THE NURSE-PATIENT RELATIONSHIP AND THE SUCCESSFUL USE OF COMPRESSION THERAPY

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The management of leg ulcers within the community forms a large part of the caseload of district nurses and practice nurses. It is estimated that 1.5–3 people in every 1,000 may have ulceration at any one time (NHS Centre for Reviews and Dissemination, 1997). They can cause considerable distress and reduce quality of life due to symptoms such as pain and malodour.

Figure 1. The patient's leg during initial assessment by the tissue viability service.

The majority (70%) of ulcers are found to be venous and the key to the successful healing of these ulcers is to reverse venous hypertension using graduated compression therapy (EWMA, 2003). Research has shown that it is possible to heal up to 83% of venous ulcers with compression bandaging and there is increasing evidence that patients' quality of life is improved by doing this (Moffatt, 2000). However, some patients find compression difficult to tolerate and concordance can be an issue. It is vitally important that clinicians spend time explaining the importance of the bandaging and building a good rapport so that the patient feels willing to work with them in considering treatment options and decisions. A compromise by introducing a reduced compression regimen is very worthwhile and by giving the patient a sense of ownership, can often lead to an increase in tolerance.

PATIENT DETAILS AND HISTORY

An eighty-seven-year-old woman who had type 2 diabetes controlled by diet was referred to the tissue viability service with a painful ulcerated area on the lower-right gaitor area of her leg which had been present for one year. The ulcer had been gradually deteriorating and was almost circumferential. She had been unable to tolerate previous attempts at treating the ulcer with compression therapy. Her leg was leaking large amounts of exudate that the district nurses had tried to manage with a hydrofibre dressing and dressing pads. Despite attending to the patient on alternate days to redress her legs, the pads would become soaked with exudate and her footwear would be wet.

ASSESSMENT AND ESTABLISHMENT OF TREATMENT OBJECTIVES

The ulcer was assessed using the trust's Leg Ulcer Care Pathway Assessment Tool and Leg Ulcer Care Guidelines which are based on the RCN's clinical practice guidelines (1998). It is essential that a comprehensive assessment that includes medical history and signs and symptoms of arterial disease is performed as well as a doppler assessment. This patient had diabetes which elevates the

risk factor of arterial disease and may affect the circulation in the large vessels or the micro-vessels, so it is important that this was considered. The medical history also encompasses any arterial signs and symptoms such as claudication (cramping in the legs) and ischaemic rest pain (pain that continues when reclining), neither of which the patient had.

Careful examination of the limbs is very important to identify signs and symptoms of arterial and venous disease. The patient had no arterial signs present on her limbs but did display signs of venous hypertension such as oedema and brown staining. Her Doppler assessment showed good biphasic signals, which indicated healthy pulsatile arteries. Her ankle brachial pressure index was 0.89 which, together with the rest of her assessment, indicated that she had no significant arterial disease.

The overall diagnosis from her assessment was that her ulceration was of venous origin and that compression therapy would be appropriate to reverse the venous hypertension and promote healing. An accurate diagnosis is paramount and compression must never be applied without both an assessment and a Doppler ultrasound having been performed.

It was important to spend time explaining to the patient why it was necessary to use compression in order to stop the exudate and heal her leg ulcer, as she had previously had negative experiences of this type of therapy. It was emphasised that without compression, her ulcers were unlikely to heal and the success of compression therapy in similar cases was relayed. The patient was given time to explain why she had found the compression difficult to tolerate so that her compression regimen could be adjusted accordingly. Reassurance was needed that the bandages applied would not necessarily have to be really tight to be effective. She was told that the aim was to find a regimen that she would find comfortable. She also needed reassurance that if she did find them uncomfortable, different bandages could be tried and that the tissue viability team would work in partnership with her to ensure she was happy with the treatment she received.

On a scale of 1–5 she described her pain as being 5 — severe on an intermittent basis. She was taking a paracetamol and codeine mixed analgesia, but on a very 'ad hoc' basis. The importance of taking analgesia regularly to gain the maximum effect was explained, and the patient agreed to do this.

The condition of the ulcer bed was assessed using the Applied Wound Management tool (Gray et al, 2005). Using the wound healing continuum, the wound was found to contain 80% yellow, 10% black and 10% red tissue. This indicated that the wound contained sloughy tissue that needed treating before healing could occur. Using the wound exudate continuum, the level of exudate was scored as 8, confirming heavy exudate levels that were causing maceration to the surrounding skin. There were no clinical signs of infection.

It was important to trace and measure the ulcer in order to monitor the progress of the chosen treatment. However, this was problematic due to the fact that the ulcer was almost circumferential. This, together with the curvature of the leg makes accurate measurement difficult, but it is still imperative to obtain some measurements in order to be able to evaluate treatment effectively. A measurement was taken at certain points giving widths and lengths and a photograph was taken to give a visual record of progress (*Figure 1*). Permission was necessary in order to photograph the ulcers and the patient signed a consent form in line with trust policy.

TREATMENT

It was important to care for and protect the macerated skin surrounding the wound. Cleansing the limb in a bucket of warm tap water with an emollient can provide comfort to the patient and remove exudate from the surrounding skin. This is essential skin care as the exudate can cause further tissue damage to surrounding skin and extend the ulcer. The patient's leg was bathed for 5–10 minutes and then a protective moisturiser was applied to prevent further maceration. The nurses had been using a hydrofibre dressing which was appropriate to manage the exudate and would aid autolysis of the slough as it gelled over the ulcer bed, so this was continued.

It was decided that elastic multilayer compression bandages would be applied and left in place for up to a week, with the frequency of change determined by the strike-through of exudate. Patients often find the layering of bandages comfortable and

Figure 2. The patient's leg after four weeks of compression treatment.

Figure 3. The ulcer is almost completely healed after four weeks of compression.

adjustments can be made to the level of compression easily.

The decision regarding the amount of compression to start with can be difficult. Although full compression of 40mmHg at the ankle is optimum to quickly reduce the symptoms and speed healing, it is necessary to consider the patient's ability to tolerate the bandages and it is far better to use a reduced regimen that they find acceptable. The patient was commenced on a reduced compression regimen for this reason. It was unlikely that it would be possible to leave them intact for a whole week initially, due to the level of exudate and this was explained to the patient and the community nurses.

Over the course of her treatment, a good rapport was developed with the patient and she began to trust the tissue viability nurse's decisions. This is essential in order to overcome difficulties and gain the best possible outcome. Continual reassurance was given that any treatment difficulties would be addressed and that the choice of bandages could easily be reviewed.

OUTCOMES

A few days later, the district nurses reported that the patient was tolerating the bandages well. Ulcers of long duration that are circumferential and have a high level of exudate can take several months to heal.

However, after just four weeks, the patient's leg ulcer had responded exceptionally well to the compression and was almost completely healed, with only one small superficial area left (*Figures 2 and 3*). This is a wonderful example of how effective compression is in treating venous leg ulceration.

Bandages can be difficult to tolerate, so communicating with the patient is essential so that they realise both the importance of the treatment and that if intolerable, a compromise can be found in order to achieve the desired outcome of wound healing.

CONCLUSION

The patient was delighted with the results of the treatment. The ulcer completely healed and she was measured for compression hosiery in order to prevent recurrence. Difficulty tolerating compression bandaging is a common problem and often prevents the use of a therapy that is essential to heal venous ulceration. A nurse-patient relationship based on trust and compromise is absolutely vital in achieving success for these challenging ulcers. **WE**

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