

## **Management of Post-Thrombotic Syndrome –focused on intervention and surgery**

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Post-thrombotic syndrome (PTS) is a serious complication and cause of debilitation after deep venous thrombosis (DVT). Many different strategies have been proposed to prevent PTS with its terminal complication of recurrent ulceration but have ultimately failed. For example, aggressive intervention for acute DVT was hypothesized to prevent the development of post thrombotic syndrome by preserving valve function, this has not been borne out. Deep venous obstruction and reflux both participate in the pathoetiology of PTS by creating the substrate of chronic venous hypertension and edema, but strategies directed at addressing peripheral obstruction with bypasses, interventions with stents, and reconstruction or replacement of valves have not been uniformly successful, and when they fail, worsen the clinical situation. Long term management with compression hosiery is effective in some patients, but failure in the form of ulceration can be devastating. Treatment of ulcers with ablation of varicose and perforating veins does appear effective. Early experience with the Linton procedure was superseded by subfascial endoscopic perforator surgery (SEPS), which had great enthusiasm, but this too has been superseded by ultrasound guided foam sclerotherapy. Until durable and reliable methods of restoring calf muscle pump function are invented, long term management involves control of edema, antisepsis, and elimination of foci of inflammation.