

RESEARCH  
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## A Comparison of the Effectiveness of Hypnotherapy and Cognitive Behavioral Therapy in the Treatment of Primary Vaginismus

### ABSTRACT

**Objective:** This study compared the therapeutic effectiveness of hypnotherapy and cognitive behavioral therapy in patients with primary vaginismus previously assessed by a psychiatrist and a gynecologist.

**Methods:** We performed as a single-center, cross-sectional study in 35 patients with primary vaginismus.

**Results:** Successful coitus was achieved by 19 (95%) individuals in the hypnotherapy group and by 14 (93.3%) members of the cognitive behavioral therapy group. These success rates were similar ( $p=0.681$ ). The mean number of sessions until successful coitus was significantly lower in the hypnotherapy group ( $p=0.000$ ).

**Conclusions:** Hypnotherapy and cognitive behavioral therapy can be applied with similar high success rates in the treatment of vaginismus. However, success may be achieved with fewer sessions with hypnotherapy.

**Keywords:** Vaginismus, Hypnotherapy, Cognitive Behavioral Therapy.

## Vajinismus Tedavisinde Hipnoterapi ve Bilişsel Davranışçı Terapi Etkinliğinin Karşılaştırılması

### ÖZET

**Amaç:** Bu çalışmanın amacı vajinismus tedavisinde hipnoterapi ve Bilişsel Davranışçı Terapi (BDT) etkinliklerinin karşılaştırılmasıdır.

**Gereç ve Yöntem:** Primer vajinismuslu 35 hastada tek merkezli, kesitsel bir çalışma olarak gerçekleştirildi.

**Bulgular:** Hipnoterapi grubundaki 19 (% 95) birey ve bilişsel davranışçı terapi grubundaki 14 (% 93,3) kişi tarafından başarılı bir ilişki sağlandı. Bu başarı oranları benzerdi ( $p = 0,681$ ). Hipnoterapi grubunda başarılı birleşmeye kadar ortalama seans sayısı anlamlı olarak daha düşüktü ( $p = 0.000$ ).

**Sonuç:** Hipnoterapi ve bilişsel davranışçı terapi vajinismus tedavisinde benzer yüksek başarı oranları ile uygulanabilir. Ancak hipnoterapi ile daha az seans ile başarı elde edilebilir.

**Anahtar Kelimeler:** Vajinismus, Hipnoterapi, Bilişsel Davranışçı Terapi.

## INTRODUCTION

Vaginismus is a common, well-described, and important sexual function disorder widely reported in the sexology literature (1,2).

Vaginismus is defined as the penis, finger, or any other object being unable to enter the vagina, even though the woman actively wishes such penetration to occur. Varying levels of involuntary pelvic muscle contraction, (phobic) avoidance and anticipation or fear of pain may be observed (1,2). The condition may be primary or secondary in form. Primary or lifelong vaginismus is defined as permanent inability to experience penetrative intercourse due to involuntary pelvic muscle contractions. In contrast, secondary or acquired vaginismus refers to the loss of a previously existing ability to have intercourse following a non-symptomatic period. This form can also occur as a complication of female dyspareunia.

The most common form in the literature is primary vaginismus (3). This may cause significant anxiety, and is also an important source of intrafamilial problems. Concealment of the problem due to concerns over privacy leads to further worsening of outcomes. Various methods are applied in the treatment of vaginismus, and varying success rates have been reported (4,5). While several studies have investigated cognitive behavioral therapy (CBT) in the treatment of vaginismus (6-12), the number of studies involving hypnotherapy is very low, and with one exception these have all been in the form of case reports (13,14). Our research revealed only one study comparing hypnotherapy and CBT in the treatment of vaginismus (15). The present study compares our results in cases of vaginismus undergoing hypnotherapy and CBT.

## MATERIAL AND METHODS

**Study Design and Setting:** Diagnosis of vaginismus was based on DSM-V diagnostic criteria (5). All our patients were primary vaginismus cases.

