

FELT THERAPY FOR LEPROSY PATIENTS WITH AN ULCER IN A PRESSURE AREA

Editor,

As a podiatrist in The Netherlands I have used felt cutouts to treat plantar ulcers in diabetics with anaesthetic feet. Whilst visiting ALERT I used this experience to experiment with self-adhesive felt cutouts for treating ulcers in leprosy patients. The purpose was to see if there was a difference in the healing of ulcers, between patients treated with felt therapy and those treated with conventional dressings.

Twenty patients of ALERT were taken into the study, and divided into two groups of 10 matching ulcers.

Group A: treated by using felt therapy of 7 mm thickness;

Group B: was the control group and received standard treatment.

All ulcers were trimmed and dressed. All patients had canvas shoes. The patients receiving felt therapy soaked the parts of the foot without felt. The control group soaked the whole foot. All patients were followed up every week, to measure the ulcer, and for trimming and dressing. Ulcer size was measured at each visit and the area of ulceration was calculated according to the following formula: $0.785 \times \text{length} \times \text{width}$.

Temporary felt therapy

An ulcer heals optimally in a resting position after the ulcer is properly trimmed. Because some patients cannot rest, an alternative approach could be to give them felt therapy. Felt therapy is a temporary therapy to decrease the stress on the ulcer. Felt therapy is most useful for ulcers which have continuous pressure, therefore preventing healing.

Felt is pressed wool material with a sticky back so that it can be glued onto the skin. It stays in place when a patient walks. I used 7 mm thick felt. In general the felt has a useful life of no more than 10–14 days. Most ulcers were localized on the plantar aspect of the foot, all were in different places but had the same cause—pressure because of foot deformities. Each felt pad was made for the individual foot, the shape of every pad was different. Every pad had the same purpose—to relieve pressure on the ulcer.

The following steps should be followed when using felt therapy after you have trimmed and cleaned the ulcer. In my example I draw an ulcer under the 2nd metatarsal head (Figure 1).

- 1 Measure the ulcer and decide what size of felt is required.
- 2 Cut an appropriate piece of felt (Figure 1(a)).
- 3 Cut an opening, the size of the ulcer (Figure 1(b)).
- 4 Cut the rest in the shape you need.
- 5 Make the borders of the felt smooth, the opening around the ulcer is left straight (Figure 1(c)).
- 6 Put a sticky plaster over the felt (the felt will remain longer with a sticky plaster), with the same opening in it as in the felt (Figure 1(c)).
- 7 Dress the ulcer with a piece of gauze (Figure 1(d)).

Results

Over 4 weeks, I followed 10 ulcer patients treated with felt and 7 patients managed in the traditional way. After 4 weeks there was a big improvement with the felt, all improved and some dramatically. For

