

## **20 - Association of post-thrombotic changes with disease severity in patients presenting with symptomatic calf vein thrombosis**

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**Background:** The natural history of calf deep vein thrombosis (DVT) have been extensively studied. Duplex ultrasound (DU) changes over time of isolated calf DVTs have also been reported; to our knowledge, however, prospective correlation of progression in clinical class with changes in DU and clinical symptoms has not been reported

**Aim:** This prospective study was designed to evaluate the natural history of isolated calf DVT in relation to their patterns and distribution

**Methods:** 117 limbs in 104 patients, with isolated symptomatic DVT diagnosed with DU were included. The distribution and extent of the initial DVT was recorded in detail. Patients with a documented episode of prior DVT or those having thrombus in the popliteal vein or higher were excluded. Ultrasound examination was done with the patient in the standing position to ensure optimal testing for detecting post-thrombotic changes. Affected venous segments were classified as having an occlusion, complete recanalization, partial recanalization, with or without reflux.

**Results:** Almost all limbs had partial or complete recanalization (Table 1). Reflux and/or obstruction were found in 63 limbs and the rest 35 were normal (Table 2). Only 2 limbs had skin damage, none developed an ulcer. Most limbs had mild to moderate disease and only 14 patients experienced persistent symptoms at 1 year (Table 3).

**Conclusion:** Patients with symptomatic calf vein DVT generally have good clinical outcomes, with most being asymptomatic, and having mild disease. While small deterioration is seen up to 4 years, few limbs developed skin changes. The presence of reflux in calf veins does not appear to be a significant predictor of severe disease development in the medium term.