Treatment Outcome of 460 Women with Vaginismus

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ABSTRACT

Introduction: We aimed to emphasize the importance of the gynecological examination in the treatment of vaginismus.

Materials and Methods: From January 2005 to October 2008, 460 sexual partners who had been treated at the tertiary Vaginismus Therapy Clinic (HERA) for vaginismus were studied via examination of treatment charts. The patients enrolled in this prospective study had vaginismus according to the criteria of the Diagnostic and Statistical Manual of Mental Disorders Fourth Revision, Turkey (DSM-IV-TR). Patients participated in a face-to-face interview and were assessed with a gynecologic examination before and after the treatment and also at 3- and 12-months follow-up. Cognitive behavioral sex therapies and medical hypnotherapy were used in the management.

Results: We developed our classification system based on the gynecological examination, and classified all the patients at the first visit. Among 460 women, we classified 152 (33.04%) as first-degree, 180 (39.1%) as second-degree, 108 (23.4%) as third-degree, and 20 (4.34%) as fourth-degree. All of the therapies were individualized for the patients based on the first gynecological assessment. After the treatment and at the 3-month follow-up, 460 (100%) women had had successful sexual intercourse. The mean number of treatment sessions was 4.2. At the 1-year follow-up after treatment, 392 (85.2%) not only had regular intercourse but orgasm as well. Forty (8.69%) did not have orgasm but felt that intercourse was pleasurable. Twenty-eight (6.08%) women had regular intercourse but no interest.

Conclusion: Our study showed that conducting a non-traumatic gynecologic examination is very important for definite diagnosis, classification of severity and establishment of a therapy modality for higher success rates in the management of vaginismus.

Key words: Vaginismus, Treatment outcome, Gynecological examination

ÖZET

Vajinismuslu 460 Hastanın Tedavi Sonuçları

Giriş: Vajinismus tedavisinde jinekolojik muayenenin önemini vurgulamak amaçlanmıştır.

INTRODUCTION
Vaginismus is the presence of persistent difficulty to allow vaginal entry of a penis, finger, and/or any object, despite the woman's expressed desire to do so, with involuntary pelvic muscle contraction[1]. In fact, it is included in the subcategory of sexual pain disorders and is classified as a sexual dysfunction[2]. Similar to other types of sexual dysfunctions, it may cause marital and interpersonal problems or infertility. The predisposing factors of vaginismus are primarily sexual trauma, religious background, and cultural and environmental factors[3].

In severe cases of vaginismus, the rectus abdominis, the adductors of the thighs and the gluteus muscles may also contract involuntarily as opposed to the rhythmic contraction during orgasm. This contraction is a general defensive reaction against a threatening situation. Increased muscle tension that precludes vaginal entry may cause the sexual pain[4].

Vaginismus may be classified as either primary or secondary. Primary or lifelong vaginismus presents from the first attempt at penetration. In secondary or acquired vaginismus, a woman loses the ability to have intercourse following physical or psychological trauma, gynecological intervention (abortion, difficult delivery, etc.), menopausal atrophic changes, or pelvic pathology[5].

In this prospective study, we evaluated the characteristics of 460 women with vaginismus and reported the efficacy of our vaginismus therapy.

MATERIALS and METHODS
In this prospective study, 460 sexual partners who had been treated at the Vaginismus Therapy Clinic (HERA) from January 2005 to October 2008 for vaginismus were studied via the examination of treatment charts. Forty-four patients with organic problems (pathologic or anatomic) were treated with some surgical interventions or medical treatments and were excluded from the study. All patients enrolled in this prospective study signed an informed consent form. The Medical Ethics Committee of Dr. Zekai Tahir Burak Women's Health Teaching and Research Hospital, Ankara, Turkey approved this work.

Vaginismus was classified according to the criteria of the Diagnostic and Statistical Manual of Mental Disorders Fourth Revision, Turkey (DSM-IV-TR)[2]. The diagnostic criteria for vaginismus is a recurrent or persistent involuntary contraction of perineal muscles surrounding the outer third of the vagina at an attempt of penetration with a penis, finger, tampon or speculum and marked distress or interpersonal difficulty owing to vaginal reactions. The couples who refused diagnostic and treatment procedures or were lost to follow-up before a definite result were excluded from the study. All patients enrolled in this prospective study signed an informed consent form.

A team comprised of a sex therapist, gynecologist, psychiatrist, and psychologist was organized for the therapy. As the first step, history was obtained and then a physical and gentle gynecologic examination with reassurance was done for absolute diagnosis. We used our classification system of four degrees of severity by means of the gynecological examination, with patients in lithotomy position (Table 1). The gynecological examination and classification permitted us to evaluate the existence of any organic problem (vaginal...
Table 1. The classification system of vaginismus based on gynecological examination “Eserdag Classification”

