

PELVIC FLOOR MUSCLE REHABILITATION FOR PATIENTS WITH LIFELONG PREMATURE EJACULATION: A NOVEL THERAPEUTIC APPROACH.

Hypothesis / aims of study

Premature ejaculation is the most common male sexual disorder. The aim of the study was to evaluate the possible therapeutic role of pelvic floor muscle rehabilitation in patients affected by lifelong premature ejaculation.

Study design, materials and methods

40 male patients were enrolled in this study after undergoing assessment and providing informed consent. PE was diagnosed by applying the ISSM definition of PE. All of the subjects had lifelong PE with a baseline IELT ≤ 60 seconds (mean: 31.7 s, range: 16.6–57.4 s). For inclusion in the study, each patient had to be in a stable relationship with a partner for at least 6 months and to engage in sexual intercourse once a week or more often. At the first visit, the patients and their partners were interviewed individually and each was requested to give an independent estimation of IELT. The patients were all treated with PFM rehabilitation. To evaluate the effectiveness of PFM rehabilitation, we compared the mean IELT values of the patients after 12 weeks of treatment. The rehabilitation treatment group comprised 40 patients aged 19–46 years (mean age: 30 years) with a mean baseline IELT of 31.7 ± 14.8 s (range: 16.6–57.4 s). The PFM rehabilitation protocol consisted of (1) physio kinesiotherapy to achieve a muscle contraction that allows the patient to be aware of motor activity; (2) electro-stimulation of the perineal floor to directly stimulate the pudendal nerve, resulting in stimulation of the pubo-rectalis muscle, which causes the urethral sphincter to contract; and (3) biofeedback, in which the patient learns to control the muscle contractions of the perineal floor and the genito-urinary sphincter. The patients had three 60-min therapy sessions each week, during which the 3 techniques were applied for 20 min each. The results were measured after the first 20 sessions (6 weeks) and then again at the end of therapy (12 weeks). Physio kinesiotherapy and biofeedback were used to train patients to recognise the muscular structures involved in pelvic floor contraction. The patients executed personalised physical exercises, during which they conducted isometric and isotonic contractions of the PFMs. During each session, after execution of the physical exercises, the patients underwent electro-stimulation to help strengthen the PFMs. A cylindrical anal probe was positioned in the anal canal. Contact between electrodes in the anal probe and the anterior portion of the sphincter system stimulated the pubovisceral muscles (puborectal and pubourethral); mild, painless electrical pulses were then sent to these muscles via the electrodes.

Results

In the PFM rehabilitation group, at the end of 12 weeks of treatment, 33 (82.5%) of the 40 patients gained control of their ejaculation reflex, optimising the latency time to ejaculation from the start of intravaginal intercourse (IELT before therapy: ≤ 60 seconds). Five patients were non-responsive to the treatment, whereas 2 improved their ejaculation after the first 20 sessions and opted to drop out of the study. For the 33 patients who responded favourably to the PFM rehabilitation, the results were maintained throughout the follow-up time (until 6 months after the 12-week treatment). None of the patients reported adverse effects that could have led to discontinuation of the treatment. At the first evaluation after 6 weeks of rehabilitation, the patients achieved a mean IELT of 124.6 ± 18.4 seconds (range: 122.7–143.1 seconds). At the end of week 12 of the PFM rehabilitation, the mean IELT was 146.2 ± 38.3 seconds (range: 129.6–184.5 seconds). 13 / 33 (39%) patients reached 6 months follow-up and the mean reported IELT was 112.6 ± 16.4 seconds (range: 108.7–121.1 seconds; Figure 2), which resulted significant when compared to their initial IELT (mean 39.8 sec; range: 24.6 – 56.3 sec).

Interpretation of results

All our enrolled patients had lifelong PE and did not report any significant improvements after previously undergoing other various therapeutic treatments such as local anaesthetic creams, behavioural therapy (including the squeeze and stop-and-start techniques), and psychological treatment of various types. In the present study, the pelvic floor exercises led to an improvement in body and, especially, pelvic floor awareness in all of the enrolled subjects, which helped them improve their self-confidence and sense of control of their ejaculatory reflex. In addition, we demonstrated that active perineal muscle control inhibits the ejaculation reflex through intentional relaxation of the bulbocavernosus and ischiocavernosus muscles, which are active during arousal and should be intentionally relaxed during this phase of sexual intercourse. This is an easily learned technique that can be mastered by using pelvic floor biofeedback.

Concluding message

In conclusion, the results we obtained with PFM rehabilitation are promising. Furthermore, this treatment option could represent an important cost reduction as compared with other commonly used treatments (SSRIs, local anaesthetic creams, and PDE-5 inhibitors). Thus, we propose PFM rehabilitation as a new type of physical treatment that may be a viable treatment option for PE.

References

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Disclosures

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