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Case Report

Warfarin-Induced Spontaneous Bilateral Breast and Extrathoracic Hematoma in an Elderly Woman

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Abstract

Warfarin- induced spontaneous breast hematoma is a very rare disease, with only a few cases having been reported in the literature so far. We describe an 80-year-old woman who had warfarin therapy due to deep vein thrombosis in a lower extremity. The patient was admitted with a history of swelling and red area on her bilateral breasts, chest wall, right arm, and right flank. She was treated conservatively with success. She was discharged after about 3 weeks without complications and was well at 6 months' follow-up.

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Introduction

Warfarin inhibits the synthesis of vitamin K-dependent clotting factors. Anticoagulant therapy with warfarin is the mainstay of the treatment of venous thromboembolism, mechanical valves, and atrial fibrillation. The most important complication of warfarin use is bleeding, and the highest rate of major bleeding occurs in the first 3 months of treatment.[1] Spontaneous breast hematoma without trauma is rare but can be observed in patients with hematological diseases or in those taking anticoagulants.[2] The incidence of spontaneous large breast and chest wall hematoma is very rare.

Case Report

An 80-year-old woman who had been on warfarin (3.75 mg daily) due to deep vein thrombosis for the preceding 3 months was admitted with the sudden onset of bilateral breast swelling and pain, which was progressively increasing in size. The patient denied any history of trauma prior to this event. Her comorbid medical condition was hypercholesterolemia. She was afebrile with a respiratory rate of 20/min, a heart rate of 90/min, and a blood pressure of 110/70 mmHg. A physical examination revealed the presence of swelling and ecchymosis in the breasts, the right arm, and the right flank (Figure 1). The ecchymosis patches were tender, and there was no palpable mass. The hematoma had limited the activity of the patient, and she was uncomfortable. There was no evidence of bleeding from any other site. Laboratory tests revealed a white blood cell count of 8500/mm^3, a hemoglobin level of 10 g/dL, a platelet count of 258000/mm^3, and an international normalized ratio of 3. Tests for lupus anticoagulants, protein C, protein S, antithrombin III, and Factor V Leiden were

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normal. Warfarin was discontinued and heparin was started. We decided to provide conservative management because of the stability of the patient. Hematoma started regressing progressively, and she was discharged after 20 days. The patient was well at 6 months' follow-up.

Figure 1. Wide ecchymosis and swelling in both breasts, the sternum, part of the right arm, and the flank.

Discussion

Warfarin is the most commonly used oral anticoagulant in Iran. Treatment with warfarin is deemed effective antithrombotic therapy, but it may place patients at significant risk of complications. One of the most important complications of warfarin is hematoma. While hematoma is frequently observed in the skin, the gastrointestinal system, the abdomen, the back, and the legs, it is quite rare in the breasts.[1] If left untreated, it may, however, result in skin necrosis and mastectomy.[3] Hematoma can also spread to the chest wall, flanks, abdominal wall, and upper limbs. The hematoma in our patient was probably not due to over anticoagulation as her international normalized ratio was within the therapeutic range. Concomitant use of warfarin with aspirin or nonsteroidal anti-inflammatory drugs increases the risk of hematoma. Several different etiologies have been proposed including coagulopathy, trauma, vascular lesions, malignancy, and surgical complications. Older age increases the risk of major hemorrhage due to the increase in endothelial vascular fragility.[4] Our patient was 80 years old. Management ranges from simple conservative to extended surgical interventions. Supportive care such as hydration, correction of coagulopathy, and analgesia should be provided. Complete hematoma resorption may take weeks to months. If hematoma is extensive enough to increase the risk of breast necrosis or to require blood transfusion, surgery should be considered.

Conclusion

Special attention needs to be paid to advanced-age patients on warfarin therapy.

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