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### PS-07-009. **Low intensity extracorporeal shock wave therapy in French patients with vasculogenic erectile dysfunction: Comparison of different energy levels and treatment frequency**

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#### **Objective**

Low-intensity extracorporeal shock wave therapy (Li-ESWT) shows encouraging results in patients with vasculogenic erectile dysfunction (ED), but optimal treatment protocols are still under investigation. This retrospective study examines the efficacy of Li-ESWT in ED patients, under real-life conditions where treatment frequency or intensity levels delivered were lower than manufacturer's recommendations.

#### **Methods**

All patients received 6 Li-ESWT sessions with the Dornier Aries device. In Lyon, patients (n=12) received 5000 shocks/session at energy flux density 0.051 mJ/mm<sup>2</sup>, at normal (6.4-7.0 days between sessions) or low (8.4-10.0 days between sessions) frequency. In Lille, patients (n=19) received 6000 shocks/session at average energy flux density 0.038-0.084 mJ/mm<sup>2</sup>, at normal frequency (6.2-8.0 days between sessions); treatment was either at low (0.038 mJ/mm<sup>2</sup>) or normal (0.051-0.084 mJ/mm<sup>2</sup>) average energy flux density. IIEF-5 was assessed at baseline and 1 month follow-up (FU). Patients remained on oral PDE5i or intracavernosal treatments throughout.

#### **Results**

No complications were reported. In Lyon, IIEF-5 scores (mean ± SD) were 9.3 ± 3.7 at baseline and 11.9 ± 5.1 at 1-month FU. IIEF-5 improved with both normal and low frequency; no group differences were observed (t-test p=0.47). In Lille, IIEF-5 scores (mean ± SD) were 13.9 ± 3.6 at baseline and 17.9 ± 3.2 at 1-month FU. IIEF-5 improved with both low and normal intensity; no group differences were observed (t-test p=0.39). In a combined analysis, IIEF-5 improved significantly (mean=3.5, SD=2.6, t-test p<0.001). Change in IIEF-5 was 1.6 ± 4.2, 4.9 ± 1.1, 3.8 ± 2.2 and 2.0 ± 2.5 in severe, moderate, mild-moderate and mild patients, respectively.

#### **Conclusion**

Minor reductions in Li-ESWT treatment intensity and frequency, as often encountered under real-life conditions, did not affect treatment efficacy of the Dornier Aries. Li-ESWT significantly improved erectile function, with improvements greater for moderate and mild-moderate ED patients, than for mild and severe ED patients.