Evaluation Of Linear Shock Wave Therapy In Patients With Vasculogenic Erectile Dysfunction In The Slovenian Population

MARKO LOVŠIN*, KLEMEN LOVŠIN**
*Division of Surgery, Dept. of Urology, University Medical Centre Ljubljana, Slovenia
**University of Ljubljana, Faculty of Medicine, Ljubljana, Slovenia

Objectives

Linear shock wave therapy (LSWT) has been proposed as an effective treatment option for vasculogenic erectile dysfunction (ED). Our aim was to assess the effectiveness of treatment among the Slovenian male population.

Results

Before the first session, the average IIEF-15 score was 32.33 (14.00-52.00). 54.5% of patients stated that morning erections improved in quality and quantity already before the end of the therapy. Preliminary SEP and GAQ scores after LSWT are showing improvement of the ED. This is still an ongoing study. According to the literature, we are expecting a positive association between IIEF-15, SEP and GAQ scores before and after the therapy.

Methods

With LSWT we treated 88 patients with clinically determined vascular ED and no history of prostate surgery, androgen therapy, pelvic radiation, haematologic disease, penile curvation or venous ED. Their average age was 61 (34-93) years.

Firstly, the patients were examined and the International index of erectile function (IIEF-15), Sexual Encounter Profile (SEP) and Global Assessment Questions (GAQ) scores were assessed.

After that, they underwent 4 weekly LSWT sessions with RENOVA. We applied 1600 shockwaves on each crura and 900 shockwaves on each cavernosa with an energy intensity of 0.09 mJ/mm². Each session lasted approximately 20 minutes. Currently, we are evaluating the IIEF-15, SEP and GAQ scores, which were collected before the treatment, 1 month and 3 months after the last session.

Conclusion

LSWT is a safe, convenient and non-invasive method. There were no side effects during the therapy in our group of patients. Our preliminary results suggest that LSWT is a promising method for the treatment of vascuogenic, non-venous ED. However, additional angiography or penile Doppler ultrasonography before and after the LSWT treatment would give objective data.

KEY WORDS: erectile dysfunction, LSWT, ED therapy