SHORT REPORT

A Thirty-month Follow-up of the Use of a New Technique for Lymph Drainage in Six Patients

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Lymphatic drainage constitutes one of the most important mainstays in the treatment of lymphoedema and it is indicated for almost all types. The objective of this study was to evaluate the results of a new technique of lymph drainage over a thirty-month period.

Six patients with lymphoedema of the lower limbs were evaluated for a period of thirty months using a new technique of lymphatic drainage. Five of the patients were female and one male with ages ranging from 18 to 64 years. The new technique of lymphatic drainage consists of the use of rollers which are passed over the skin following the paths of the lymphatic vessels and obeying the basic principles of lymph drainage.

In all patients, a reduction in circumference of the affected limbs was seen during treatment.

Key Words: Lymphatic drainage; Compression.

Introduction

Lymphatic drainage constitutes one of the most important mainstays in the treatment of lymphoedema and it is indicated for almost all types.¹ A technique of manual lymphatic drainage was first described by Vodder in 1936 and enjoyed widespread use.² This technique was further investigated by lymphologists such as Földi, Casley-Smith, Leduc, Nieto, Mayall and others.³–⁶ The main principles underlying the treatment have not altered. Drainage techniques using circular movements and those of compression (pumping) continue to be used.

In 1997 a new approach to lymph drainage was conceived by Godoy and Godoy which consists of the utilization of “rollers” which glide over the skin along the paths of the lymph vessels whilst obeying the basic principles of drainage, improving drainage in swollen limbs.⁷ The simplicity of the technique and the possibility of auto-drainage contributes greatly to improvements in the lives of lymphoedema sufferers, especially the less well-off. This technique recommends modifications in the form of the movements, suggesting an elimination of the circular movements. This is justified due to the characteristics of the lymphatic system which is made up of numerous channels which drain liquid. However the direction of drainage is of extreme importance. Circular movements can go against the direction of the flow in lymph vessels and may therefore not produce much improvement. Valves in the system which help to control the direction of the lymphatic flow can be damaged when the pressure is opposing the flow. The concept of lymphatic cavities made by Kubik in 1985 and knowledge of the lymphatic currents are the required principles to administer the technique.⁸ This is a new technique which still requires to be evaluated over a longer period of time.

The objective of this study was to evaluate the results of the new technique of lymphatic drainage over a thirty-month period.

Methods

Six patients were observed over a thirty-month period of being submitted to the new technique of lymphatic drainage. Five of them were female with ages of
18, 25, 34, 56 and 64 years and the other was a 26-year-old male.

All the patients were diagnosed clinically and using a lympho-scintigram. Two patients suffered from grade I lymphoedema which regressed during repose, and four patients had grade II lymphoedema without improvement with rest.

All the patients were initially submitted to four or five sessions per week until a reasonable reduction of the lymphoedema was achieved which was then maintained with one or two sessions per week. After the reduction of the diameter of the circumferences of the limbs, a non-elastic dressing started to be used.

Results

A reduction of the diameter of the circumferences of the affected limbs was seen with all of the study group as shown in Table 1.

Two of the patients, those with grade I lymphoedema, presented a total reduction of the lymphoedema when the limb was compared with the contralateral limb.

With the patients with grade II lymphoedema, a reduction was evident, although not a complete regression.

Discussion

All the patients had a sustained reduction in the circumference of the limbs during the treatment period. The necessity for maintaining treatment is due to the permanency of this disease. Treatment, by itself, does not solve the basic problem but can produce significant clinical improvement.

Performing isolated lymphatic drainage during this period had as its aim, the long-term evaluation of this new method. However, as we demonstrated in another study this associated with an inelastic sleeve, developed by the author, gave better results compared to lymphatic drainage alone. Antibiotic therapy with penicillin was used with all of the patients as each had a history of several episodes of erysipelas. This course was taken to prevent the occurrence of clinical or sub-clinical infection which could occur during this period.

Continuation of treatment on the part of the patients was achieved by their awareness of the disease and the importance of the treatment principally to avoid progression to elephantiasis. It is important that the relatives have a good knowledge of the disease and that they collaborate in the treatment. The evolution of a multi-disciplinary team is fundamental for the improvement of this awareness both at the level of the patients and relatives. The lymphoedema patient support group permits an exchange of experiences between the patients and their families, thereby facilitating life with the difficulties due to this disease.

The two patients with grade I lymphoedema improved more quickly than those with grade II. With the patients with grade II lymphoedema resolution was slower, requiring a greater number of lymphatic drainage sessions and for a longer period of time.

The number of sessions per week is fundamental in terms of the reduction of the circumference of the limb. We observed that when we used the same total number of sessions but with only one per week, a reduction did not occur but maintenance was achieved.

Another observation seen was that even with the same degree of lymphoedema, it is possible to have different results depending on the degree of fibrosis and oedema present in the limb. In the cases where there is more oedema the results are better and achieved more rapidly.

Conclusion

The new technique of lymphatic drainage permitted a reduction in the measurements of the circumference of the limb in patients suffering from lymphoedema. Isolated lymphatic drainage can be useful to maintain the diameter of the limbs but this is related to the number of sessions per week and the grade of lymphoedema.
References
