Linear Low Intensity Shockwaves Treatment of Vasculogenic ED – First Results

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Introduction and Objectives

ED is significantly associated with: increased age, diabetes, cardiovascular disease, hypertension, depression, smoking, medications, and has a multifactorial etiology with physical and psychological factors.

The treatment options currently offered to patients are: drugs that reversibly inhibit penile-specific PDE5 and enhance the nitric oxide–cyclic GMP pathways of cavernous smooth muscle relaxation, vacuum constriction device, intraurethral and intracorporeal alprostadil, or surgical treatment-implantation of penile prosthesis.

Our aim was to assess the safety and efficacy of a unique Linear Shockwave Therapy for Vasculogenic ED patients in a prospective trial (PT).

Materials and Methods

22 men with vasculogenic ED completed this open-label, prospective pilot study. In order to compare our own results (22 men) we included the outputs of other 3 European LSWT centers. Finally, overall 69 (22+47) patients with mild to severe ED were treated using Renova device and evaluated.

The evaluation of success was made according to the IIEF-EF questionnaire, which was filled at baseline, and 1,3, and 6 months post treatment.

Results

The average IIEF-EF increased significantly from 14.7 at baseline to 21.6 at 1 month and 3 months post treatment. 82% of patients had a successful treatment. No adverse events were reported during the treatment and the follow-up duration.

Conclusions

We have been able to prove that Linear SWT is an effective therapeutic option for men with erectile dysfunction of vasculogenic origin. Moreover the efficacy of linear application of low-intensity extracorporeal shock waves is superior to former non-linear methods.

The above paper abstract was presented by Dr. Motil at the 102nd Annual Meeting of the Japanese Urological Association (JUA), on April 21st 2014, Kobe, Japan.