Factors That Might Be Predictive of Completion of Vaginismus Treatment

Kadir ÖZDEL¹, Ayşegül YILMAZ ÖZPOLAT², Özge ÇERİ³, Hakan KUMBASAR⁴

SUMMARY

Objective: Vaginismus is defined as a recurrent or persistent involuntary spasm of the musculature of the outer third of the vagina that interferes with sexual intercourse. The aim of this study was to assess the level of symptoms of depression, anxiety, obsessive-compulsive symptoms, and perfectionism among patients with vaginismus, as well as to determine if these clinical variables are related to the completion of treatment.

Materials and Methods: The study included 20 women with vaginismus and their spouses that were referred as outpatients to Ankara University, School of Medicine, Department of Psychiatry, Consultation and Liaison Unit. All couples underwent cognitive behavioral therapy, which was administered as 40-60-min weekly sessions. At the first (assessment) session, the female patients were assessed using a sociodemographic evaluation form, the Hamilton Rating Scale for Depression (HAM-D), the Hamilton Rating Scale for Anxiety (HAM-A), the Maudsley Obsessive-Compulsive Inventory (MOCI), the Multidimensional Perfectionism Scale (MPS), and the Golombok Rust Inventory of Sexual Satisfaction (GRISS). The male spouses were evaluated using the GRISS. The same scales were administered after the completion of treatment to those that completed the treatment.

Results: The correlation between completion of treatment, and an elevated level of anxiety and self-oriented perfectionism was significant (P < 0.05). Among those that completed the study, depressive symptoms in the female patients improved (P < 0.05), and scale scores related to sexual functioning in both the males and females improved significantly (P < 0.05).

Conclusion: Vaginismus is not only a sexual dysfunction, but it is related to multiple components of mental health. Anxiety and a perfectionist personality trait were important factors associated with the completion of treatment; therefore, these factors should be evaluated before treatment.

Keywords: Vaginismus, depression, anxiety, therapy, outcome.

INTRODUCTION

Vaginismus encompasses a phobic reaction to insertion into the vagina and is characterized by involuntary spasm of the musculature at the outer third and neighboring area of the vagina (e.g. pubococcygeus muscles). Usually, avoidance of sexual intercourse accompanies these symptoms (APA 2000, Butcher 1999), which can even occur during gynecological examination and insertion of a tampon into the vagina (Beck 1995). Primary vaginismus is the most frequent form of female sexual dysfunction (Crowley et al. 2006), but its prevalence and incidence rates are unknown among the general population (Spector and Carey 1990). Prevalence rates among those that present to sexual dysfunction clinics vary from 5% to 17% (Bancroft and Coles 1976; Catalan et al. 1990; Hirst et al. 1996). In Sweden 1% of women were diagnosed as vaginismus during a 12-month period (Fugl-Meyer 1996); however, in Turkey vaginismus is the most common sexual dysfunction and its incidence varies from 43%-73% among those that seek treatment for sexual dysfunction (Sungur 1994; Tugrul and Kabakci 1997).

The effects of various factors on the etiology of sexual dysfunction and vaginismus have been investigated. Anxiety, quality of the marital relationship, sexual functioning of partners, and lack of knowledge about elementary anatomy and sexuality are some of the suggested factors with a probable role in the etiology of sexual dysfunction and vaginismus;
Given the above data, perfectionism may be predictive of successful treatment for vaginismus. As such, the aim of the present study was to determine if there are statistical differences in terms of the symptoms of depression, anxiety, and obsessive-compulsive disorder, as well as the level of perfectionism and sexual satisfaction between those that completed and didn’t complete treatment for vaginismus. The findings may provide additional information about the factors that are predictive of the completion of cognitive-behavioral therapy for vaginismus, which could inform us concerning relevant clinical interventions.

**MATERIAL AND METHODS**

**Participants**

The study included 20 women with possible vaginismus and their spouses that presented to Ankara University, School of Medicine, Department of Psychiatry, Consultation and Liaison Unit between December 2008 and July 2009. Inclusion criteria were as follows: age 18-45 years; minimum level of education at the elementary school level; recurrent and lifetime vaginismus, according to DSM-IV TR. Exclusion criteria were as follows: any physical, psychopathological, or relational disturbance that could severally interfere with the therapy; refusal to participate in cognitive-behavioral therapy or refusal to voluntarily participate in the study; any couple with a male partner that has a sexual dysfunction (in order to standardize the intervention). According to the exclusion criteria, 3 couples were excluded from the study. Of them, 2 couples that were living in another city and reported that they couldn’t participate in weekly therapy sessions and 1 couple did not want to participate in the therapy.

**Procedure**

During the first interview the couples were provided basic information about general human sexuality (organs and functions) and the cognitive-behavioral model of vaginismus. After informed consent was received from each participant, weekly cognitive-behavioral therapy sessions commenced. Weekly therapy sessions were 40-60 min in duration, both partners were present, and all sessions were led by the same clinician (OK). The therapy included psycho-educational and behavioral interventions, such as education about male/female sex organs, Kegel exercises, sensate focus exercises, systematic desensitization, gradual vaginal expanding, and such cognitive techniques as cognitive restructuring. Among the couples that completed the therapy, the mean number of sessions was 8.5 (range: 5-14).

