

# Fully equipped to manage wounds

As Doppler assessment is such a vital tool in the care of leg ulcers, nurse training is essential, write **Karen Greally** and **Kerry Wardick**



AS MORE and more people are enjoying increasing longevity, this in turn may lead to a growing incidence of chronic health-care issues such as leg ulceration.

In the area of general wound care the aim of the nurse-led clinic is to ensure that patients get more efficient access to healthcare and to make better use of nurses' skills.

Nurses' knowledge of the holistic approach in leg ulcer assessment is essential for effective and safe practice. Holistic assessment involves physical, psychological, social and investigative needs, ie. Doppler assessment of the patient.

Forward planning in on-going professional development and the needs of nurses in Doppler training should be supported by their organisation.

It is clear that nurse-led services are wide ranging, flexible and patient centred. With the proper educational and structural supports, nurse-led services, fronted by the clinical nurse specialist, have great potential to expand.

Furthermore, this support brings about empowerment and ownership for front-line nurses, hence improving morale, sustainability and reducing hospital waiting time for patients.

## Wound care

Around 1-2% of the population will develop a leg ulcer at some point in their lives.<sup>1</sup> The recurrence of leg ulceration is significant and ulcers can take a long time

to heal. Although most ulcers fall into the venous category (81%), a significant number are arterial (10%) or mixed venous/ arterial (7%), with the number of arterial ulcers likely to increase as the general population ages.<sup>2</sup>

## Treatment

The mainstay of conservative treatment for uncomplicated venous ulcers is compression bandaging. The recommended treatment pathway developed by the International Leg Ulcer Advisory Board highlights the association between accurate assessment, detailed diagnosis and effective compression therapy in the management of venous ulcers.<sup>3</sup>

The pathway also identifies the importance of the identification of arterial disease and the role of the multidisciplinary team in ensuring safe practice. Therefore, it is not sufficient merely to palpate foot pulses as this is not a good indication of adequate limb perfusion.<sup>4</sup>

Doppler ultrasound is used to assist the diagnosis of the aetiology of an ulcer, by helping to determine the presence or absence of compromised arterial flow, in the lower limb.<sup>5</sup> This adds to the clinical findings when diagnosing the ulcer type.

## Guidelines

National guidelines recommend that Doppler assessment is a compulsory part of leg ulcer care,<sup>6</sup> highlighting the need for a holistic leg ulcer assessment for each client.

Holistic care to clients with leg ulceration, should include calculation of ankle brachial pressure index (ABPI). The literature reveals that Doppler ultrasound is used internationally to calculate the ABPI in clients with vascular problems – namely in Australia<sup>7</sup> and Europe<sup>8</sup>, including the UK,<sup>9</sup> and Ireland.<sup>10</sup>

## Accurate diagnosis

Research into wound healing is advancing and influencing wound care but in order to utilise these findings effectively an accurate assessment of the underlying condition is necessary.<sup>2</sup>

Doppler is an invaluable, non-invasive tool and together with a full holistic assessment can indicate treatment options. This is especially useful in decision making in the non-venous leg ulcer.

In particular, and most importantly, care needs to be taken in the clinical setting with the methodology, training, interpretation and recording of the Doppler technique. Accurate training in full leg ulcer assessment including Doppler needs to be available to all nurses involved in leg ulcer management.

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*References on request from nursing@medmedia.ie (Quote Greally K, Wardick K, WIN 2009; 17(5): 28)*