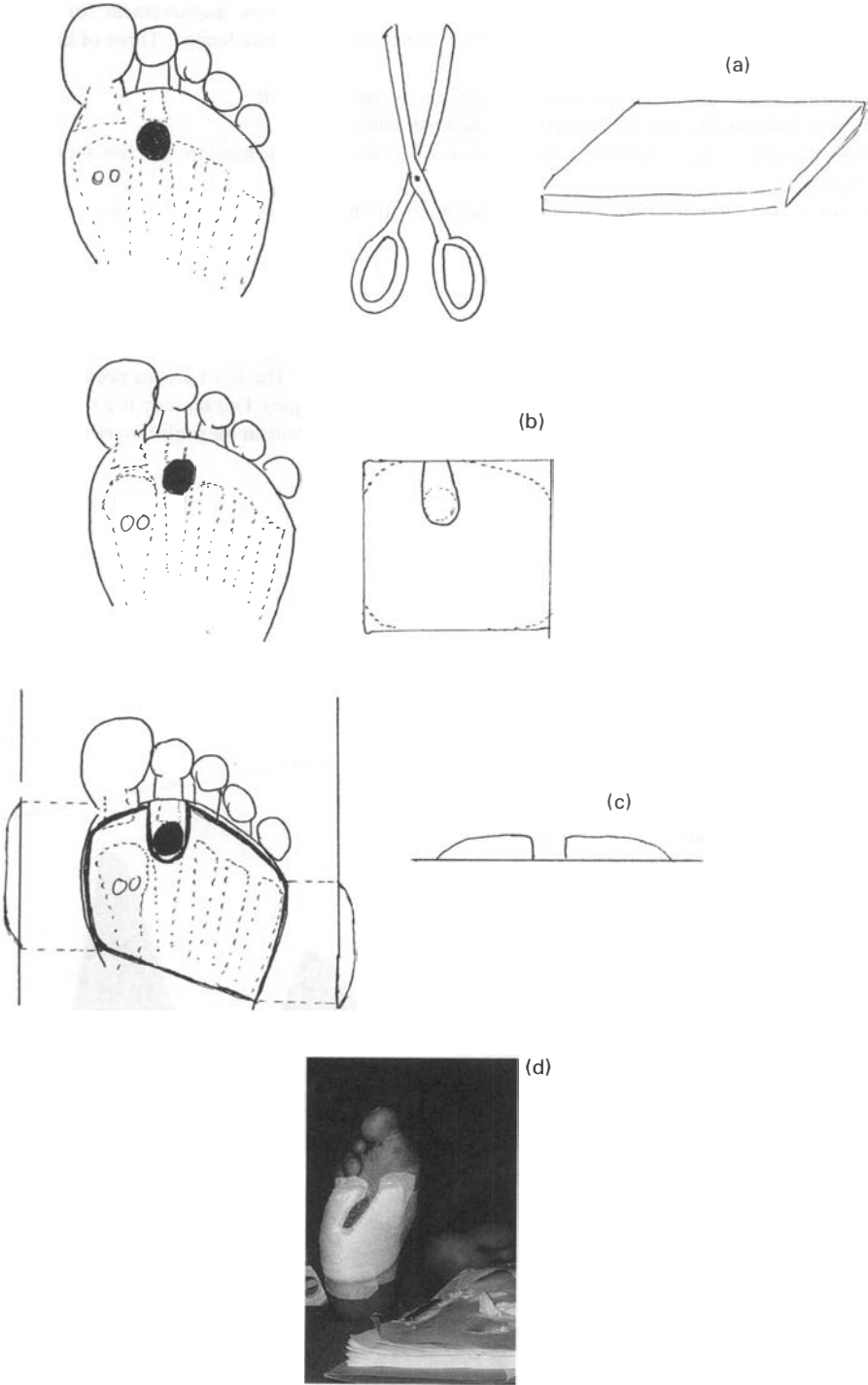


Figure 1.

5 out of 10 patients, their ulcers completely healed. There was some improvement for the patients without felt therapy, but none of the ulcers of the control group patients healed. Three of these patients were not seen at the final follow up.

*Figure 2 shows the ulceration in the 10 patients treated with felt.

*Figure 3 shows the area of ulceration in patients without felt.

Note: Patients 1, 6, 7 were not examined at 4 weeks, so these patients are not included in the results.

Figure 4 shows the geometric mean of ulcer areas in the two groups over 4 weeks.

Discussion

Ulcer healing consists of proper trimming, shows which fit properly, the condition of the patient and rest. If it is difficult for patients to rest, felt therapy can be useful. The felt relieves pressure so that the ulcer is unstressed even if the patient walks a little (1 km for example). Felt therapy is a therapy which is easy and quick to make. A carefully-controlled trial is needed to confirm the preliminary results reported here.

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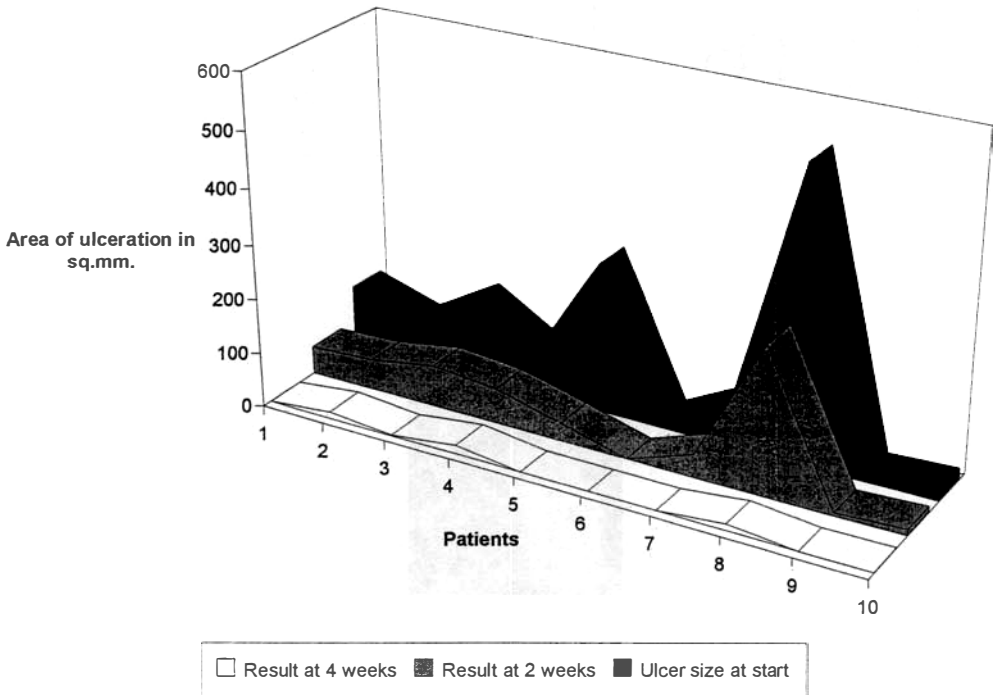


Figure 2.

