

A New Treatment for Premature Ejaculation: The Rehabilitation of the Pelvic Floor

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This study evaluated pelvic floor rehabilitation as a possible treatment for premature ejaculation. In this treatment it is assumed that the pelvic muscles are involved in the control of the ejaculatory reflex. The treatment avails itself of a method already used for fecal and urinary incontinence. Eighteen patients with premature ejaculation were recruited. Fifteen (83%) of them had suffered from this disturbance for at least five years. Most of them had experienced other therapies without success. After 15–20 sessions of pelvic floor rehabilitation, 11 (61%) patients were cured and are able to control the ejaculatory reflex; seven (39%) patients had no improvement. All patients were followed for a minimum of 6 months to a maximum of 14 months. This therapy is easy to perform, has no side effects, and can be included among the therapeutic options for patients with premature ejaculation.

The exact sequence of events that determine and inhibit the ejaculation reflex has still not been completely clarified.¹⁻⁶ Therefore, various hypotheses have arisen concerning the cause of premature ejaculation.⁷⁻¹⁴ In this article we report the results of a new treatment for premature ejaculation based on the assumption that the pelvic floor muscles play a role in the control of the ejaculatory reflex. The treatment avails itself of a method already used for fecal and urinary incontinence.¹⁵ It involves physiokinesitherapy,¹⁶⁻¹⁸ electrostimulation,¹⁹⁻²² and biofeedback.²³⁻²⁹ The program teaches the patient to recognize which muscles are involved in the mechanism of controlling the ejaculatory reflex and reinforces and tones those muscles at the same time.

MATERIALS AND METHODS

Patients

We selected 18 heterosexual patients, with an average age of 34 (range 20–52 years), suffering from premature ejaculation as defined by Kaplan.⁹

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None of them were able to control the ejaculatory reflex. Fifteen (83%) patients had a history of premature ejaculation of at least five years' duration and 12 (66%) had previously undergone treatments based on anesthetic cream, alpha blockers, start-and-stop therapy, and antidepressant tricyclics, without benefit.

Before treatment the patients received andrological screening with the Rigiscan test for nocturnal erections, hormonal and routine exams, the Meares-Stamey test³⁰ to rule out bacterial prostatitis, prostatic echography, and digital rectal examination. None of them showed any evidence of prostatitis or erectile impairment, and none had a phimosis or a "frenulus brevis."

We subjected these patients to a rehabilitation of the pelvic floor protocol, modifying the technique adopted for the treatment of fecal and urinary incontinence.

Techniques

The rehabilitation protocol included physiokinesitherapy of the pelvic floor, electrostimulation, and biofeedback. The three techniques were applied at the same setting, in three separate weekly sessions, each one lasting 60 minutes. The protocol included the completion of 20 consecutive sessions, at the end of which the first evaluation of results was carried out.

Physiokinesitherapy was used to teach patients to recognize the movements of the pelvic floor. Patients executed personalized physical exercises, during which they conducted isometric and isotonic muscular contractions of the pelvic floor. The technique we used tended to provoke contractions of the pelvic floor that the patient learns to recognize. In this manner we obtained a twofold objective: the strengthening of the musculature and self-awareness of the motor activity.

After the execution of the physical exercises, during the same session, the patient underwent electrostimulation. This was carried out by means of a circular anal probe, 6 cm long, 1 cm wide, in which the central part is formed as a "saddle." On the two extremes of the saddle are bipolar electrodes, 0.5 cm, and distanced from each other at 0.7 cm. The probe is positioned in the anal canal in such a way that the electrodes are in contact with the anterior portion of the sphincter system and therefore stimulate the perineal body in which lie the pubovisceral muscles (puborectal and pubourethral).³¹ The wave frequency used was 50 Hz, in order to stimulate directly the pudendal nerve, encouraging the contraction of the genital-urinary sphincters. The patients underwent electrostimulation for a variable period of from 10 to 15 minutes. The stimulus time initially was five seconds, and was gradually increased during the subsequent sessions to 10 and 20 seconds, with rest intervals at double the respective stimulus time (10–20–40 seconds) in order to avoid fatiguing the muscle. The object of electrostimulation was to allow the patient to apprehend a motor scheme and to augment the strength and duration of contraction of the perineal muscles.

