

NEW ORLEANS -- May 20, 2015 -- Low-intensity extracorporeal shock wave therapy (LI-ESWT) appears to be effective and safe for men with vasculogenic erectile dysfunction (ED), researchers reported here on May 18 at the 2015 Annual Meeting of the American Urological Association (AUA).

Robert Feldman, MD, Urology Specialists, PC, Middlebury, Connecticut, and colleagues analysed data from 604 men with vasculogenic ED who underwent LI-ESWT or a sham treatment. The data were pooled from 5 randomised, placebo-controlled studies and 3 single-arm open-label studies.

The analysis included men who had responded to oral phosphodiesterase type 5 inhibitor (PDE5I) therapy as well as non-responders to PDE5I therapy. All men had International Index of Erectile Function ED (IIEF-ED) domain scores between 5 and 19 and abnormal nocturnal penile tumescence (NPT) parameters.

During each treatment session, LI-ESWT was applied to the penile shaft and crus at 5 different penile anatomical sites. Patients had 2 treatment sessions per week for 3 weeks, which were repeated after a 3-week no-treatment interval.

The shock waves are one-tenth the level of intensity as shock waves used to pulverize kidney stones.

Dr. Feldman pointed out that while all other current treatment options for erectile dysfunction are palliative in nature, LI-ESWT is unique in that it aims to restore the erectile mechanism in order to enable natural or spontaneous erection.

Changes in IIEF-Erectile Function (IIEF-EF) domain were assessed at baseline and at mid-treatment, following the sixth treatment session (FU1), at 1 month after the last treatment (FU2), 6 months after the last treatment (FU3), and 12 months after the last treatment (FU4).

The pooled analysis showed that 55%, 61%, 65%, and 71% of patients achieved a minimally clinical important difference (MCID) in their IIEF-EF score from baseline at FU1, FU2 and FU3, and FU4, respectively. The mean change in IIEF-EF from baseline was 5, 6.8, 6.2, and 7 points at FU1, FU2, FU3, and FU4, respectively.

Adverse events were rare and tended to be mild and resolve spontaneously.