Melbourne Vascular Imaging

# VARICOSE VEINS

Varicose veins are associated with gender, family history, pregnancy, and occupation.

Venous blood is normally directed from the superficial veins to the deep system via communicating veins. With the action of the calf and foot muscle pump, blood is forced back to the heart, aided by the muscles of the diaphragm. To prevent gravity assisted retrograde flow (venous flow away from the heart, and from the deep to the superficial system) one way valves are located throughout the venous system. When the one way valves malfunction, retrograde (backward) flow can occur causing abnormally high pressure in the superficial veins. The resultant venous hypertension can cause symptoms of heaviness, aching, and fatigue, as well as findings of oedema and dilated tortuous veins. In bad cases, skin changes and ulceration can occur in the calf. When venous insufficiency (retrograde flow or reflux) is confined to the superficial system it is referred to as primary varicose veins. When it is related to deep vein insufficiency (usually associated with DVT), it is known as secondary varicose veins.

Duplex scanning is of great assistance to defining whether or not the venous insufficiency is primary or secondary, and to assess which superficial veins are incompetent and their communication to the deep system (the main junctions or perforating veins). Duplex scanning can also expose

pelvic vein incompetence, which sometimes occurs following pregnancy.