Rates of initial and recurrent thromboembolic disease among patients with malignancy versus those without malignancy. Risk analysis using Medicare claims data.

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Abstract

Although the association between malignancy and thromboembolic disease is well established, the relative risk of developing initial and recurrent deep vein thrombosis (DVT) or pulmonary embolism (PE) among patients with malignancy versus those without malignancy has not been clearly defined. The Medicare Provider Analysis and Review Record (MEDPAR) database was used for this analysis. Patients hospitalized during 1988-1990 with DVT/PE alone, DVT/PE and malignancy, malignancy alone, or 1 of several nonmalignant diseases (other than DVT/PE) were studied. The association of malignancy and nonmalignant disease with an initial episode of DVT/PE, recurrent DVT/PE, and mortality were analyzed. The percentage of patients with DVT/PE at the initial hospitalization was higher for those with malignancy compared with those with nonmalignant disease (0.6% versus 0.57%, p = 0.001). The probability of readmission within 183 days of initial hospitalization with recurrent thromboembolic disease was 0.22 for patients with prior DVT/PE and malignancy compared with 0.065 for patients with prior DVT/PE and no malignancy (p = 0.001). Among those patients with DVT/PE and malignant disease, the probability of death within 183 days of initial hospitalization was 0.94 versus 0.29 among those with DVT/PE and no malignancy (p = 0.001). The relative risk of DVT/PE among patients with specific types of malignancy is described. This study demonstrates that patients with concurrent DVT/PE and malignancy have a more than threefold higher risk of recurrent thromboembolic disease and death (from and cause) than patients with DVT/PE without malignancy. An alternative management strategy may be indicated for such patients.

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