After this first phase of treatment, lasting from three to six sessions, the patient was taught methods of biofeedback. The objective was to control the contraction of the perineal body, and therefore of the genital-urinary sphincters, with growing pressure and for long periods of time.

An anal pressure probe with a diameter from 0.5 cm to 65 cm was used. On its distal extremity are placed pressure points mounted on a finer shaft with an external inflatable balloon. The probe is inserted in the anus, and 1–2 cc of air is introduced into the balloon, connecting it to the central body of the apparatus; the last one is placed and set at a pressure that varies from 0 to 100 cm of H₂O. In this way, the patient learns to contract the muscular mass at the anterior perineum, mimicking the ejaculation stop. This movement is transformed into graphic form on a monitor placed in front of the patient. Through this visible stimulus, he becomes aware of and optimizes the contraction.

The biofeedback procedure lasts 10–15 minutes in every session, and the duration of contraction is gradually augmented from 5 seconds initially to 10, 20, and 40 seconds, with periods of muscle release respectively doubled (10–20–40–80 seconds). For our study we used the PRS 8900. This is a computerized apparatus that assembles the biofeedback and electrostimulation. The software permits perfect control of the electrostimulus sent, the exact setting of the determined pressure of the sphincter contraction, and transformation of the action into clear and proportional graphics.

Furthermore, memorization and elaboration of results are possible for each patient in each session. This allows the specialist to vary the therapy based on improvement. The instrumentation is equipped with two monitors: one for the patient, to coordinate experience with visual and heard feedback, and one for the specialist, to control the therapy. Results were appraised at the end of the first 20 sessions and at six months from the beginning of the therapy.

RESULTS

Before the treatment, all patients had an ejaculatory latency time of less than one minute of coitus or prior to 15 penile vaginal strokes on 90% of coital attempts. After the treatment, 11 of 18 patients (61%) learned to control the reflex and were considered cured. Two patients slightly improved their intercourse time without clinical help. Five did not respond positively to the treatment. The best results were obtained with the younger patients. Results were maintained at follow-up. Follow-up occurred between 6 and 14 months. No side effects were recorded.

DISCUSSION

According to our hypothesis, patients suffer from premature ejaculation both because of an incapacity to carry out the correct movement and because their muscles are hypotonic or do not develop sufficient strength to inhibit the reflex. If this hypothesis is true, a treatment aimed either

at reinforcing the closing strength of the external urethral sphincter or at teaching how to contract these muscles might be effective in the control of ejaculation. Physiokinesitherapy, biofeedback, and electrostimulation have been shown to be useful in the treatment of incontinence by increasing the closing pressure of the external urethral sphincter.²³ In particular, chronic electrostimulation produces hypertrophy of the external sphincter.³¹ It has also been postulated that the electrostimulation is able to inhibit the detrusorial reflex by depolarizing the sensitive afferent fibers of the pudendal nerve.^{32,33} As yet, there is no demonstration that contraction of pelvic muscles (puborectalis and pubourethralis) inhibits ejaculation.

Among the limitations of this initial experience with this new treatment is the fact that it is not a randomized study. Although we are aware of the limitations of our experiment, we want to underline that the majority of our patients had suffered from premature ejaculation for more than five years and more than 50% had already been subjected, without success, to various therapeutic treatments such as stop-and-start techniques, antidepressant drugs, anesthetic cream, behavior therapy, and psychological treatment of various types.

This therapy is easy to perform, has no side effects, and can be included in the therapeutic options of patients with premature ejaculation.

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