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ABSTRACT N. PO76

THROMBOSIS ASSOCIATED WITH MIDLINE IN AUTOIMMUNE PATIENT: A CASE REPORT ON THE USE OF APIXABAN IN A REAL-WORLD SETTING.

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Background
Upper extremity deep vein thrombosis (UEDVT) accounts for about 10% of all DVTs, with increasing incidence among hospitalized patients and those with central venous devices, such as PICC and midline catheters. Systemic inflammation, catheter-related infection, prolonged indwelling time, and prothrombotic comorbidities further increase the risk. While anticoagulation remains the standard treatment, the use of DOACs in catheter-related thrombosis (CRT) in non-oncologic, septic, or autoimmune patients is not well defined. We present a clinical case that highlights this therapeutic gap.
Case Report
A 42-year-old woman with seronegative spondyloarthritis on biologic therapy was admitted to intensive care for septic shock. Ten days earlier, a brachial midline catheter had been placed due to poor venous access and the need for MRI with contrast. At admission, she had high-grade fever, hypotension, and acute respiratory failure. Chest CT revealed bilateral pneumonia. Peripheral and central blood cultures, as well as the catheter tip, tested positive for MRSA. Empiric intravenous vancomycin therapy was initiated.
During hospitalization, she developed painful swelling of the right upper limb. Doppler ultrasound revealed acute thrombosis of the subclavian and axillary veins. Given the MRSA bacteremia and in accordance with IDSA 2009 and ESVS 2021 guidelines, the midline was promptly removed despite the concomitant thrombosis. Transthoracic echocardiography ruled out endocarditis. Thrombophilia screening, performed prior to anticoagulation, showed an isolated mild protein S deficiency, which was not confirmed on repeat testing.
Initial anticoagulation with fondaparinux 7.5 mg/day was started. After internal medicine consultation, a switch to apixaban (10 mg BID for 7 days, followed by 5 mg BID) was made due to oral administration, favorable safety profile, and ease of outpatient management. There were no contraindications to DOAC use.
At the 3-month follow-up, the patient was in good clinical condition, with no signs of thrombotic recurrence or bleeding. Follow-up ultrasound showed complete venous recanalization, and anticoagulation was discontinued as planned.
Conclusions
Catheter-related thrombosis of the upper limb in non-oncologic, septic, or autoimmune patients remains a clinical gray area with no specific guidance in major recommendations. Current indications are often based on data from lower limb DVT or oncologic settings. This case supports the use of apixaban as an effective and well-tolerated treatment option in complex clinical scenarios, advocating for its use in selected CRT cases outside of oncology. Dedicated prospective studies and clearer guidelines are urgently needed to address this underexplored area of venous thromboembolism.

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