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## Objectives

Clinical studies showed an improvement of erectile function after low-intensity shockwave treatment (Li-ESWT) (1).

Regarding Peyronie`s disease data are more inconsistent, yet selected patients seem to benefit from Li ESWT (2).

Still there is little data on patient satisfaction after Li ESWT in a private practice.

We wanted to know, is the improvement of sexual function sufficient for patients to be satisfied with this new therapy even when for example they have to pay for it.

## Results

19 patients (mean age 62 years, range 35 to 83y) in the ED group (mean IIEF 12) and 9 patients with PD (mean age 60y, range 38 to 72y) were followed up. 2 patients were lost to follow-up.

11 ED patients (58%) reported improvement (PD: 7/ 78%).

13 ED patients (63%) could perform sexual intercourse (PD: 8/ 89%).

14 ED patients (74%) improved sexual performance using PDE-5-I (PD: 5/ 55%)

Overall content with the treatment were 13 ED patients (68%) and 8 PD patients (89%).

14 ED patients (74%) and 8 PD patients (89%) would recommend Li ESWT to other patients or friends

In ED subgroup of PDE-5-I pre-treatment non-responder 8/11 (73%) could perform sexual intercourse after treatment. 7 patients (64%) were subjectively content with this result.

In ED subgroup of men under 65y 6/8 (75%) patients were overall content, >65y 7/11 (64%) showed overall satisfaction with the result of ESWT.

Only 4 patients in the ED group had a mild to moderate ED (IIEF >17), 3/4 (75%) showed an improvement that led to satisfaction with the ESWT result. 10/15 (67%) patients with IIEF <17 were subjectively content with the result of therapy.

## Method

20 patients with erectile dysfunction (ED) and 10 patients with Peyronie`s disease (PD) were treated with Li ESWT in our practice.

Standard protocol included 12 sessions with 5000 shockwave impulses (0,16mJ/mm<sup>2</sup>) in linear tissue coverage technique (fig.1 Piezowave2, Wolf/Elvation) in ED. In PD patients 2500 impulses were applied with linear coverage along complete corpora cavernosa, 2500 impulses were applied plaque intensified with point-focused shockwaves (fig.2) up to 0,702 mJ/mm<sup>2</sup> when tolerated by the patient. Both groups were treated additionally with Tadalafil 5mg daily dose.

After 3-6 month a follow-up appointment was made.



Figure 1:  
Linear coverage  
shock-wave technique  
(0,16mJ/mm<sup>2</sup>)



Figure 2:  
Point focused  
shock-wave (up  
to 0,702 mJ/mm<sup>2</sup>)

Patients who did not show up were contacted by telephone.

Five simple questions were asked, only dealing with patient satisfaction (fig. 3):

- Improvement of complaints
- Sexual intercourse possible
- Intercourse with PDE-5-I possible/ better
- Overall content
- Would you recommend ESWT to others?

Answers were possible in 4 categories:

- Positive
- Mostly positive
- Mostly negative
- Negative

Treatment costs were mostly not covered by patients health insurance but by patients themselves.

## Conclusion

Despite the many limitations of this small survey (e.g. unselected and small group of patients, variations of standard protocol and follow-up intervals due to patients will) it is safe to say, Li ESWT leads to high patient satisfaction and improvement of complaints in ED and PD, not only in clinical studies but also in a private practice.

While ED patients subjective satisfaction seem to match the clinical results of objective studies (1) in our small group PD patients did surprisingly well. New clinical studies with modified protocols should be reconsidered.

Li ESWT seems highly beneficial in PDE-5-I non responder patients, giving them back the ability to perform sexual intercourse (3).

Also patient satisfaction is still high, when the treatment is not covered by their health insurance but the costs seem to be affordable for the patient.

Still: it seems mandatory to find better criteria for future patient selection to increase the number of satisfied patients.

Questionnaire Patient Satisfaction				
Subjective Improvement	positive	mostly positive	mostly negative	negative
My complaints have improved?				
Sexual intercourse is possible				
Subjective Satisfaction				
"I am satisfied with the result of therapy"				
Recommendation				
"I would recommend this therapy to other patients/ friends"				

Figure 3:  
Questionnaire  
Patient Satisfaction

## References

(1): Lu Z, Lin G, Reed-Maldonado A, Wang C, Lee Y-C, Lue T, Low-intensity Extracorporeal Shock Wave Treatment Improves Erectile Function: A Systematic Review and Meta- Analysis, Eur Urol 2016 05-050

(2): Gao L, Qian S, Tang Z, Li J, Yuan J, A Meta-Analysis of Extracorporeal Shock Wave Therapy for Peyronie`s Disease, Int Journ of Impot Research, 2016, 28: 161-166

(3): Kitrey N, Gruenwald I, Appel B, Shechter A, Massarwa O, Vardi Y, Penile Low Intensity Shock Wave Treatment is Able to Shift PDE5i Nonresponders to Responders: A Double- Blind Sham Controlled Study, Journal of Urology, 2016: 195, 1550-1555

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Disclosures: No conflict of interests