## Healing rates following venous surgery for chronic venous leg ulcers in an independent specialist vein unit

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## Abstract

*Objectives*: This is a retrospective study over 12 years reporting the healing rates of leg ulcers at a specialist vein unit. All patients presented with active chronic venous leg ulcers (clinical, aetiological, anatomical and pathological elements [CEAP]: C6) and had previously been advised elsewhere that their ulcers were amenable to conservative measures only.

*Method*: Seventy-two patients (84 limbs) were treated between March 1999 and June 2011. Patients were contacted in August 2011 by questionnaire and telephone. Of 72 patients, two were deceased and two had moved location at follow-up, so were not contactable. Fifty patients replied and 18 did not (response rate 74%), representing a mean follow-up time of 3.1 years.

*Results*: Ulcer healing occurred in 85% (44 of 52 limbs) of which 52% (27) limbs were no longer confined to compression. Clinical improvement was achieved in 98% of limbs.

*Conclusions*: This study shows that a significant proportion of ulcers currently managed conservatively can be healed by surgical intervention.

Keywords: venous leg ulcer; endovenous technique

## Introduction

Venous leg ulcers are a severe manifestation of chronic venous insufficiency. Leg ulceration is estimated to affect 1% of the adult population, with 0.3% of people having an open ulcer at one time.<sup>1-6</sup> Traditionally, ulcers have been treated almost exclusively in the community, using conservative treatments such as compression bandaging, which represent the mainstay of treatment in most practices. There has been a growing diversion of treatment away from specialist care in hospitals.<sup>5,7</sup>

In 1992, Darke and Penfold<sup>8</sup> demonstrated that 40% of patients with leg ulcers were associated

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with superficial venous incompetence and/or ankle perforating veins, with no reflux in the deep system. This study showed that 90% of these patients healed with saphenous ligation alone.<sup>8,9</sup> More recent work has shown that up to 60% of ulcers are associated with superficial venous incompetence alone, and logically are potentially curable with superficial venous surgery.<sup>10–12</sup>

A recent Cochrane review found that ulcers treated with compression therapy healed faster than those without.<sup>13</sup> However, there is evidence to suggest that recurrence rates and ulcer-free time are more favourable following superficial vein surgery when compared with compression bandaging alone. The Effect of Surgery and Compression on Healing and Recurrence (ESCHAR) study of 500 patients compared the long-term results of compression therapy alone versus compression plus surgery. Although the results did not seem to suggest that superficial venous surgery improved ulcer healing, it did reduce the number of ulcer recurrences at four years and the amount of ulcer free time.<sup>2</sup> In 1999, a study showed that the