EXTRA DEPTH SHOES MADE ON SPECIAL LAST

Editor,

A Letter to the Editor in *Leprosy Review*[1] highlighted the use of deepened canvas footwear. This aroused our interest to place an order for a similar type of shoes with one of the shoe manufacturing company in China. The first consignment of 100 pairs of deep canvas boots received was used amongst patients from September 1991. Proving to be protective and comfortable, they earned a good reputation. Due to difficulties in the procurement of deepened canvas shoes, a special wooden last was designed so that similar types of shoes could be made. Since early 1992, we have been regularly using shoes made on the specially designed last, for patients with badly deformed feet who need special footwear.

Indications for use

1. A severely distorted foot, with loss of bone, padding, skin or balance.
2. Disparate feet which cannot be fitted with sandals or other kind of ready-made shoe.
3. Unmatched foot length—to give matching shoes to avoid stigma.
4. Other conditions: this type of shoe is also used to improve or correct walking pattern (gait) by using different types of orthosis for realignment of the foot and leg.

Advantages

The use of this new technique saves plaster of Paris (POP) work, and a cost equivalent to NRs 300/- (5 US dollars) per pair, and consumes 50% less time. Different foot orthoses can be incorporated, removed, replaced or adjusted at any time. The shoe has increased acceptability due to its attractive commercial design. Matching shoes for badly deformed feet are a help to avoid stigma. The wooden shoe last can be used again and again, for ages. Ready-made shoes can be made available for issue in the hospital or field. Leather shoes are also strong, firm, and appropriate for hilly or cold countries like Nepal and Bhutan.

Disadvantages

The shoes are more expensive than canvas ones. Frequent care of footwear is required. Deterioration of leather may cause ulceration of skin. Such shoes are not available elsewhere, so the patient incurs expense travelling to the hospital for replacements. If the stock of ready made footwear runs out, then a replacement is not possible immediately. This type of shoe is not suitable for field work during the monsoon.

Production

The wooden shoe last is made by a local carpenter by adding 10 mm thickness underneath (Figure 1). Below the line, 10 mm extra space has been added to give the room for thick microcellular rubber (shown underneath) inside.

The six lasts used are numbers 3–8 (i.e. normal Nepali shoes sizes). The technique of making the shoe is similar to making an ordinary shoe, except for leaving 1·5 cm on the upper leather side to meet the extra depth of the wooden last. When the shoe is ready, it looks perfectly normal and gives enough

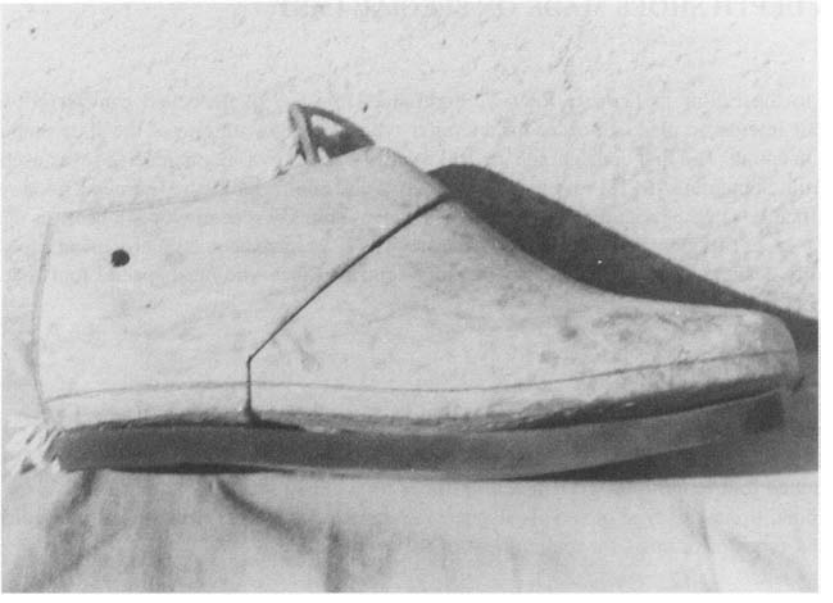

Figure 1. Extra space is provided for microcellular rubber interior.

room inside (Figures 2 and 3) to accommodate the desired foot orthosis. If additional build-up is desired to reduce pressure on certain areas, the last can be temporarily built up (with a piece of cork or rubber or leather, which is later removed when unwanted), without jeopardizing the original shape of the last.

Over 200 pairs of shoes have been produced and used for patients since 1992, as an alternative to the conventional moulded boot made on a POP cast. This technique proved to provide sufficient space to

Figure 2. Appearance of finished shoe.

Figure 3. Provision of different foot orthoses.

accommodate various foot orthoses into the shoe to create a comfortable environment for the foot. Perfectly normal-looking shapes and attractive designs of the shoes have increased their acceptability amongst users, and encouraged them to build up a positive attitude which helps to give mental as well as physical protection to the patient. Relatively speaking, the shoe is cheap to produce.

Anandaban Leprosy Hospital, S. P. RUCHAL,
The Leprosy Mission, C. R. BUTLIN,
Post Box 151, N. KHADKA,
Kathmandu, Nepal KUMAR MIJAR

References and further reading

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