ANTICOAGULANT TREATMENT

LONG-TERM ANTICOAGULANT THERAPY AND REDUCTION OF OVARIAN CANCER RECURRENCE: CLINICAL EVIDENCE OF A POTENTIAL ANTITUMOUR EFFECT

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Background. Activation of the haemostatic system is a key component of tumour progression and metastasis in advanced ovarian cancer. Anticoagulant therapy (ACT), traditionally used for prevention of venous thromboembolism (VTE), may interfere with these mechanisms and potentially modify tumour recurrence and carcinogenesis.

Aim. To evaluate the impact of long-term ACT on ovarian cancer recurrence in patients with stage III-IV epithelial ovarian cancer.

Methods. A prospective interventional non-randomized comparative study included 126 patients with stage III-IV epithelial ovarian cancer. The main group (n=66) received DOACs for 60-72 months as secondary prevention of VTE, while the comparison group (n=60) did not receive ACT. Both groups were comparable in age, disease stage, and extent of antitumour treatment. DOACs were used: dabigatran 50 mg twice daily, rivaroxaban 10 mg once daily, or apixaban 2.5 mg twice daily, with individualized selection based on renal function and clinical profile. The primary outcome was ovarian cancer recurrence; thrombotic events were also recorded.

Results. During long-term follow-up, ovarian cancer recurrence was observed in 21 of 66 patients(31.8%) receiving ACT, compared with 39 of 60 patients(65.0%) in the comparison group ($p<0.05$), indicating a nearly twofold reduction in recurrence rate associated with long-term anticoagulation. The incidence of VTE remained comparable between groups: 18.2% in the anticoagulated cohort and 16.7% in patients not receiving anticoagulants. In the anticoagulant group, thrombotic events included DVT in 12.1% and PE in 6.1% of patients. Despite similar rates of thrombotic complications, long-term ACT was associated with a marked decrease in tumour recurrence, suggesting an effect beyond thromboprophylaxis. The observed benefit persisted throughout extended follow-up, supporting a sustained modification of tumour progression dynamics.

Conclusions. Long-term anticoagulant therapy administered for 60-72 months in patients with advanced epithelial ovarian cancer is associated with a significant reduction in tumour recurrence without an increase in thrombotic events. These findings support the hypothesis that anticoagulants may exert an additional antitumour effect by interfering with haemostasis-dependent mechanisms of invasion and metastasis. ACT may therefore represent a potential modifier of cancer recurrence and carcinogenesis, warranting further investigation in randomized controlled trials.