■ CNE Article

Thromboprophylaxis in Ambulatory Lung Cancer Treatment

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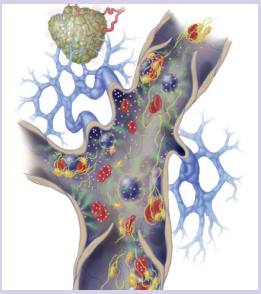

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Venous thromboembolism (VTE), including deep vein thrombosis and pulmonary embolism, are common problems experienced by patients with lung cancer that can impact treatment plans, prognoses, and survival. Patients with lung cancer are at greatest risk for development of VTE in the ambulatory care treatment setting. Literature does exist on VTE management for medical and surgical oncology inpatients, as well as clinical guidelines for inpatient prophylaxis; however, published evidence is lacking on outpatient risk and thromboprophylaxis in medical oncology outpatients, particularly patients with lung cancer. Because patients with lung cancer treated in the ambulatory setting have established risks for VTE, they may benefit from thromboprophylaxis. Clinical guidelines for outpatient thromboprophylaxis direct the clinical practice for thromboprophylaxis in lung cancer treatment. The purpose of the current article is to explore the VTE risks associated with ambulatory lung cancer treatment and to review the recommended guidelines for thromboprophylaxis to guide clinical decision making for patients with lung cancer.

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Venous thromboembolism (VTE), including deep vein thrombosis (DVT) and pulmonary embolism, represent major public health problems. VTE is a life-threatening complication developed by one in five patients with cancer. VTE is the second leading cause of death in patients with active cancer, accounting for 9% of fatalities (Khorana, 2007). Lung cancer may account for up to 21% of cancer-associated VTE (Tafur et al., 2011). Consequences of VTE include inpatient hospitalization, interruption of cancer treatment, ongoing pharmacologic management, risk of recurrence, decreased quality of life, decreased survival, and financial burden (Lyman & Khorana, 2009). VTE is most prevalent in the outpatient treatment setting (Khorana, 2007).

Guidelines for VTE management in cancer populations are endorsed nationally and internationally by professional clinical groups based on valid and reproducible clinical trial data (Corrales-Rodriguez & Blais, 2012). Evidence-based recommendations have been established to direct clinical practice regarding VTE and to support risk assessment, primary prevention, and thromboprophylaxis in patients with cancer in an inpatient setting admitted for surgical and medical reasons; however, ambulatory patients with cancer receiving outpatient treatment are at the greatest risk for VTE and have fewer evidence-based interventions and recommendations (Lyman et al., 2007). In the absence of consistent preventive strategies, clinicians must bridge the gap by systematically evaluating inpatient and outpatient recommendations and applying them to VTE management in ambulatory oncology settings.

Although the risk for VTE is great, therapeutic anticoagulation in patients with cancer is complicated by the dual challenges of increased bleeding risk for hemorrhage and increased risk for hypercoagulation related to malignancies and chemotherapeutic treatments. A comprehensive understanding of the risks, complications, management, and treatment guidelines for VTE in patients with lung cancer in ambulatory care settings is an integral component of patient care and treatment (Falanga & Russo, 2012).

Inconsistencies and contradictions occur in the clinical guidelines proposed for outpatient VTE thromboprophylaxis