<table>
<thead>
<tr>
<th>Degree</th>
<th>Description</th>
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<tbody>
<tr>
<td>First degree</td>
<td>Patient tolerates insertion of examiner’s index finger into the vaginal canal and involuntary vaginospasm is felt by the examiner.</td>
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<tr>
<td>Second degree</td>
<td>Patient tolerates insertion of examiner’s little finger to vaginal entry with difficulty and some anxiety.</td>
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<tr>
<td>Third degree</td>
<td>Patient demonstrates fear, cannot tolerate examiner’s finger in her vagina, and allows examiner only to touch her vestibulum and vulva.</td>
</tr>
<tr>
<td>Fourth degree</td>
<td>Patient demonstrates tremendous fear, anxiety and embarrassment, sometimes cries and elevates her buttocks, constricts her thighs, withdraws herself, contracts all her muscles (sometimes even her chin and toes), and does not allow the examiner to even touch her vulva or allows it with difficulty.</td>
</tr>
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Septum, rigid hymen, vaginitis, vulvar vestibulitis, etc.) as well as to determine the modality of therapy, and patients were also informed about the therapy and its estimated duration.

If the male partner had problems, a urologic examination was performed by a urologist. If there was no organic problem in the male partners, cognitive and behavioral sex therapies were also given to them to prepare them for the intercourse[6-8].

We used cognitive and behavioral therapies in all patients with first-, second-, and third-degree severity. Cognitive and behavioral therapies were used after the medical hypnotherapy in all patients with fourth-degree severity.

After obtaining a medical history, patients were instructed about the reasons for vaginismus, the conscious/subconscious mechanisms and sexual myths. We provided a wide explanation for the patient about the common psychodynamics of vaginismus and assured her that she is not alone, that the condition can be cured, and that her genital anatomy was normal, etc. We used various therapeutic metaphors, verbal suggestions and encouragement to support patient self-esteem during the therapies.

We also showed the patient the genital anatomy in a pelvic model and described the functions of the genital organs (especially the clitoris, vagina, hymen). Then, systematic desensitization and dilatation techniques with behavioral approaches like mirror exercises, external genital massage, Kegel exercises, and firstly finger and then mechanic vaginal dilator insertions were used. We did not use finger dilatation except for discovering the vaginal structure for a period, as these exercises were not found attractive or hygienic by the patients.

We used our specially developed smooth plastic vaginal dilators, “Eserdag dilators”, in these exercises. These four graduated dilators started from 16 mm front-19 mm back and finish with 33 mm front-36 mm back in diameter. After an instruction and demonstration, patients were asked to insert these gradually expanding vaginal dilators into their vaginal canal, using breath techniques and lubricating agents. We gave the patients a private room to conduct their exercises alone or with their partners for a period of time ranging from 1 hour to 3 hours, and then advised them to repeat the exercises at home as home tasks. The patients were encouraged to come to the clinic every day and most of them agreed to this arrangement. Thus, the treatment duration was quite short (generally concluded in one week). Some of the patients came to the sessions alone, while others were joined by their partners.

We also conducted “sexual pleasure studies”, including clitoral and vaginal stimulation, focusing the brain on orgasmic responses and discovering the body’s erogenous zones, to encourage sexual excitement.

After insertion of the fourth vaginal dilator was achieved, information was given to the couple about sexual intercourse. The easiest positions were shown using educational CDs and on a pelvic model for illustration for a comfortable penetration, and then intercourse trials were started.

The cognitive and behavioral therapies that we use in our clinic are shown in (Table 2)[6-8].

Statistical analyses were performed using the Statistical Package for the Social Sciences (SPSS) Software (SPSS, Chicago, IL, USA) version 9.0 for Windows. Statistical evaluation was performed with Student’s t-test and chi-square test. The one-way
ANOVA and logistic regression test were performed to compare means among groups. Results were considered statistically significant if $p < 0.05$.

**RESULTS**

Table 1 shows the classification of vaginismus severity among patients in our study. We classified 152 (33.04%) patients as first-degree, 180 (39.1%) as second-degree, 108 (23.4%) as third-degree, and 20 (4.34%) as fourth-degree. While 23 (5%) patients were diagnosed as secondary vaginismus, 437 (95%) of them were primary vaginismus and 128 (27.8%) had perforated hymen showing at least one coitus.

Among 152 women with first-degree severity, the number of treatment sessions ranged from 2-4, with a mean of 3.4, and all were successfully cured. Among 180 women with the second-degree severity, the number of treatment sessions ranged from 2-5, with a mean of 4.2. Among 108 women with third-degree severity, the number of treatment sessions ranged from 4-7, with a mean of 5.1. Among 20 women with the fourth-degree severity, the number of treatment sessions ranged from 4-10, with a mean of 6.8. The success rate among all women in our study was 100% (Table 3).

In our study, the number of treatment sessions and duration of unconsummated intercourse were not found to be positively related (Table 4). One hundred sixty-seven couples having a duration of unconsummated intercourse of less than 1 year had 2-10 treatment sessions with a mean of 4.3; 128 couples having a duration of unconsummated intercourse of 1.1-3 years had 2-8 treatment sessions with a mean of 3.9; 92 couples having a duration of unconsummated intercourse between 3.1-5 years had 2-7 treatment sessions with a mean of 4.3; 49 couples having a duration of unconsummated intercourse of 5.1-10 years had 3-9 treatment sessions with a mean of 4.2; and 24 couples having a duration of unconsummated intercourse of more than 10 years had 3-10 treatment sessions with a mean of 4.8 (Table 3).