Interviews and hypnotherapy were formed by the same hypnotherapist (KT) in all sessions. Patients were first told about the therapeutic methods being considered for application. Participants determined the method to be applied, and informed consent forms were obtained accordingly. Coitus within the recommended process was adopted as a criterion of success. Treatment was concluded following two successful acts of coitus. Successful acts of coitus was accepted as the penis being able to enter the vagina without pain and discomfort.

In the hypnotherapy group (20 women) the patient and her partner were requested to attend the first session together. Both were given simultaneous information about hypnosis during the initial evaluation process. Any questions concerning hypnosis were answered. Information concerning male and female sexual anatomy and

physiology was given to both partners in the first session. Sexual fears and inaccurate mental images were identified by means of a detailed sexual history.

The principal incorrect ideas identified were 1 – The penis will cause injury after entering the vagina, or injury involving severe pain, excessive bleeding, and irreparable damage to the hymen. 2 – The vagina being very small or very narrow. 3 – the penis being very large. 4 – Negative attitudes toward sexual relations: the idea that sexuality is something shameful or dirty. 5 – Negative attitudes toward male sexuality; the penis, testes and/or sperm being regarded as repulsive.

Negative thought patterns used by the subject were particularly investigated while sexual history was being taken, and mental visualizations and positive suggestion patterns were employed in correcting these during the therapeutic process. Particular care was taken during the initial evaluation process to use language patterns that would encourage the subject. Suggestions were made during almost all sessions concerning pleasurable images of sexual scenes and events in order to increase sexual stimulation. All hypnotherapy sessions were administered in the form of 60-min appointments. All hypnotherapy sessions were held at weekly intervals, and the subject was given positive ideation homework. Subjects were taught autohypnosis in order to perform this homework more comfortably. Subjects experiencing difficulty with autohypnosis were asked to perform sexual visualization. Attempted coitus in sexual relations was prohibited until the patient was able to imagine comfortable penile penetration of the vagina. However, individuals able to imagine such relations without anxiety and with pleasure were encouraged to attempt coitus. During this process, the male partner was asked to assist his partner and not to pressurize her into coitus without her being ready for relations.

**Inclusion and Exclusion Criteria:** Patients presenting to a physician for the first time are not included in treatment sessions in our clinic. For that reason, patients who had been treated by at least one psychiatrist, but in whom success had not been achieved, were enrolled. In order to rule out anatomical problems, all patients were examined by a gynecologist before treatment.

**Intervention:** The ‘visual fixation, verbal suggestion method was employed during hypnosis. This was followed by relaxation hypnosis. The subject was instructed to perform positive imagining. The reframing technique was applied in cases of history of sexual abuse or rape, or of first night fear. Posthypnotic suggestion was given before subjects were released from hypnosis to enable them to attend the next session in a greater state of relaxation and to enter deeper hypnosis within a shorter period of time.

Standard methods were applied in subsequent hypnosis sessions. Following relaxation hypnosis, subjects enrolled for hypnosis received suggestion concerning establishing sexual fantasies with their partners and being able to experience this comfortably in an environment of their choosing. In addition, all subjects were taught autohypnosis and given homework concerning the creation of these fantasies in their own homes. Subjects were advised not to attempt coitus with their partners so long as they were unable to perform these measures without anxiety and stress, and until they experienced pleasure from them.

Similarly to the hypnotherapy group, the cognitive behavioral group (15 women) were asked to attend the first session together with their partners. Both partners were given information, together, about the therapeutic process. During the first session, in order to determine the module at which treatment should commence, the patient was asked questions about her vaginismus (Module 1: Nothing can enter the vagina. Module 2: Nothing belonging to another person can enter the vagina. Module 3: The penis cannot enter the vagina). Each of these modules lasts approximately four sessions. If the individual is to start from the first module, the process is concluded after 11 sessions. Each session was applied for 60 min, on a once-weekly basis.

