

# Low-intensity shockwave treatment (LIST) for ED

## Follow-up of two years

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### Introduction and Objectives

The effect of low-intensity shockwave treatment (LIST) for erectile dysfunction has been previously described.



**Sexual Medicine**  
**Can Low-Intensity Extracorporeal Shockwave Therapy Improve Erectile Function? A 6-Month Follow-up Pilot Study in Patients with Organic Erectile Dysfunction**

Yoram Vardi\*, Boaz Appel, Giris Jacob, Omar Massarwi, Ilan Gruenwald  
Neuro-Urology Unit, Rambam Healthcare Campus and the Technion, Haifa, Israel



**Low-Intensity Extracorporeal Shock Wave Therapy—A Novel Effective Treatment for Erectile Dysfunction in Severe ED Patients Who Respond Poorly to PDE5 Inhibitor Therapy**

Ilan Gruenwald, MD, Boaz Appel, MD, and Yoram Vardi, MD  
Neuro-urology Unit, Rambam Healthcare Campus, Haifa, Israel



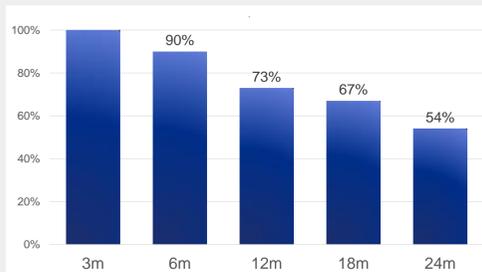
**Does Low Intensity Extracorporeal Shock Wave Therapy Have a Physiological Effect on Erectile Function? Short-Term Results of a Randomized, Double-Blind, Sham Controlled Study**

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From the Neuro-Urology Unit, Rambam Healthcare Campus, and the Rappaport Faculty of Medicine, Technion – IIT, Haifa, Israel (YV, BA, AK, IG), and the Department of Urology, Yale-New Haven Hospital, New Haven, Connecticut (AK)

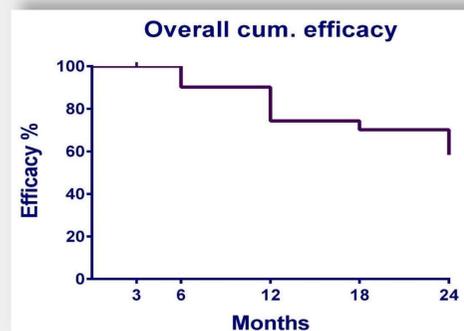
### For how long does it last?

The aim of this study was to find out if men who have responded to shockwave therapy for 3 months post therapy preserved their response after two years.

### Results

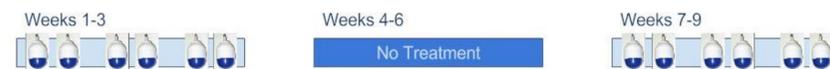


Gradual decline of MCID IIEF-EF



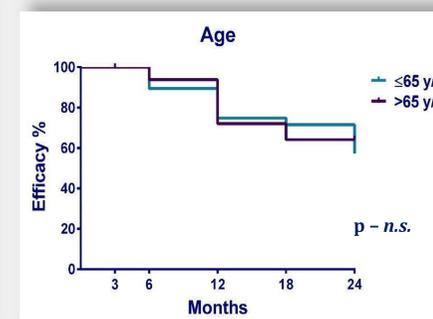
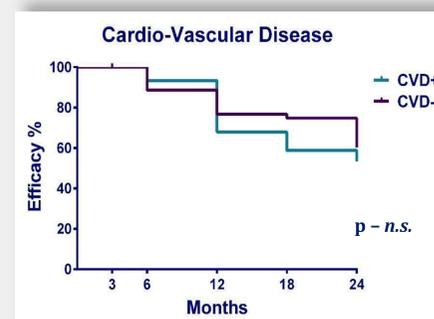
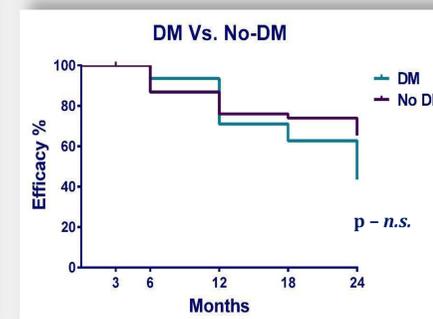
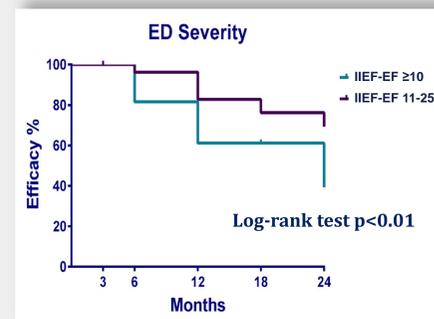
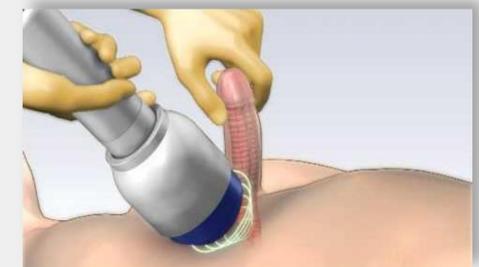
### Material & Methods

- All men that had a significant improvement in their erectile function at follow-up, and had at least 2 years of follow-up, were included in the study.
- The initial success was defined according to the change in the IIEF-EF domain questionnaire from baseline (Rosen's MCID - Minimal Clinical Important Difference).
- Patients were prospectively followed after 6, 12, 18, and 24 months by an interview.



### Patients

- 96 patients from previously published studies that were successful 3 months after LIST.
- 72 patients have reached the 2 years follow-up visit.
- Mean baseline IIEF-EF = 12 (6-22). Severe ED – 40 (42%)
- Median age: 58 (27-78)
- Diabetes mellitus: 31 pts. (32%)
- Cardiovascular disease: 32 pts. (33%)



### Conclusions

- The positive effect of low-intensity shockwave therapy on erectile function wanes gradually over two years in about half of the patients.
- The effect wanes more rapidly in severe ED patients.
- Additional research is needed to find the possible modifications in the treatment protocol that could make its effect last longer, and to learn if an additional treatment protocol can maintain the initially achieved response.