

PHLEBITIS

Phlebitis is defined as inflammation of the walls of a vein and is characterized by a tender, reddened and swollen vein. It is usually limited to the lower extremities. *Phlebitis* often follows the development of varicose veins and may be a precursor to thrombus formation and life threatening emboli. The cause of *phlebitis* is, in most cases, obscure. However, the inflammatory processes involved may arise out of bacterial infection in close proximity to the veins or from irritating nonbacterial sources. Nonbacterial sources include prolonged sitting, hiking or climbing at high altitudes, pregnancy and some types of chemicals (birth control pills appear to be causal in some cases).

When *phlebitis* appears, the tissue around the inflamed area may be hard, swollen, tender, and warmer to touch than normal. The extremity below the inflammation may become swollen and develop pitting edema. The skin covering the inflamed area

will have higher than normal skin resistance, and there may be discomfort when the foot is dorsiflexed on the involved side.

Treatment

Before the formation of a thrombus, *phlebitis*, responds well to the application of low frequency wide-pulsed electrical stimulation, applied over the inflamed zone, at seven Hz, for 20 minutes. If performed soon enough after onset, when the area first begins to become tender, the phlebitis episode may be aborted in one or two sessions. Lasting relief seems to depend on the patient's willingness to wear support hose when walking or standing for extended periods of time (refer to Electrical Stimulation, Circulation Enhancement).