Once the patient's status had been determined, treatment was administered based on the relevant CBT module. Kegel exercises, breathing exercises, finger exercises, systematic desensitization, the parking technique, and limited penile penetration were generally employed in these modules. The patient was asked to employ the finger technique, first using her own fingers, and afterward to perform the exercises with her partners' fingers. Partners were advised not to attempt coitus during this process. However, they

were informed that they could attempt coitus once they were able to perform these exercises comfortably, without anxiety and stress.

**Statistical Tests:** The research was performed as a single-center, cross-sectional study. Statistical analysis was performed on SPSS 20 software. Since the data were not normally distributed, numerical data were expressed as mean plus standard deviation (Mean±SD), and categorical data were expressed as number and percentage values. The t test (Mann-Whitney U test) was used to compare numerical data, and the chi-square test in the comparison of categorical data. p values ≤0.05 were regarded as statistically significant.

**Ethical Approval:** The records for vaginismus patients presenting to the Medical Faculty Traditional and Complementary Medicine Hypnosis Polyclinic between July 2013 and August 2018 were retrieved retrospectively, and patient characteristics and treatment outcomes were subjected to statistical analysis and comparison. Ethical approval for the study was granted by the faculty ethical committee (Date:30.05.2019, Number: B.30.2.ATA.0.01.00).

## RESULTS

The study commenced with 42 patients with primary vaginismus, 24 in the hypnosis group and 18 in the CBT group. Four members of the hypnosis group discontinued treatment (two after the first session, one after the second session, and one after the fourth session), and three members of the CBT group also discontinued treatment (one after the first session, one after the second session, and one after the third). Data were evaluated for the remaining 35 patients (20 receiving hypnosis, 15 receiving CBT).

Patients' sociodemographic data and results are shown in Table 1.

**Table 1.** Patients' sociodemographic characteristics and results

Parameter	Hypnosis		CBT		p
	n	%	N	%	
<b>Education</b>					
Primary	0	-	1	6	0.165
High school	7	35	8	53	
University	13	65	6	40	
<b>Occupation</b>					
Housewife	9	45	7	46.6	0.928
Civil servant	8	40	4	26.6	
Self-employed	3	15	4	26.6	
<b>Sexual history</b>					
Presence of abuse	6	35.2	5	33.3	0.517
Presence of rape	1	5.8	0	-	0.571
Negative emotion burden concerning the first night	10	58.8	10	58.5	0.627
	<b>Mean±SD</b>		<b>Mean±SD</b>		
Age	30±5.9		31±6.8		0.299
Length of marriage	4±3.2		2.3±2.1		0.109
Number of sessions	4.2±1.9		10.7±1.6		<0.001
	<b>n (%)</b>		<b>n (%)</b>		
Discontinuation of treatment n (%)	4 (16.7)		3 (16.7)		0.665
Success rate n (%)	19 (95)		14 (93.3)		0.681

The groups were similar in terms of education level, occupation distributions, prevalence of factors related to sexual history, and length of marriage.

Treatment discontinuation rates were similar between the groups. At the end of the sessions, successful coitus was achieved by 19 (95%) individuals in the hypnotherapy group and by 14 (93.3%) members of the CBT group (Table 1). These success rates were similar ( $p=0.681$ ). The mean number of sessions until successful coitus was significantly lower in the hypnotherapy group ( $p<0.001$ ).

## DISCUSSION

Research into women diagnosed with vaginismus have shown that have a fear of pain and extreme discomfort, excessive bleeding, tearing or rupture, fear of the penis remaining trapped inside them, fear of fainting or dying, and feelings of repulsion or disgust.<sup>16-21</sup> Since sexual behavior and beliefs are highly susceptible to societal factors, cultural influences may be clearly visible in sexual function disorders (22). Male-centered Eastern cultures in particular teach girls that sexuality is something to be performed only for reproduction, as an act very important to the spouse's pleasure and satisfaction, but not as a source of pleasure (23). Lack of sex education, women being unacquainted with their own sexual organs, exaggerated importance attached to virginity, sexual experience beginning with direct coitus rather than developing in stages, and taboos concerning the general conception of sexuality are all regarded as reasons why vaginismus is more prevalent in Eastern cultures (20,22).

