Study investigates prophylaxis of catheter-related deep vein thrombosis in cancer patients


Abstract:

PURPOSE: Whether an anticoagulant prophylaxis is needed for patients with cancer with a central venous catheter is a highly controversial subject. We designed a study to compare different prophylactic strategies over 3 months of treatment.

METHODS: We performed a phase III prospective, open-label randomized trial. After the insertion of a central venous access device, consecutive patients with planned chemotherapy for cancer were randomized to no anticoagulant prophylaxis, low molecular weight heparin, or warfarin 1 mg/day. Treatments were given over the first 3 months. Doppler ultrasound and venographies were performed on days 1 and 90, respectively, or sooner in case of clinical presumption of thrombosis.

RESULTS: A total of 420 patients were randomized, and 407 were evaluable. Forty-two catheter-related deep vein thrombosis (DVT) occurred (10.3 %), 20 in those with no anticoagulation, 8 in those receiving warfarin, and 14 in those receiving LMWH. Nine additional non-related catheter deep vein thrombosis (CDVT) occurred. Anticoagulation
significantly reduced the incidence of catheter-related DVT (p = 0.035) and catheter non-related DVT (p = 0.007), with no difference between warfarin and LMWH. Safety was good (3.4 % of attributable events) but compliance with randomized prophylaxis was lower than expected.

CONCLUSIONS: Prophylaxis showed a benefit regarding catheter-related and non-catheter-related DVT with no increase in serious side effects.