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LETTER TO EDITOR

Spontaneous Breast Hematoma Associated With Warfarin

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Abstract
Today warfarin sodium (Coumadin) is still the most commonly used agent for anticoagulant therapy. Dosage adjustment is very difficult because of many drugs and food interaction thus it can be very easy to overdose. Coumadin can cause bleeding which can be serious and sometimes lead to death. There are many cases in the literature that caused severe bleeding in different parts of the body but there is not spontaneous breast hematoma. We want to present 84-year-old female patient who had warfarin therapy due to pulmonary embolism, atrial fibrillation and right atrial thrombus. She admitted to the emergency department with a 2 day history of swelling and bruising at left breast without a history of trauma.

Key Words: Breast Hematoma, Warfarin, Anticoagulant

To the editor
84-year-old female patient admitted to the emergency department with a 2 day history of swelling and bruising at left breast. She was discharged with warfarin therapy due to pulmonary embolism, atrial fibrillation and right atrial thrombus 2 months ago. There was no history of trauma and generalized swelling, edema and common ecchymosis of the left breast (Figure 1) were found on physical examination.

Figure 1: Generalized swelling, edema and common ecchymosis of the left breast

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Other physical examination findings were unremarkable. At the laboratory examination, hemoglobin (Hb) was determined 8.15 g/dl, prothrombin time (PT) was 58.7 second, internalized normalized ratio (INR) level was 3.3, activated partial thromboplastin time (aPTT) was 50.1 second.

The other laboratory findings were normal. There was edema under the skin and 70x163x124 millimeter (~145 ml) hematoma which containing hypo-anechoic spaces in the left breast at breast ultrasound (U.S.) (Figure 2).

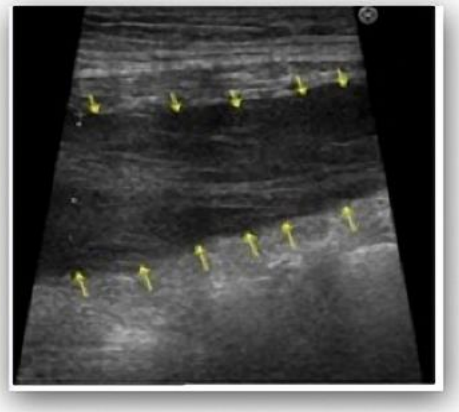

Figure 2: Hematoma in the left breast at breast ultrasound

The patient hospitalized and 4 fresh frozen plasma infusions were administered. In the control laboratory examination Hb was 5.89 g/dl, INR was 4.41, PT was 83.3 second, aPTT was 55.3 second. Ecchymosis and swelling were observed to increase at physical examination. It was found that significant increase in the size of the collection left breast (~60x190x200mm, ~1208 ml) at control US. A thoracic computed tomography scan was performed to evaluate expanding hematoma. Fluid-fluid showing floor leveling and 145x87x219 millimeter hematoma in the left breast (Figure 3), thickening of the left lateral chest wall and the left breast subcutaneous fatty tissue and increased density of left breast were detected. Collection of muscle was not detected muscle was not detected

Patients enrolled in intensive care because of Hb decline, a significant increase in the volume of the left breast, increase in breast ecchymosis and supportive therapy was continued.

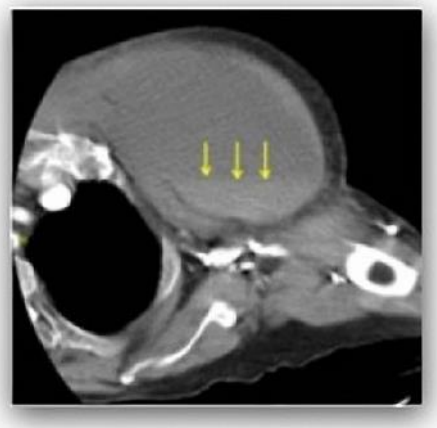

Figure 3: Hematoma in the left breast at thoracic computed tomography

Treatment on the 3rd day, Hb was 8 g/dl, INR was 2, PT was 32 second, aPTT was 51.2 second. Total 24 fresh frozen plasma and 9 unit erythrocyte suspension infusion were administered. Vitamin K and tranexamic acid were applied. Treatment on the 7rd day blood count began to be stable (Hb: 10 mg/dl, INR: 1.17 PT: 16.8 min and APTT: 27.9 min). Ultrasonography-guided drainage was performed in patients at 7rd day. Hematoma was 158x73x21 mm at control US 12 days after drainage. Hematoma had shrunk and from bleeding had stopped drainage catheter. Drainage catheter was pulled. With cardiology department proposal low molecular weight heparin was begun. The patient was consulted to the hematology department and diagnosed as acquired bleeding diathesis and was followed.

Coumadın can cause bleeding which can be serious and sometimes lead to death. Today warfarin sodium is still the most commonly used agent for anticoagulant therapy.

Different results were found in studies with warfarin incidence of bleeding in patients. In one of these studies, It has been reported that incidence of mild or severe bleeding rate between 7.6% and 16.5%, incidence of severe or life-threatening bleeding rate of 1.3-2.7 / 100 patients / year (Makris et al.,2010). Warfarin bleeding is more common in the elderly. The reason for this co-morbid diseases, multiple drug use, and endothelial vascular fragility increase with aging. Our patient was 84 years old.

Studies in the literature have shown conflicting results regarding the incidence of bleeding in patients on warfarin. In one of these studies while mild or severe bleeding rates were reported between %7,6 and %16,5, severe or life threatening bleeding rates were 1,3-2,7/100 patient/year (Makris et al., 2010). Bleeding risk due to warfarin usage is more common in the elderly. The reason for this might be co-morbidity which increased with age, increased vascular and endothelial fragility in elderly and multiple drug use (Beyth and Landefeld, 1995). Besides, the present patient was 84 year old.

The literatures reveal numerous reports of acute spinal hematoma, retroperitoneal hematoma, and rectus sheath hematoma, abdominal wall hematoma, sublingual hematoma, supraglottic hematoma ect. secondary to warfarin use (Fujikawa et al.,2011; Martin et al., 2011; Berthelsen et al.,2013;Yuanyuan, 2014;). However, there was no report about spontaneous breast hematoma

Informed Consent: Written informed consent was obtained from the patient who participated in this case.
Peer-review: Externally peer-reviewed.
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Conflict of Interest: No conflict of interest was declared by the authors.
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