

# Low-Intensity Shockwave Therapy (LiST) for Erectile Dysfunction: Is It Safe for Patients on Anticoagulant Medication?

---

June 23, 2019

A significant percentage of men with vasculogenic erectile dysfunction (ED) use antiplatelet therapy because they have a history of cardiovascular disease. However, the safety of this novel treatment modality in patients under antiplatelet treatment has been based on anecdotal cases, and published data are lacking. The aim of this study is to examine the safety of low-intensity shockwave therapy (LiST) on a group of patients under antiplatelet therapy who were treated with LiST.

A pulled data analysis, conducted from November-December 2018, including 2 randomized clinical trials conducted at an Andrology outpatient clinic is presented. The 2 trials used the same design, the same shockwaves generator, as well as the same method of delivering the energy. The LiST protocol differed between the patients regarding LiST sessions number (6, 12, or 18), sessions frequency (1, 2, or 3 sessions/wk) and energy flux density used, which was either 0.05 or 0.1 mJ/mm<sup>2</sup>. The number of 5,000 pulses/session remained unchanged. For the purpose of the current study, patients receiving anticoagulant medication at the time of treatment and follow-up period were included in this analysis. All patients had a diagnosis of vasculogenic ED. According to the study protocol, after every treatment visit, as well as at 1 and 3 months after treatment, all patients reported any side effects or complications of the treatment; physical examination of the penis was performed before and after each treatment session, as well as at follow-up visits at 1 and 3 months. Penile ultrasonography was performed at baseline, as well as at 3 months' follow-up, at the same time with triplex ultrasonography by the same investigator.

138 patients were included in the 2 trials, whereas 135 (98%) of them finished the 3 months follow-up. 35 (25.3%) of them were under anticoagulant/antiplatelet medication during LiST. No bleeding events or any other side effects were reported.

The main strength of this article is that it is the first report on the safety of LiST on the specific group of cardiovascular patients with ED under anticoagulant/antiplatelet therapy. However, it is a pulled data analysis, based on 2 randomized studies, which did not have safety of LiST as a primary outcome.

LiST seems to be a safe and well-tolerated treatment option for vasculogenic ED in patients on antiplatelet medication. Kalyvianakis D, Memmos D, Mykoniatis I, et al. Low-Intensity Shockwave Therapy (LiST) for Erectile Dysfunction: Is It Safe for Patients on Anticoagulant Medication? *J Sex Med* 2019;XX:XXX-XXX.

The journal of sexual medicine. 2019 Jun 13 [Epub ahead of print]

Dimitrios Kalyvianakis, Dimirios Memmos, Ioannis Mykoniatis, Paraskevi Kapoteli, Dimitrios Hatzichristou

---

1(st) Department of Urology and Center for Sexual and Reproductive Health, Aristotle University of Thessaloniki, Thessaloniki, Greece; Institute for the Study of Urological Diseases, Thessaloniki, Greece., 1(st) Department of Urology and Center for Sexual and Reproductive Health, Aristotle University of Thessaloniki, Thessaloniki, Greece., 1(st) Department of Urology and Center for Sexual and Reproductive Health, Aristotle University of Thessaloniki, Thessaloniki, Greece; Institute for the Study of Urological Diseases, Thessaloniki, Greece. Electronic address: g\_mikoniatis@hotmail.com.

PubMed <http://www.ncbi.nlm.nih.gov/pubmed/31204264>