

Management of lymphoedema using laser therapy: a year of results

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Introduction/ Background

Laser has been used in the management of lymphoedema and other problems for many years. Reported therapeutic effects are softening of tissues, reducing pain and heaviness and improving the immune system (Carati et al 2003, Tadakuma 1993). Thelander and Piller (2000) report improvements in scar tissue and softening as main changes in their initial trials. The UK has been slow to adopt this technology but since gaining its CE registration in 2008 WLS has commenced this treatment. Results will continue to be collated until February 2009 with the full years results will be analysed.

Aim of the Study

The primary aim of this study was to determine immediate, post and general feedback for laser treatment to enable future treatment planning.

As this is a new treatment within WLS, this initial study was to determine all effects of laser through physical examination, patient evaluation and anecdotal evidence.

Methods

Patients were selected with lymphoedema secondary to cancer or its treatment whose disease was non active. Selection was based on oedema failing to respond to routine treatment or stubborn thickening of the tissues. Tissue thickening was measured by palpation of the sub cutaneous tissues on a 3 point scale (mild/moderate/severe). At present 20 patients have received laser treatment with or without MLD. Patients have been treated 3 times for the first 2 weeks, reducing to weekly for 4 weeks, fortnightly for 2 sessions, monthly for 2 sessions and ongoing as necessary. A RianCorp class 1 laser was used on the 'hi' frequency setting for 40-60 seconds at each position. Unmarked positions were treated 2 cm apart for between 7-25 minutes, all within the treatment area. Scar areas were treated first followed proximally to distal on the oedematous area. If combining laser with MLD, laser was used initially followed by MLD to clear the collecting vessels. Ethical approval was not required as this is was an evaluation of laser treatment and use of laser within standardized practice.

Results

At 6 months 12 patients had been treated with 100% of patients reporting significant improvements to softening of tissues, mobility and appearance of radiotherapy and scar tissue. There were no significant reported side effects of treatment. It was noted that some of the first patients developed an increase of thickening with the reducing treatments. Extra sessions were introduced which seems to have resolved this issue.

Conclusion

The results of the 6 month study have proved both successful and interesting ensuring analysis at 12 months. However, some patients will require monthly ongoing treatment. Long term resource implications need to be considered but if the effects of laser can be maintained long term with top up sessions of less than 30 minutes, patient's lives can be enhanced and oedema improved.

References;

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