Among 460 women with vaginismus, 460 (100%) had successful sexual intercourse after treatment and at the 3-month follow-up. At the 1-year follow-up after treatment, 392 (85.2%) not only had regular intercourse but orgasm as well. Forty (8.69%) did not have orgasm but felt that intercourse was pleasurable. Twenty-eight (6.08%) women had regular intercourse but no interest. One year after treatment, 351 (76.3%)
women were pregnant. Most of the other patients stated they currently had no plans to get pregnant.

No recurrence was reported by the patients as feedback.

**DISCUSSION**

Psychological, social, cultural, personal, or physical factors may cause vaginismus[6]. For the treatment of vaginismus, different methods, from psychoanalysis to surgical interventions, have been developed[7-13]. Recently, combined therapies have been preferred for vaginismus treatment, as progressive muscle relaxation, vaginal dilatation, or psychological counseling.

**Why was a new classification system needed?**

Vaginismus is truly and easily diagnosed by a gynecologic examination[14]. The gynecologist specialized for sexual therapies should be trustworthy, gentle, tender, and understanding of the patient during the first gynecologic evaluation because of the risk of causing unnecessary pain and discomfort, which may cause avoidance of the therapies in these patients.

Frequently, vaginismus patients are classified into the four degrees of severity as firstly defined by Lamont in 1978. According to the Lamont classification, first degree is perineal and levator spasm relieved with reassurance, second degree is perineal spasm maintained throughout the pelvic examination, third degree is levator spasm and elevation of buttocks, and fourth degree is levator and perineal spasm, buttocks elevation, adduction, and retreat. Our classification system that we have used for 10 years, the “Eserdag classification”, is based on a gentle digital gynecologic evaluation after the genital inspection (Table 1). Thus, it is quite easy and objective for differentiation of the four classes, which will guide the therapy.

Interestingly, in our experience, we found severe vaginismic patients not capable of vaginal sex, who tended toward anal penetration with their partners. Thus, perineal spasm was not an essential factor in severe-degree vaginismus, as mentioned in the Lamont classification.

According to our observation, the most important factor that led to a high success rate in our patient group was the patient’s trust of her therapist. Other essential factors were performing home exercises regularly, being patient, being in love with their partner, and receiving psychological support from him.

Unconsummated intercourse can also occur due to some organic genital problems[15,16]. Forty-four patients (11.45% of the total 504 patients) were excluded from this study and managed by some surgical operations or medical treatments. Most of the organic problems of patients in our study were rigid and thick hymen, vulvar vestibulitis, vaginitis, Bartholin abscess, and vertical and horizontal vaginal septum. Thus, this finding also emphasizes the importance of a thorough gynecological evaluation for the patients with sexual problems at the beginning of the therapy.

Reissing et al. reported that vaginismus may be classified as "vaginal penetration phobia" or "genital pain disorder", or both[17]. For the patients with fourth-degree vaginismus, we used medical hypnotherapy, which was quite effective to diminish anxiety and phobia, resolve fear and facilitate relaxation and loosening of the muscles. After the hypnotherapy, desensitization and dilatation exercises were also easy to perform. We generally did a single hypnotherapy in the second interview after providing some relevant information. However, some patients may need multiple hypnotherapy sessions. We sometimes used hypnosis including sexual imagination in the last treatment session before the intercourse.
The therapy durations were quite short in our clinic. Most of the patients were cured in one week perhaps because patients presented for the treatment every day for sessions as long as 1-3 hours. Our study showed that daily treatment sessions were positively related with the success rate and a fast response. According to our experience, hypnotherapy quickens the therapy as well. This may explain why treatment duration among the severe vaginismus patients was not significantly different from that of the mild- and moderate-in-severity patients.

In this study, the number of treatment sessions was not found to be positively correlated with the duration of unconsummated intercourse. We believe this is because the most important factor in the management of vaginismus is to first make the definite diagnosis with a gynecologic examination. The duration of unconsummated intercourse did not affect the number of treatment sessions. At this point, our results did not support the findings of Jeng et al., which suggest that couples with a duration of unconsummated intercourse of up to 2 years have a better success rate\[14]. Friedman also reported results similar to those of Jeng et al.\[18].

Several studies have suggested that successful penetration alone in the treatment of vaginismus is not enough for the success, since pleasure is also an important factor\[17,19\]. In our study, at the 1-year follow-up after treatment, we asked patients whether sexual pleasure or pregnancy was achieved. According to the results, 392 (85.2%) women not only had regular intercourse but orgasm as well. Forty (8.69%) did not have orgasm but felt that intercourse was pleasurable. Twenty-eight (6.08%) women had regular intercourse but no interest. No recurrence of the problem after the therapy was reported in the long-term.

In conclusion, our study showed that in the management of vaginismus patients, the duration of unconsummated intercourse does not affect the treatment outcome. Further, a non-traumatic gynecologic evaluation is very important for definite diagnosis, determination of the degree severity and establishment of an individualized treatment modality.

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REFERENCES


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