

Azygos vein thrombosis despite rivaroxaban therapy in a patient with breast cancer: A rare entity

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Key message

In the light of this case, azygos and hemiazygos veins should be evaluated carefully in thorax CT scans. This rare case is also important in terms of the occurrence of AVT in a patient receiving rivaroxaban therapy. The outcomes and recurrence rates of these patients should also be reported for the decision of anticoagulant treatment.

KEYWORDS

azygos vein, breast neoplasms, rivaroxaban, thrombosis

Azygos vein thrombosis (AVT) is an extremely rare type of venous thromboembolism. It is commonly associated with predisposing factors such as azygos vein aneurysm and malignancy including cholangiocarcinoma¹ and renal cell carcinoma.² However, AVT associated with metastatic breast cancer has not been reported yet.

We present a 71-year-old woman who was admitted to the clinic with complaints of persistent cough and breathlessness. Diagnosed with invasive ductal breast carcinoma 22 years ago, she underwent a right mastectomy and was treated with chemo-radiotherapy. As cancer relapsed a year ago, she underwent chemo-radiotherapy again. She has good

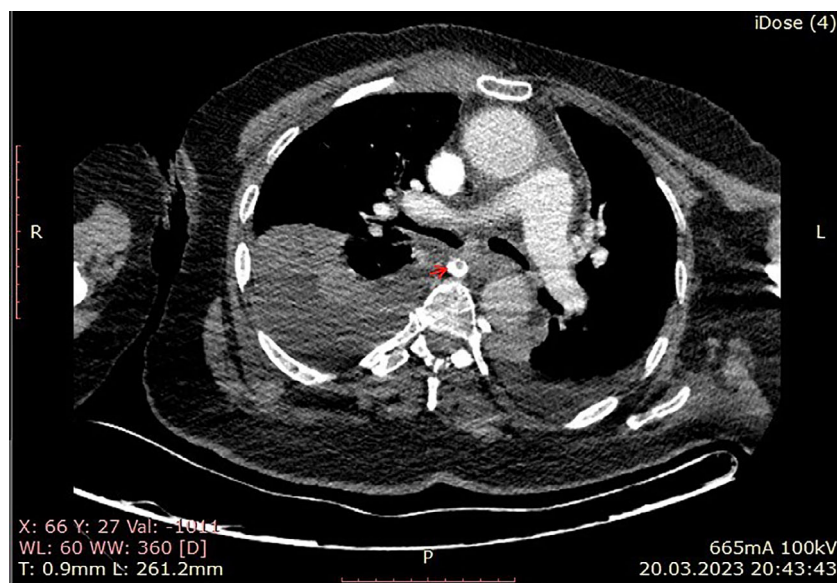


FIGURE 1 Mediastinal window of an axial section of a contrast enhanced thorax CT shows bilateral pleural effusions, especially more on the right hemithorax. Red arrow shows thrombosis in azygos vein

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adherence to rivaroxaban treatment for atrial fibrillation. Physical examination reveals pretibial edema and decreased breath sounds on auscultation. A contrast-enhanced thoracic computed tomography (CT) was planned to rule out pulmonary embolism and AVT was detected (Figure 1). Rivaroxaban was replaced with enoxaparin at a therapeutic dose and patient follow-up was planned. This rare case is important in terms of carefully examining the azygos and hemiazygos veins on thorax CT scans, and emphasizing the occurrence of AVT in a patient receiving rivaroxaban therapy. The outcomes and recurrence rates of these patients should also be reported for the decision on anticoagulant treatment.

AUTHOR CONTRIBUTIONS

Guliz Degirmenci: Data curation, Software, Writing-Original draft preparation. **Celal Satici:** Conceptualization, Software, Writing- Reviewing and Editing.

CONFLICT OF INTEREST STATEMENT

None declared.

DATA AVAILABILITY STATEMENT

Data sharing not applicable to this article as no datasets were generated or analysed during the current study

ETHICS STATEMENT

The authors declare that appropriate written informed consent was obtained for the publication of this manuscript and accompanying images.

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