Results: Of the 1506 patients, 567 (38%) were men and 939 (62%) were women. Mean age was 57 years (range, 14-96 years). Thirty percent of patients referred (n = 453) were postoperative. The most common presenting symptoms were pain (n = 600; 40%), edema (n = 425; 28%), and pain and edema (n = 406; 27%). Duplex scans were abnormal in 335 (22%) patients (223 acute DVT, 102 chronic DVT). In the acute DVT, extent was classified as four in 34 limbs (15%), three in 100 limbs (45%), two in 66 limbs (30%), and one in 23 limbs (10%). The most common referring physician specialty was family medicine (n = 601; 40%), followed by orthopedics (n = 491; 33%) and internal medicine specialties (n = 280; 19%). In acute DVT, hypercoagulable states (P < .001), pregnancy (P = .001), and recent travel (P = .04) were associated with increased severity of DVT, and postoperative state was associated with a decreased severity (P = .03). In the multivariate model for the presence of acute DVT, postoperative state (odds ratio [OR] = 3.08, P < .001), male gender (OR = 1.94, P < .001), presentation with pain and edema (OR = 2.39, P < .001, compared with edema alone), and younger age (OR = 0.88, P = .01, per 10 years) conferred the greatest risk of acute DVT. Once gender, age, and postoperative status are accounted for, referring physician specialty was not a statistically significant predictor of DVT.

Conclusion: In patients referred to an OVL, patient gender, age, postoperative state, and presenting symptoms were predictive of a positive scan. When controlling for these factors, the risks for acute DVT were similar across specialties. Outreach and education to referring physicians in regards to risk factors for, and appropriate workup of, DVT may assist in efficient utilization of OVL.

Mode of Thrombolytic Therapy and Residual Obstruction do not Affect Valve Function

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Background: Successful catheter-directed thrombolysis (CDT) for iliofemoral deep vein thrombosis (IFDVT) reduces post-thrombotic morbidity and is suggested by the American College of Chest Physicians for treatment of patients of IFDVT. Pharmacomechanical thrombolysis (PMT) is also suggested to shorten the treatment times and reduce the dose of plasminogen activator. However, there is concern that mechanical devices will damage vein valves. The purpose of this study is to examine whether PMT adversely affects venous valve function compared with catheter-directed thrombolysis alone in IFDVT patients treated with catheter-based techniques.

Methods: Sixty-nine limbs in 54 patients who underwent catheter-based treatment IFDVT form the basis of this study. Lytic success and degree of residual obstruction were analyzed by reviewing postprocedural phlebograms. All patients underwent bilateral post-procedure duplex examinations to evaluate patency and valve function. Patients were divided into three groups based on the mode of lytic therapy: Group 1, CDT alone; group 2, CDT with Angiojet; and group 3, CDT with trellis catheter. The validated outcome measures were compared between the three groups.

Results: Sixty-nine limbs underwent CDT with or without PMT. Average age was 47 years (range, 16-78 years). The Fig demonstrates the correlation between mode of therapy and valve incompetence. Residual venous obstruction did not have an effect on valve function; however, the vast majority of patients had < 50% residual obstruction. Valve function following catheter-based intervention correlated best with valve function of the nonaffected limb (P < .05).

Conclusions: In patients undergoing catheter-based intervention for IFDVT, PMT does not adversely affect valve function compared with CDT alone. Valve function following catheter-based intervention correlated best with valve function of the unaffected limb.