. Bleeding creates palpable breast mass, density



Figure 1. Markedly enlarged, ecchymosed, and tender breast due to hematoma.

increase, and color change. Bleeding can also spread to the chest wall. Red blood cell transfusion and surgery may be needed in such cases.<sup>[5]</sup>

In conclusion, medical treatment may be adequate for selflimited small breast hematoma; however, in cases with risk of necrosis in the skin of the breast or if hematoma is extensive

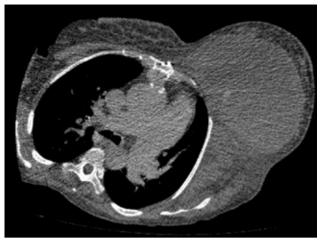


Figure 2. Computerized tomography showing widespread hematoma in left breast and pectoral region.

enough to require blood transfusion, we believe that surgery must be considered without delay.

Conflict of interest: None declared.

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#### KISA RAPOR - ÖZET

## Antikoagülan tedaviye bağlı meme hematomu

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Tromboembolik olayların önlenmesinde yaygın olarak kullanılan varfarin en sık kullanılan oral antikoagülandır. Varfarine bağlı spontan meme hematomu oldukça nadiren görülen bir komplikasyondur. Varfarine bağlı memede hematom gelişmesi nadir bir durumdur. Anahtar sözcükler: Antikoagülan; hematom; varfarin.

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