

ELABS Lay Summary

Background

Hypertrophic burn scarring (HBS) is thought of as “the greatest unmet challenge after burn injury”. This Early Laser for Burn Scars (ELABS) trial was done to see if early laser treatment of HBS improves the look and feel of the scar. It also aimed to find out if this had an effect on the quality of life (QoL) for the patient.

Methods

A large trial to study this early laser treatment was carried out at seven NHS Hospitals across England (Salisbury, Bristol, Chelmsford, Newcastle, St Helen's, Chelsea & Westminster, Birmingham). Patients were asked to join the trial if their burn injury had healed within the last three months and they showed signs of developing this type of scar. Normally laser treatment is not offered until at least 6 months and often a year after the wound has healed.

A total of 153 (77 Male, 76 Female) patients were recruited between November 2021, and June 2023. Half of the patients received three treatments with a pulsed dye laser in addition to normal care, whereas the other half had normal care only. 138 (69 in each group) completed the six-month trial. The scar was measured using a scale that was rated by the patient and their quality of life was also assessed at the beginning and end of the trial.

Findings

Early laser treatment showed an improvement in patient-rated scar quality) at six months. There were no differences seen for Quality-of-Life. Early laser was not seen to be cost-effective. There were no safety issues related to the treatment.

Summary

Early laser treatment of HBS is safe and shows improvement for the scar but not Quality-of-Life at six months. However scars like these often take a lot longer to heal fully and therefore longer-term follow-up of upwards of two to three years is required to fully understand the benefit and cost of early laser treatment, especially to see if it is a cost saving for the NHS.

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