Bridal virginity is of particular importance in traditional Turkish families, and the bride is obliged to prove her virginity to her husband and his family on the first night. Such a tradition exacerbates anxiety in sexual relations, particularly for couples with insufficient knowledge and no experience of sexuality. Traditionally, an older female member of the family describes her own first night experience to the bride to be (24). Clinical observations suggest that this transmitted information is both unrealistic and catastrophic, suggesting that sexual relations cause unbearable pain to the woman and discomfort lasting several days. It is thought that such misinformation can lead to sexual function disorders or exacerbate sexual problems (13,14).

The reported prevalence of vaginismus in sexual function disorder clinics is 5-17% (26,27). The global prevalence varies, but vaginismus represents 43-73% of all sexual function disorders presenting for treatment in Turkey, and is the most common such disorder (28-30).

Incidences of divorce, depressive emotions, and low self-esteem are also high in patients with vaginismus (15). It is therefore of great importance for treatment to be initiated immediately in these patients.

If somatic causes are eliminated, and if sufficient treatment is administered, then the prognosis in vaginismus is excellent. Studies have reported success rates of 78-100% (31,32). Studies have also reported acceptable and similar effectiveness for various therapeutic techniques (31,32). The treatments currently most commonly applied are; Kaplan's traditional, symptom-focused, and short term-therapies consisting of muscle relaxation techniques using systematic desensitization and relaxation (3). Methods such as sex therapy and CBT are widely employed in the treatment of vaginismus (3). However, a lengthy treatment period may be difficult for the patient and her spouse. The need for further studies in order to increase the success of treatment and reduce the duration thereof has been emphasized (33). Another modality successfully employed in vaginismus is hypnotherapy (15). Studies have reported that hypnotherapy can be applied with a high rate of success (13-15). Studies in the international literature have investigated the effectiveness of hypnotherapy in the treatment of vaginismus, but only one has compared the results of hypnotherapy with those of CBT (15). Our study compared the outcomes of hypnotherapy and CBT in the treatment of vaginismus, and elicited important results.

Success rates of 78-100% have been reported in previous studies (31,32). Sughayir reported 100% success in both hypnotherapy and CBT groups (15). We also achieved high and similar success rates in our hypnotherapy and CBT groups (Table 1). However, the number of sessions required until achievement of full coitus was significantly lower in the hypnotherapy group than in the CBT group ( $p<0.001$ ). This finding indicates that hypnotherapy may be a more suitable option for patients without reservations concerning hypnosis and thought to be possibly non-compliant with treatment. It should also be remembered that a short duration of treatment will also reduce costs.

There is no doubt that sexual relations are not necessarily limited to successful coitus. Sexual satisfaction is important in terms of harmonious spousal relations. One study showed a significant increase in sexual satisfaction in patients receiving hypnotherapy and behavioral therapy, together with a decrease in spouses' anxieties concerning sexual relations, although no difference was observed between the groups (15). Sexual satisfaction analysis was not performed in the present study since the focus in therapy sessions was primarily on successful coitus.

One important problem in the treatment of vaginismus is the therapeutic process being discontinued halfway through. Kabakçı and Batur applied CBT to 28 women diagnosed with vaginismus, and their spouses, for a period of six months, and reported that 14 couples discontinued treatment in the first sessions (18). Other studies

have also reported that large numbers of patients discontinue treatment (15). Researchers have speculated that this early discontinuation may be due to very rapid treatment expectations and fears concerning the results of treatment (15). In addition, it has been suggested that levels of anxiety and perfectionism in patients may also be important factors in treatment not being completed, and that these factors may need to be considered in the therapeutic process (4). Discontinuation of treatment should not therefore be regarded as

failure. Discontinuation rates in our study were relatively low (Table 1), and were similar between the two groups.

### CONCLUSION

Hypnotherapy and CBT can be applied with similar high success rates in the treatment of vaginismus. However, success may be achieved with fewer sessions with hypnotherapy.

**The authors declare no conflict of interest.**

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