A systematic review of the long-term efficacy of lowintensity shockwave therapy for vasculogenic erectile dysfunction.

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To look at the evidence base for LISWT as a treatment modality for vasculogenic erectile dysfunction, focusing on the long-term outcomes at over 6 months following treatment.

A systematic literature search was conducted utilising MEDLINE and Scopus databases from 2010 to September 2018 by two independent reviewers.

Outcome measures extracted for long-term efficacy included International Index of Erectile Function scores and Erection Hardness Scores. Subgroup analysis for LISWT effectiveness included age, PDE5i responsiveness, presence of vascular co-morbidities and smoking status.

The search identified eleven studies, representing a total of 799 patients. Nine studies found a significant improvement in erectile function after LISWT at 6-month follow-up (median IIEF-EF improvement in 5.3 at 6 months). However, of five studies assessing erectile function at 12 months; two identified a plateauing of results, with three a deterioration (IIEF-EF score changes of - 2 to 0.1 from 6 months). Erectile function did, however, remain above baseline results in all of these studies. Subgroup analysis revealed increasing age to reduce the response to LISWT treatment. Whilst ED severity, PDE5i responsiveness and co-morbidities potentially influence effectiveness, results are still inconsistent.

LISWT may be a safe and acceptable potential ED treatment with demonstrated benefits at 6 months. There is some question regarding efficacy deterioration beyond this, but there is still a demonstrated benefit seen even at 12 months post treatment. However, quality of evidence remains low with larger multiinstitutional studies required, standardising confounders such as shockwave administration and oral medication use.

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