EPIDEMIOLOGY

OUTPATIENT TREATMENT OF VENOUS THROMBOEMBOLISM AND SUBSEQUENT RISK OF CANCER

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Introduction. Venous thromboembolism (VTE) patients with a low risk of complications are increasingly being treated on an outpatient basis. VTE is a known marker for occult cancer, but the risk of malignancy is only known to a limited extent in VTE patients treated on an outpatient basis.
Aim. To examine the risk of cancer after hospital-based outpatient treatment of VTE.
Materials and Methods. For 2000-2022 we used Danish health registries to include all patients treated for VTE in a hospital-based outpatient setting (including emergency room visits), who did not have an inpatient VTE hospitalization within 7 days of diagno-sis. VTE patients with less than 7 days of follow-up were excluded. Patients were fol-lowed from 7 days after their outpatient VTE treatment to first incident cancer (except non-melanoma skin cancer), death, emigration, or end of study (31 December 2022), whichever came first. As measures of relative cancer risks, we calculated age-, sex- and calendar period standardized incidence ratios (SIRs) comparing the observed cancer in-cidence among people with outpatient treated VTE with the expected cancer incidence based on Danish national cancer rates.
Results. We identified 43,615 patients (50.6% female) with VTE treated in an outpatient setting. The median age was 61 years (interquartile range (IQR): 47-74) and the median follow-up time was 5.3 years (IQR: 2.3-10.3). During the first year of follow-up 1,275 were diag-nosed with cancer yielding an SIR of 2.58 (95% confidence interval (CI): 2.44 – 2.73). During the first year of follow-up, SIRs exceeding 4 for cancer sites with more than 10 observed cases were observed for liver, gallbladder, pancreatic, cervical, ovarian, and thy-roid cancers, as well as non-Hodgkin lymphoma. During the subsequent years the SIR declined to 1.18 (95% CI: 1.15 – 1.22).
Conclusions. VTE is a marker of undiagnosed cancer in patients treated for VTE on an outpatient basis.