

ANTICOAGULANT TREATMENT

## **VENOUS THROMBOEMBOLISM IN BREAST CANCER: INSIGHTS FROM A SINGLE-CENTER COHORT**

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**Background.** Venous thromboembolism (VTE) is a major cardiovascular complication in cancer patients and the leading cause of morbidity and mortality. The study aimed to evaluate the incidence, timing, clinical predictors, and management of VTE in patients with breast cancer (BC), undergoing oncological therapy, and to propose a risk-adapted strategy for thrombosis monitoring and prevention.

**Methods.** In this retrospective single-center study, 116 women with histologically confirmed BC (stages I-IV) treated between 2021 and 2024 were included. Patients were divided according to the occurrence of objectively confirmed VTE. Clinical characteristics, comorbidities, laboratory parameters, cancer-related factors, and treatment modalities were analyzed. Univariate and multivariate logistic regression analyses were performed to identify independent predictors of VTE.

**Results.** VTE occurred in 25 patients (21.6%), predominantly within the first 12 months after cancer diagnosis. Deep

vein thrombosis of the lower and upper extremities was the most common manifestation (52%), while pulmonary embolism was present in 24% of cases, either alone or in combination (20%). Patients who developed VTE were significantly older and more frequently had hypertension, dyslipidemia, hyperglycemia, anemia, and leukocytosis. Multivariate analysis identified age  $\geq 55$  years (OR 1.74, 95% CI: 1.18 to 2.72), ECOG performance status  $\geq 3$  (OR 1.92, 95% CI: 1.29 to 2.12), and elevated glucose level (OR 2.21, 95% CI: 1.53 to 3.14) as independent predictors of VTE. Direct oral anticoagulants were the most frequently used agents of long-term anticoagulant therapy.

**Conclusions.** VTE is a clinically relevant and relatively frequent complication in patients with BC, particularly during the early period of anticancer treatment. Patient-related and metabolic factors play a key role in thrombosis risk, underscoring the need for individualized, risk-adapted approaches to VTE prevention and monitoring in this cohort.