Simple and effective method of heat therapy in lymphoedema

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Received: 12 October 2009 / Accepted: 26 October 2009
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Abstract Heat therapy is a well known conservative management for lymphoedema. We are describing here a heat therapy apparatus which is easy to make, cheap, transportable, easily reproducible and maintenance free and found to be very effective.

Keywords Heat therapy · Lymphoedema

Introduction

Lymphoedema is a common clinical problem in our country especially in coastal areas. Apart from surgical treatment, many conservative therapies have been described like compression therapy, massage, interferential therapy, micronised flavonoid tablet and heat therapy [1].

Material and method

We are using a very simple apparatus since last 3 years, developed by Dr Tambwekar a senior plastic surgeon in Mumbai. This therapy is also known as Chinese heat therapy as it was widely used in China and brought to India by Dr Tambwekar [2].

Before the therapy the measurement of circumference at various prefixed point is taken on both sides and then onward weekly until the end of the therapy. The affected limb of the patient is inserted for maximum of 30 minutes, in a special chamber, that provides radiant heat through 16 [100 watt electric] bulbs. The temperature can be controlled by regulators, to between 45 and 50°C (Fig. 1).

Every patient of ours (6 patients up till now, all post-filarial) makes the apparatus as per the dimensions given by us and uses at home for regular and permanent use and along with leg elevation and micronised flavonoid tablets.

Technique

Dimensions of the apparatus are as follows:

- Shape: It is a semicircular chamber, open at both ends (can be covered with blankets)
- Weight: Around 20 kg
- Height: 22 inches

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Fig. 1 Apparatus switched on

Fig. 2 Apparatus folded

- Diameter: 44 inches
- Thickness: 2 inches
- Length: 35 inches
- Material: Plywood with 16 (100 watt) bulbs with regulators.

It is foldable in the middle with three hinges (Fig. 2). Even wheels can be added for the easy transport.

Temperature chart (when all the bulbs switched on)

Duration	Temperature
5 minutes	42°C
10 minutes	45°C
15 minutes	47°C
20 minutes	48°C
25 minutes	50°C
30 minutes	52°C

Discussion

We have found very good results in these patients of severe lymphoedema of the leg (grade 3 and grade 4). We achieved reduction of up to 30% of the original volume of the leg. This result was achieved after 3 months of treatment in these patients. This apparatus is easy to make, cheap (cost around 5,000 INR) transportable, easily reproducible and maintenance free.

We also suggest that this heat therapy can be used for other limb oedemas like postsurgical, venous and other postinflammatory oedemas.

References

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