Change in ulcer size over 4 weeks in those patients treated without felt

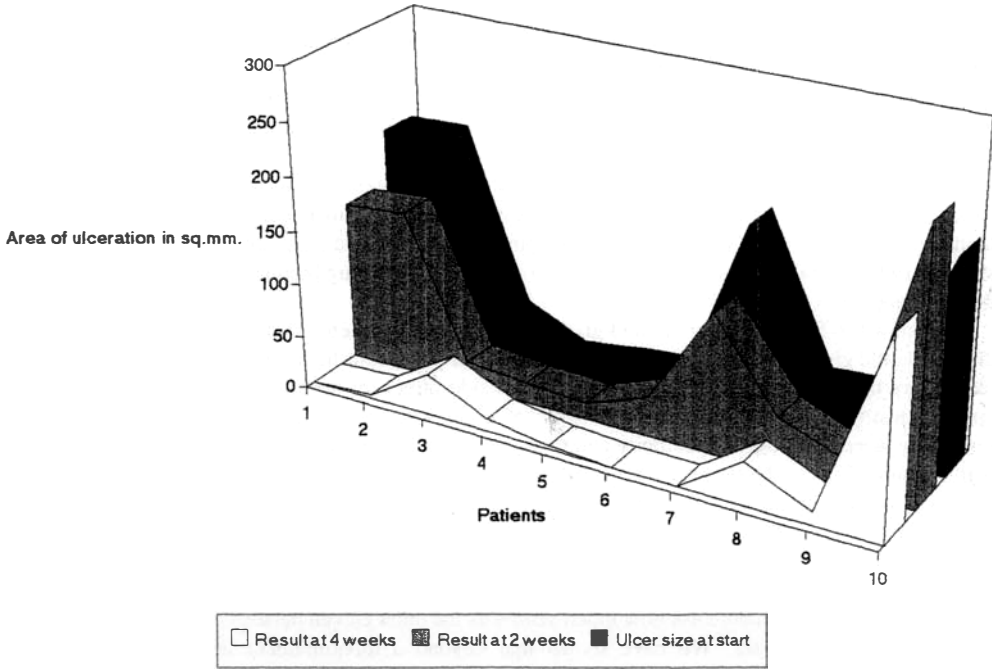


Figure 3.

Geometric means of ulcer areas in two groups over 4 weeks

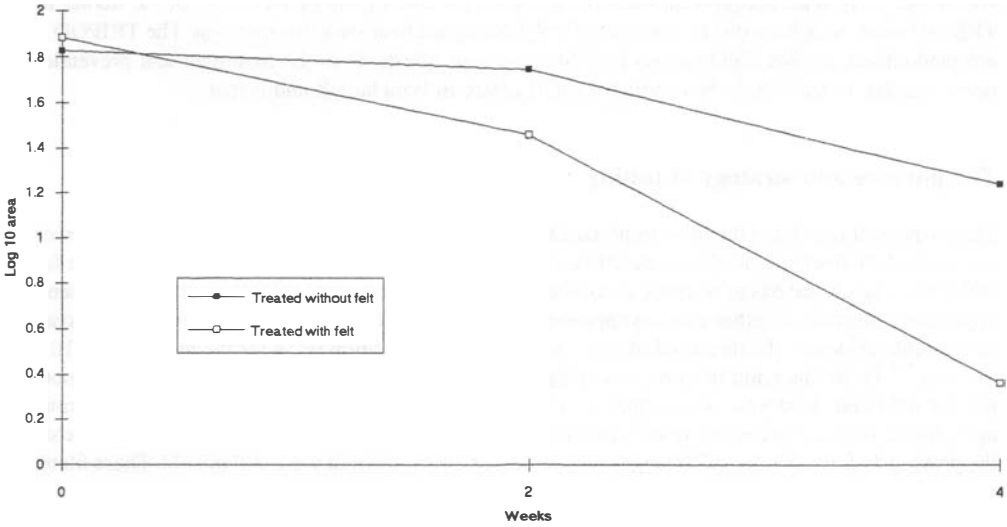


Figure 4.