The primary goal of the cognitive-behavioral therapy for vaginismus was healthy sexual intercourse with complete penetration in the absence of pain or avoidance. Non-completion of...
the treatment was defined as discontinuation of the sessions by either partner. Couples that changed their minds about the therapy modality were also considered non-completers. Of the 17 couples included, 12 completed the treatment and 5 dropped out after attending a varying number of sessions. After the second session, 1 couple dropped out of the therapy because they were trying a different type of treatment. Another couple discontinued the therapy after the fifth session because the male partner refused to continue. Three additional couples stopped coming to therapy after the 2nd, 5th, and 6th sessions without providing any reasons, and they could not be subsequently reached by phone.

All scales used in the study were administered by the same clinician after the relevant sessions. Scales were administered after the first treatment session and the session after the goal was reached (if it was). The women were administered a sociodemographic data form (administered only once, the Hamilton Depression Rating Scale (HAM-D) (Akdemir et al. 1996), the Hamilton Anxiety Rating Scale (HAM-A), the Maudsley Obsessive Compulsive Inventory (MOCI) (Erol and Savaşır 1988), the Multidimensional Perfectionism Scale (MPS) (Hewitt and Flett 1989, 1991), and the Golombok and Rust Inventory of Sexual Satisfaction Scale (GRISS) (Tuğrul et al. 1993). In addition to the sociodemographic data form, the men were administered the GRISS.

Scales

Hamilton Rating Scale for Depression (HAM-D)

This questionnaire was developed by Hamilton et al., and the validity and reliability of the Turkish version were reported by Akdemir et al. (1996). The scale consists of 17 questions with a maximum score of 53, and measures the severity of depression. Depression is scored as follows: 0-13 no depression; 14-27 mild depression; 28-41 moderate depression; 42-53 severe depression.

Hamilton Rating Scale for Anxiety (HAM-A)

This scale is a clinician-rated instrument used to assess and quantify the severity of anxiety in patients diagnosed with neurotic anxiety states. The validity and reliability of Turkish version were reported by Yazici et al. (Hamilton 1959; Yazici et al. 1998). Each scale item is rated on a 5-point Likert-type scale, ranging from 0-4; higher scores indicate greater severity of anxiety. Scores ≥17 indicate a possible anxiety disorder.

Maudsley Obsessive Compulsive Inventory (MOCI)

The MOCI is a well-established 30-item true-false questionnaire that measures obsessive-compulsive symptoms. It is comprised of 4 subscales: checking, cleaning, slowness, and doubting-conscientiousness. It was developed as a self-assessment scale by Hodgson and Rachman, and was adopted for use in Turkey by Erol and Savaşır (1988). The Turkish version has an additional subscale (rumination) and 7 items from the MMPI (Minnesota Multivariate Personality Inventory). There is no cut-off point for the Turkish version.

Multidimensional Perfectionism Scale (MPS)

The MPS is a 45-item, 7-point Likert-type (1-7) scale used to assess 3 dimensions of perfectionism: self-oriented perfectionism, socially prescribed perfectionism, and other-oriented perfectionism. Respondents rate items on a 7-point Likert-type scale to indicate their agreement or disagreement with the item content. The responses are then scored and transformed into T-scores (Hewitt and Flett 1991).

The Golombok Rust Inventory of Sexual Satisfaction (GRISS)

The GRISS is a short, 28-item questionnaire that assesses the existence and severity of sexual problems. It provides overall scores (for men and women separately) of the quality of sexual functioning within a relationship. In addition, subscale scores for impotence, premature ejaculation, anorgasmia, vaginismus, non-communication, infrequency, male and female non-sensuality, and male and female dissatisfaction, can be obtained. Individuals rate each item on a 0-4 scale. The Turkish version was reported to be valid and reliable for use in Turkey (Tuğrul et al. 1993).

Statistical analysis

Sociodemographic data and scale scores for the therapy completer and non-completer groups were compared using the Mann-Whitney U test. Alterations in the scale scores of the women with vaginismus that completed the study were analyzed using the Wilcoxon signed-rank test. To detect possible correlations between the sociodemographic variables and scale scores Spearman's correlation test was used. Statistical significance was set at P < 0.05. SPSS (Statistical Package for Social Sciences, Chicago, IL) was used for all analyses.

RESULTS

Sociodemographic variables (i.e. age, level of education, duration marriage) did not differ significantly between the 2 groups (completers and non-completers) (P > 0.05). All scale scores (HAM-D, HAM-A, MOCI, MPS, and GRISS) for the 2 groups are shown in Table 1.

