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SHORT REPORTS

Support hose and varicose veins

Despite the successful clinical use of support hose for many years the exact amount of compression required to give maximum benefit to patients with varicose veins is still disputed.^{1,2} Physiological studies have shown that the tension and pressure of support hose should be close to the capillary pressure,³⁻⁵ but as the capillary pressure varies with posture and the distance from the heart this is technically difficult to achieve. We investigated the acceptability of a stocking that is claimed by the manufacturer (Sigvaris, Ganzoni, St Gallen, Switzerland) to provide graduated support with a pressure of roughly 40 mm Hg at the level of the ankle.

Patients, methods, and results

Patients were selected sequentially from a surgical waiting list, starting with those added most recently. They were randomised into two groups and given stockings that provided either 30-40 mm Hg or 40-50 mm Hg pressure. For each patient a history was taken and an examination made for the presence of pain, eczema, and ulceration and the extent of varicosities. The patients were fitted with support hose below the knee and asked to wear the stockings for six weeks. They were then reviewed blind, particular attention being paid to tolerance of the stockings and whether symptoms were better, worse, or unchanged.

Altogether 163 patients were asked to take part in the trial. Twenty five did not reply because they had moved from the area, four had had operations elsewhere, and 30 declined to participate. Thus 104 patients entered the trial, of whom 53 were randomised to wear stockings providing 30-40 mm Hg pressure and 51 stockings providing 40-50 mm Hg pressure. The groups were evenly matched for age, symptomatology, and extent of varicose veins. On review nine patients given the 30-40 mm Hg stockings and 13 given the 40-50 mm Hg stockings asked for their names to be removed from the waiting list because their symptoms had improved. In all, 42 patients given the 30-40 mm Hg stockings and 40 given the 40-50 mm Hg stockings claimed symptomatic improvement (table). Their overall feeling of benefit was not due to improvement in any one particular symptom. An attempt to analyse the effect of the two types of stocking on particular symptoms was unsuccessful because the subgroups were too small.

Results in patients asked to take part in trial

	No of patients	Remained on waiting list	Stockings improved symptoms	Came off waiting list
Non-participants	59	30		29
Participants:				
30-40 mm Hg	53	44	42	9
40-50 mm Hg	51	38	40	13
Total	163	112	82	51

Comment

We reduced our waiting list by 51 patients simply by conducting this trial. Of the 104 patients who took part in the trial, 80 claimed that the stockings were comfortable. In the remaining group of patients the main cause of discomfort was not simply that they were too tight. In answer to the proponents of low pressure stockings, most of our patients found the higher pressure stockings tolerable and roughly one quarter found them sufficiently acceptable that they

decided not to undergo surgery. We could have increased the acceptability of the stockings by varying their weight and length (for example, above knee length or tights), but for consistency within the trial we did not offer different styles to the patients.

We accept that the study was biased towards surgery because patients were taken from the waiting list and therefore may have considered stockings to be second best; but we believe that this bias was probably offset by our giving those patients who were not keen on surgery an alternative method of treatment. Despite these reservations we believe that the trial showed that most patients with simple varicose veins tolerate pressures of about 40 mm Hg and that suggestions that lower pressures are more acceptable are too cautious.¹

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Mixing short and intermediate acting insulins in the syringe: effect on postprandial blood glucose concentrations in type I diabetics

Many diabetics take combinations of short and intermediate acting insulin, and they often mix them in the syringe before administration.¹ We have recently shown that mixing short acting and isophane insulins in the syringe does not affect the absorption kinetics of the short acting insulin, whereas its activity is delayed when it is combined with lente insulin.² This study compared the effects of mixtures of short acting with lente and short acting with isophane insulins on postprandial blood glucose and plasma free insulin concentrations in type I diabetics.

Patients, methods, and results

We studied 13 type I diabetics aged 19-64 who did not secrete endogenous insulin. They were treated with twice daily mixtures of short and inter-