

Abstract title:

An explorative trial of pressure chamber treatment in early breast cancer-related lymphedema

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This study explored the effect of Hyperbaric Oxygen Therapy (HBOT) in women with early stage BRLE.

Patients treated for breast cancer with axillary dissection and radiotherapy who experienced BCRL one year after surgery were invited. Participants received 40 sessions of 90-minute pressure exposures at 2,4 Bar while breathing 100% oxygen. Symptoms and function were assessed by validated scales, BRLE by Dual Energy X-Ray Scans and lymphatic clearance by lymphoscintigraphy with a 6-month follow-up.

19 participants were enrolled, all completing 6-month follow-up. We found overall clinically relevant improvements in patient-reported outcomes for symptoms and function. There was no change in arm mass ($\beta=2.3\%$, 95% confidence interval (CI) -0.23; 4.82) or lymphatic clearance ($\beta=8\%$, CI -13; 30).

Participants experienced a lower symptom-burden after HBOT but not an objectively measured reduction of limb volume or improvement of lymphatic clearance.