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PELVIC-FLOOR MUSCLE EXERCISES FOR THE IMPROVEMENT OF MALE SEXUAL FUNCTIONS

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ABSTRACT. ***Introduction***. Premature ejaculation (PE) and erectile dysfunction (ED) are the most common sexual disorders among men regardless of ethnicity. The literature estimates the prevalence of PE between 16,3-32,5 and the prevalence of ED between 10-66% depending on age and secondary diseases. ***Objectives.*** We aim to assess the efficacy of the 8-week-long program of pelvic floor muscle(PFM) rehabilitation in the therapy of premature ejaculation and erectile dysfunctions. ***Materials and methods***. The volunteer in our case-study was a 24-year-old, non-smoking, athletic university student living in a heterosexual, sexually active relationship for 5 months. At the beginning of the investigation, the subject had to complete numerous questionnaires. The trial used complex physiotherapy as treatment. The first part of the physiotherapy consisted of exercises to raise consciousness of the function of pelvic floor muscles (PFM). The patient had to learn how to isolate the contractions of PFM from its synergic muscles. The basic exercises consisted of isotonic, isometric and relaxation practices that lasted for 6 weeks. After that, "lifting exercises" supplemented the basic practices for another 2 weeks. ***Results.*** At the termination of the 8-week-long program all previously measured qualities showed improvement to a certain extent. ***Conclusion.*** At the end of the 8-week-long program, we measured significant change in various qualities regarding sexual life that proves the efficiency and the reason of existence of PFM rehabilitation in the therapy of premature ejaculation and erectile dysfunctions.

Keywords: *pelvic-floor muscle exercises, premature ejaculation, perineal muscles, IELT, PEDT*

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Background

Premature ejaculation (PE) and erectile dysfunction (ED) are the most common sexual disorders among men regardless of ethnicity. The literature estimates the prevalence of PE between 16,3-32,5 (Rowland, 2004) and the prevalence of ED between 10-66% (Feldman, 1994; Wagner, 1996) depending on age and secondary diseases. PE and ED could develop simultaneously as symptoms of a possible pelvic-floor dysfunction. The above-mentioned sexual dysfunctions are often approached by medical therapies that could have various side-effects. Treating pelvic floor muscles (PFM)-related PE and ED with physiotherapy has low risks, no side-effects and can be easily learned and executed by the patient in his home.

The role of the pelvic floor in male sexual dysfunction and the importance of pelvic floor physical therapy are only beginning to be appreciated by the sexual medicine community. Treatment of the pelvic floor has been shown to result in significant functional improvement of sexual health in selected men with concomitant pelvic floor and sexual dysfunction, especially in the presence of chronic prostatitis/chronic pelvic pain syndrome (Cohen, 2016).

Objectives

We aim to assess the efficacy of the 8-week-long program of pelvic floor muscle (PFM) rehabilitation in the therapy of premature ejaculation and erectile dysfunctions.

Materials and methods

Through internet advertisement, we recruited men, who reported premature ejaculation. The volunteer in our case-study was a 24-year-old, non-smoking, athletic university student living in a heterosexual, sexually active relationship for 5 months. He had neither incontinence nor any urological symptoms apart from self-reported PE. At the beginning of the investigation, the subject had to complete numerous questionnaires. We used the Premature Ejaculation Diagnostic Tool (PEDT) to assess the possibility and degree of the volunteer's PE (Symonds, 2007, a,b). 9 or higher values of PEDT was sufficient to take part in the study. Furthermore, the Beck

Depression Inventory (BDI) intended to discover any sign of depression (Beck, 1996). The Sexual Activity and Satisfaction Scale (SAS) measured the volunteer's contentment and activity in his sexual life with his partner (Kreuter, 1996). We applied the 5-item version of the International Index of Erectile Function (IIEF-5) to identify any possible dysfunction in the man's erection (Rosen, 1999). The subject was asked to estimate his Intravaginal Ejaculatory Latency Time (IELT), the time from vaginal penetration to intravaginal ejaculation during sexual intercourse (Lee, 2015).

The trial used complex physiotherapy as treatment (Lavoisier, 2014; Van Kampen, 2003). The first part of the physiotherapy consisted of exercises to raise consciousness of the function of pelvic floor muscles (PFM). The patient had to learn how to isolate the contractions of PFM from its synergic muscles. The basic exercises consisted of isotonic, isometric and relaxation practices that lasted for 6 weeks. After that, "lifting exercises" supplemented the basic practices for another 2 weeks. In these techniques, the subject had to learn how to distinguish at least five different degrees of PFM contractions and be able to change between the various levels without resting. Thus, these practices contained isometric-isotonic combinations of muscle-activity. "Lifting exercises" were only introduced if the patient reached a certain level in the physiotherapy thus his PFM showed improvement in strength and control. All these exercises aimed the strengthening of PFM.

Moreover, the volunteer had to execute masturbation techniques for 8 weeks as well. These exercises served as a sort of biofeedback during the program, therefore the patient could experience the functioning of the PFM and raise consciousness of them during erection. In addition, masturbation techniques can teach the male patient "when" and "how" to contract or relax his PFM during the pre-orgasm sensation. Mainly, ischiocavernosus and bulbospongiosus muscles are responsible for the maintenance of erection and ejaculation. These muscles function in synergism with the rest of the PFM. The acquirement of the ability to relax the PFM was crucial for the patient in order to delay the ejaculation. In these practices, the male subject had to maintain his erection for at least 30 minutes by tactile stimuli (without and with lubrication) and then ejaculate. Conditioning the man to uphold a sustained erection before ejaculation was also a key factor in treating PE.

The patient had to record a workout-log about his activities. All sessions took place at the university's educational room where only the patient and the therapist were present. The meetings' regularity was customised according to the development and needs of the volunteer.

Results

At the termination of the 8-week-long program all previously measured qualities showed improvement to a certain extent. After the complex physiotherapy, the patient filled out the same questionnaires again: PEDT values decreased (9 to 2) thus the patient shifted to the category of PEDT that indicates no rapid ejaculation. IIEF-5 (19 to 23) and SAS (15 to 16) values increased, BDI values were constant (zero). The estimated Intravaginal Ejaculatory Latency Time (IELT) of the male subject increased from 5 to 13-15 minutes during coitus which corresponds to the time length of a "normal" sexual intercourse (7-14 minutes) (Montorsi, 2005). IIEF-5 identified a mild erectile dysfunction at the beginning of treatment. After the physiotherapy, the patient regained the physiological rigidity of his penile erection according to IIEF-5.

Conclusion

At the end of the 8-week-long program, we measured significant change in various qualities regarding sexual life that proves the efficiency and the reason of existence of PFM rehabilitation in the therapy of premature ejaculation and erectile dysfunctions. Pelvic-floor related male sexual problems should be treated by complex physiotherapy and other alternative therapies before considering medications. PFM-exercises have no side-effects and it is relatively easy learn by the help of a physiotherapist. Furthermore, it is cost-effective and can be executed anywhere even during other activities. However, further research and observation needed in order to gather sufficient evidence and experience about pelvic-floor muscle rehabilitation. Up to this point, the results are promising.

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