The differences in HAM-A total, MPS total, and MPS self-directed subscale scores between the 2 groups were significant; these scores were higher in the women that did not complete the study. Although there wasn't a difference in GRISS total score between the 2 groups, the mean GRISS female dissatisfaction subscale scores in the women that did not complete the study was lower, indicating that those women
had a higher level of sexual satisfaction (score: 2.6 ± 1.51, 
P = 0.04). In all, 2 women (1 in the completer group and 
1 in the non-completer group) had HAM-D scores >16 (18 
and 21, respectively). No specific intervention for depres-
sion was provided to these women; however, their depression 
scores decreased to the level of 10 point at the end of the 
study.

There wasn’t a correlation between the demographic vari-
ables and the scale scores (HAM-D, HAM-A, MOCI, and 
GRISS) in either of the 2 groups. Table 2 shows the changes 
in HAM-D, HAM-A, MOCI, and GRISS scores during the 
study.

As shown in Table 2, HAM-D total score (0.006) and MOCI 
cleaning subscale score (P = 0.035) in the women that com-
pleted the treatment decreased significantly. GRISS total 
score (P = 0.002), non-communication subscale score (P = 
0.04), vaginismus subscale score (P = 0.002), and anorgas-
mia subscale score (P = 0.01) decreased during the study, 
indicating improved functioning in the women. Among the 
men, GRISS total score and dissatisfaction subscale score at 
the end of the study were significantly lower than at baseline 
(P = 0.006 and P = 0.004, respectively).

DISCUSSION

Rosenbaum (2005) reported that anxiety is the primary com-
ponent of vaginismus; however, it remains unclear if a high 
level of anxiety is a cause of sexual dysfunction or a conse-
quency of it. In the present study baseline anxiety levels dis-
ffered between the completer and non-completer groups (P 
< 0.05), suggesting that anxiety played a role in completing 
the treatment; however, the difference in anxiety levels be-
tween baseline and at the end of the study was not statistically 
significant (P = 0.061). As such, evaluation of the level of 
anxiety at treatment onset and subsequent use of cognitive-
behavioral techniques specific to anxiety might increase the 
likelihood of the completion of treatment. As antidepressant 
drugs have some negative effects on arousal and orgasm stages 
of the sexual response, in patients with an anxiety disorder the 
pros and cons of such treatment must be carefully considered 
(Yetkin 1999).

Another variable that differed between the completer and 
non-completer groups was the baseline level of perfectionism; 
in particular, MPS self-oriented perfectionism subscale scores 
differed significantly (points in favor of non-completer’s 
group (P = 0.009). Beck (1995) reported that many patients
benefitted from a simple reminder that they should not strive for perfection when doing homework. Other studies report that the women with vaginismus couldn’t let themselves engrossed in the sexual act and so were playing a spectator role during the sexual activity (Yetkin 1999; Bayrak 2006); accordingly, it may be beneficial to consider a patient’s perfectionism and controlling attitudes during therapy. Controlling attitudes in individuals with obsessive characteristics or symptoms might result in their avoidance of sexual activity due to the fear of failure. It was also reported that obsessive-compulsive symptomatology could negatively affect marital and sexual relationships, as it can hinder intimacy (Hoover and Insel 1984). Among the women in the present study’s completer group, MOCI cleaning subscale score decreased, indicating that there may be a relationship between fear of contamination obsession and sexuality. Previous studies reported that contamination-type obsessions—especially those associated with bodily secretions—were a risk factor for sexual dysfunction (Freund and Steketee 1989). Aksaray et al. (2001) observed that women with contamination-type obsessions were sexually more insensitive and avoidant.

In the present study HAM-D scores in the women in the completer group decreased significantly. Although baseline HAM-D scores were not at the level of clinical depression, the observed decreases might have been due to improved self-esteem, which often seen low in the vaginismus patient. (Kaplan 1988). GRISS overall sexual satisfaction, vaginismus, and anorgasmia subscale scores improved in all of the women in the present study. Overall, GRISS scores in the men also improved, but this improvement was primarily related to decreases in the dissatisfaction subscale scores, indicating the importance of coitus to men’s satisfaction. In addition, GRISS non-communication subscale scores in the women decreased, which might have been due to the use of therapeutic communication enhancement exercises. The present study has some limitations. Firstly, the study sample was small, which limits the generalizability of the findings related to the factors that were observed to be predictive of the completion of treatment; however, the literature includes few similar studies that have longitudinally assessed larger patient populations (Wijma et al. 2007). Secondly, although it was acceptable for the purpose of this study, vaginal penetration without pain cannot be the only treatment goal. Thirdly, 3 of the couples that did not complete the study could not be contacted. However it is not expected according to the exercise and intervention stages but there still is a possibility that penetration without pain and avoidance has been taken place. In conclusion, a high level of anxiety and perfectionism, especially self-directed perfectionism, negatively affected the treatment completion rate. As such, cognitive components of therapy should include interventions specific to anxiety and perfectionism. The observed decreases in HAM-D scores in the women that completed treatment were considered primarily an indirect consequence of the resolution of sexual dysfunction. In addition to behavioral techniques, cognitive interventions that target perfectionist, rules, and expectations [as intermediate beliefs] during the early phases of treatment may increase the likelihood of treatment completion.

REFERENCES


