Case report

Superior vena cava syndrome in a patient with severe thrombocytopenia

I. ATLAS\textsuperscript{1}, K. KRYUGER\textsuperscript{2} and A. BLUM\textsuperscript{3}

From the \textsuperscript{1}Department of Onco-gynecology, \textsuperscript{2}Imaging Department and \textsuperscript{3}Department of Internal Medicine, Baruch-Padeh Poria Medical Center, Lower Galilee 15208, Israel

Address correspondence to A. Blum, MD, Department of Internal Medicine, Baruch-Padeh Poria Medical Center, Lower Galilee 15208, Israel. email: navablum@hotmail.com

Case report

A 75-year-old woman was admitted with a suspected superior vena cava syndrome. She was diagnosed with Stage IV progressive ovarian carcinoma and has been treated for the last 2 weeks with topotecan as third-line chemotherapy. A week earlier, she noticed that the right-sided chest skin was becoming progressively demarcated with venous congestions. On examination, we found that her right jugular vein was fully congested (10 cm) with engorged veins of the skin on the right anterior chest. Her blood pressure was 120/80 mmHg, regular sinus rhythm of 80 beats per minute, no signs of dyspnea or orthopnea, and only the right jugular vein was enlarged and congested (Figure 1). The left-sided jugular vein was normal. The lungs were clear with alveolar breathing, normal clear heart sounds without murmurs. She had severe ascites without peripheral edema. Normal pulse was felt in both the arms, in the radial and ulnar arteries, as well as in the legs. Her hemoglobin

Figure 1. Clinical image.
was 8 g%, 800 WBCs/ml (70 neutrophils), 31,000 platelets/ml, international ratio of 1.2, PTT 28.9 s. Electrolytes, renal function and liver function tests were normal.

Computed angiography has demonstrated an occluded right subclavian vein with collaterals (Figure 2). After admission, she was treated simultaneously with granulocyte colony stimulating factor, six packs of platelets and subcutaneously low molecular heparin (clexan 60 mg twice daily) increased her PLT to 119,000/ml, and the WBC count improved within 2 days to 4500/ml. Before admission, she was not treated with heparin or low molecular weight heparin.

After 3 days of treatment, the venous markings started to fade and became less pronounced. She noticed that overall she was feeling much better and was sent home with low molecular weight heparin.

Discussion

Superior vena cava syndrome is a common complication of malignancy.1 Lower extremity deep vein thrombosis (DVT) is more common than upper extremity DVT, but cancer patients are prone to upper extremity DVT due to additional risk factors like central venous catheters, chemotherapy, radiotherapy or bulky malignancies that cause prolonged compression of veins, hence venous stasis.2

Our patient did not have a bulky mass, was not radiated to that area and no central lines were inserted to the subclavian vein. More than that, she suffered from subclavian vein thrombosis while she had severe thrombocytopenia. Medical treatment with low molecular heparin was beneficial with no downregulation of platelets and with a good clinical response.

Conflict of interest: None declared.

References
