PRIMARY CARE MANAGEMENT GUIDELINES
Varicose Veins

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Dilated, tortuous superficial veins of the lower limb usually in the distribution of either the long saphenous or short saphenous veins but occasionally both. May result from superficial vein incompetence (primary varicose veins) or valveless/occluded deep veins (secondary varicose veins). The latter is often associated with a history of deep venous thrombosis (post-thrombotic syndrome). This definition does not include fine reticular veins, telangectasia or dermal flares.

CLINICAL PROBLEM (Clinical Determinants)	ACTIONS	LOCAL IMPLEMENTATION REQUIREMENTS
UNSIGHTLY APPEARANCE		
Without complications as below	No specific treatment / simple reassurance	
	Conservative management to prevent/retard progression [1]	
	Compression sclerotherapy [2] (optional)	Refer to Private sector
	Refer to surgeon (optional)	Refer to Private sector
OEDEMA [3]		
Painless, bilateral	Venous cause unlikely. Manage underlying condition	
• Painless, predominantly unilateral	• Consider non-venous causes[4] • Consider post-thrombotic syndrome (see below) • Conservative management[1]	Refer to Public or Private sector
• If severe and failed conservative management	• Refer to surgeon	Refer to Public or Private sector
Painful, predominantly unilateral	Duplex ultrasound to exclude DVT Consider thrombophlebitis (see below)	
ACHE / HEAVINESS		
Mild / moderate / severe symptoms	Conservative management [1]	
Mild / moderate symptoms and failed conservative management	Compression sclerotherapy [2] (optional) Refer to surgeon (optional)	Refer to Private sector
Severe symptoms (preventing activities of daily living) and failed conservative management	Refer to surgeon	Refer to Public or Private sector
SUPERFICIAL THROMBOPHLEBITIS		
Pain and local swelling	Symptomatic management – elevation and rest	Prescribe non-steroidal anti-inflammatory agents
Single or mild/moderate episode	Refer to surgeon (optional)	Refer to Private sector
Extensive and recurrent episodes	Refer to surgeon	Refer to Public or Private sector
VENOTENSIVE SKIN SIGNS [5]		
Without stasis ulceration	Initiate conservative management [1] Exclude significant arterial disease - Check pedal pulses and ABPI >0.8 [7]	
With stasis ulceration **AND** deep veins probably competent (no history of DVT or severe unilateral oedema) [6]	Initiate compression bandaging [8]	Refer to specialist nursing service
	Refer to vascular surgeon	Refer to Public or Private sector
POST-THROMBOTIC SYNDROME		
History: previous DVT or unilateral oedema	Duplex ultrasound examination to confirm diagnosis	
Examination: unilateral oedema, venotensive skin signs	Conservative management of chronic venous insufficiency [1]	

SEE NOTES ON REVERSE >>>

NOTES:

1. See separate guidelines below (Conservative management of varicose veins and chronic venous insufficiency).
2. Suitable for isolated segment varicosities.
3. Differentiate from lymphoedema: Longstanding brawny and non-pitting. Peau d'orange appearance. Crevices in skin.
4. Non-venous causes include 1) oedema secondary to dependency in a paralytic limb; 2) central cause of oedema (e.g. CHF) with unilateral lower limb ischaemia suppressing oedema; 3) early lymphoedema; 4) congenital AV fistula; 5) factitious or "hysterical" oedema.
5. Venotensive skin signs include pigmentation, induration (lipodermatosclerosis), scaliness, eczema and ulceration, typically in the gaiter area.
6. If deep veins valveless/occluded, surgery unlikely to be of benefit.
7. Ankle Brachial Pressure Index.
8. This is a specialist nursing service. Specific training is required.

CONSERVATIVE MANAGEMENT OF VARICOSE VEINS AND CHRONIC VENOUS INSUFFICIENCY

Most patients with varicose veins or chronic venous insufficiency will benefit from conservative measures to control their symptoms and/or heal ulcers. In contrast, surgery is often not appropriate, particularly in the presence of deep venous incompetence, but it is likely to benefit those with purely superficial venous incompetence. Conservative measures fall into three categories:

1) Reassurance,
2) Control of oedema, and
3) External support / compression therapy.

Simple reassurance: Patients presenting with varicose veins may simply be concerned about the prognosis of their venous disease. They may for example be aware of a history of ulceration in elderly relatives. In many patients with cosmetic varicose veins reassurance may be all that is required. In addition regular exercise (walking) and/or use of support hose (class I) when standing for prolonged periods may prevent or retard progression.

Control of Oedema: Oedema can be controlled by elevation of the foot of the bed and high elevation of the limb when resting. Simple elevation is an essential component of the management of stasis ulceration. Active exercise (walking) is encouraged especially if accompanied by graduated elastic compression (see below).

External Support / Compression Therapy: Patients with simple superficial varicose veins often benefit from external support by graduated elastic compression stockings. They are particularly useful for pain/aching or swelling, in frail patients, and as a temporary measure while awaiting surgery. Class I or Class II knee length stockings should generally be sufficient.

External support / compression therapy is fundamental in management of chronic venous insufficiency, but up to 25% of patients are unable to comply for a variety of reasons. Broadly speaking there are two modes of treatment: bandaging or graduated elastic compression.

Bandaging is useful to obtain healing of ulcers. There is no clear evidence as to whether inelastic support or elastic bandaging is better, but whatever is used it must be correctly applied by an experienced individual and monitoring of progress is required.

Graduated elastic compression stockings are useful to maintain healing of ulcers or as prophylaxis against the formation of ulcers. The pressure required at the ankle is uncertain, but moderate compression, up to ***30 mmHg at the ankle (Class II compression)*** is generally recommended in the majority of cases. High compression being reserved for severe cases of chronic venous insufficiency. Advice may need to be varied depending upon particular circumstances. For example, frail elderly patients may lack the strength to use anything more ***than the lightest grades of compression (Class I stockings). Knee length stockings are generally sufficient*** for chronic venous insufficiency that affects the tissues below the knee, but ***full length stockings with a waist band may be needed for thigh swelling in post-thrombotic syndrome.***

Stockings must be accurately fitted and the patients checked for comfort and fit. Ideally they should be re-measured after one month and re-fitted if there has been any significant change. Stockings should be washed frequently to maintain elasticity and replaced every 4 - 6 months.

In all cases arterial insufficiency must be excluded before use of compression stockings. In general the presence of good distal pulses should be ascertained together with an adequate ankle brachial pressure ratio. Compression stockings should be used with caution in diabetics.

PRODUCT INFORMATION:
Compression stockings & information are available from:
Protech Solutions - Thrombexin 0800 377 683
Medic - Lastosheer 0800 50 8070
NZ Medical & Scientific - Elastic Therapies 0508 634 1036
Smith & Nephew - Jobst 0800 807 663

REFERRAL LETTER INFORMATION

- Demographics
- Critical determinants leading to referral

See also:
NZGG - Care of People with Chronic Leg Ulcers - http://www.nzgg.org.nz/guidelines/dsp_guideline_popup.cfm?guidelineCatID=32&guidelineID=8
The Elective Services National Referral Guidelines & Clinical Priority Assessment Criteria and the Varicose Veins Primary Care Management Guidelines can be found at: www.electiveservices.govt.nz

This management guideline has been prepared to provide general guidance with respect to a specific clinical condition. It should be used only as an aid for clinical decision making and in conjunction with other information available. The material has been assembled by a group of primary care practitioners and specialists in the field. Where evidence based information is available, it has been utilised by the group. In the absence of evidence based information, the guideline consists of a consensus view of current, generally accepted clinical practice.

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