



THREE-MONTH CUMULATIVE INCIDENCE OF THROMBOEMBOLISM AND BLEEDING AFTER PERIPROCEDURAL ANTICOAGULATION MANAGEMENT OF PATIENTS WITH VENOUS THROMBOEMBOLISM

ACC Poster Contributions

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Background: Patients receiving chronic anticoagulation for venous thromboembolism (VTE) often require temporary interruption of warfarin for an invasive procedure. There are few data regarding the incidence of thromboembolism (TE) and bleeding related to peri-procedural anticoagulation management of such patients.

Methods: In a prospective, protocol driven, inception cohort design study, all VTE patients referred for peri-procedural anticoagulation management (1997-2007), were followed forward in time to estimate the 3-month cumulative incidence of TE and bleeding. Patients were stratified by thrombus acuity ("acute" <30 days, "subacute" 31-90 days, or "chronic" \geq 91 days). Warfarin was stopped 5 days prior to the procedure. Decisions to provide "bridging" low molecular weight heparin (LMWH) were individualized based on estimated risk of TE and bleeding. All events were centrally adjudicated.

Results: 775 VTE patients (61 \pm 15 yrs; 50% women) were referred for peri-procedural anticoagulation management. LMWH was more often given in acute (87%) and subacute (81%) compared to chronic VTE (59%; $p < 0.001$). Although 13% had IVC filters, only 4 were placed as part of the "bridging strategy". The 3-month cumulative incidence of TE (1.8%), major hemorrhage (1.8%) and mortality (1.7%) were low and did not differ by management strategy. Active cancer was the only independent predictor (OR; 95% CI) of thrombotic recurrence (4.95; 1.64-14.93; $p = 0.005$); major hemorrhage (6.89; 2.13-22.31; $p = 0.001$); and death (33.71; 4.36-260.88; $p = 0.0008$).

Conclusions: The three-month cumulative incidence of TE, bleeding, and death among VTE patients in whom anticoagulation is temporarily interrupted for an invasive procedure is low. Cancer patients require particular care given their propensity for both clotting and bleeding.