## Vaginismus treatment

## Hypnotherapy versus behavior therapy

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## **ABSTRACT**

**Objective:** To investigate the effectiveness of hypnotherapy in the treatment of vaginismus compared to behavior therapy.

**Method:** A consecutive sample of 36 women with vaginismus (DSM-IV criteria) referred to the out-patient psychiatry clinic at King Abdul-Aziz University Hospital in Riyadh between 1999-2003 were divided into 2 groups for either treatment on a random basis. A female psychologist independently and carefully assessed patients before and after treatment. Patients were treated until they achieved satisfactory sexual intercourse.

**Results:** Although both behavior therapy and hypnotherapy were successful in treating vaginismus,

hypnotherapy performed better than behavior therapy in reducing the level of the wife's sex-related anxiety and in improving the husband's sexual satisfaction score. Success tended to occur faster in women treated with hypnotherapy as they received fewer treatment sessions. Women with vaginismus can be successfully treated by hypnotherapy without simultaneous treatment of their husbands.

**Conclusion:** Hypnotherapy can provide an acceptable time and cost effective therapeutic tool that helps resolve vaginismus and improves sexual satisfaction in both spouses.

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V aginismus is a recurrent involuntary contraction of the perineal muscles surrounding the outer third of the vagina when vaginal penetration with a penis, finger, tampon, or speculum is attempted.<sup>1</sup> In some females, even the anticipation of vaginal penetration may result in muscle spasm. There are no epidemiologically sound incidence or prevalence estimates.<sup>2</sup> Approximately 10-20% of women seeking professional assistance for some sexual dysfunction suffer from vaginismus.3 However, is commonly underreported, underdiagnosed, and overlooked.4 Among the etiological factors that have been implicated are sexual and physical abuse, negative attitude to sexuality, and relationship difficulties. However,

critical review of the literature has concluded that the available studies are methodologically flawed so that adequate conclusions concerning etiology cannot be drawn.5 Vaginismus may lead to husband's erectile failure, premature ejaculation, or both. There is a high risk of disruption of marital depressive emotions relationship, self-esteem in the patients involved. immediate therapeutic intervention is essential. One of the most consistent observations in the literature has been that the sexual response of women with vaginismus remains unaffected if penetration is not attempted or anticipated.<sup>5</sup> Contemporary treatment approaches to vaginismus have primarily targeted the perceived immediate cause, the muscle spasm

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that prevents intercourse.2 Behavior therapy was employed most frequently and the technique of Masters and Johnson<sup>6</sup> prevailed, sometimes in combination with other behavior modification techniques. Provided that somatic causes are ruled out and treatment is adequate, vaginismus is one of the sexual dysfunctions for which the prognosis is excellent. Most authors report a success rate between 78-100%. Fuchs, during a 10-year period, treated 71 women suffering from severe vaginismus using hypnotic desensitization with reasonable success. He suggested hypnosis as a method for relaxation and an aid for desensitization. Recent research indicates that mental imagery with positive suggestions can be used to enhance sexuality, and to treat sexual dysfunction.8 A meta-analysis of studies on vaginismus revealed that the effectiveness of the different treatment modalities is acceptable and similar, but any conclusion about time and cost-benefit ratios could not be drawn.<sup>2,9</sup> Most of the previous studies were uncontrolled survey studies or case descriptive studies with unspecified populations and limited statistical evaluation.<sup>2,3,9</sup> Few studies used pre-post treatment design or between group designs. We were motivated to carry out the present study after a rapid success of hypnotherapy in the treatment of 2 couples that presented with unconsummated marriage secondary to vaginismus. The study was designed as a step further to investigate the effectiveness of hypnotherapy compared to behavior therapy in the treatment of vaginismus. An additional value of this study is the use of mental imagery reprograming as a hypnotherapeutic technique that positively reframes and reforms the client's mental images and cognitive experiences of sexual perception to alleviate the fear that induces vaginismus and to enjoy normal sexual intercourse.

**Methods.** From December 1999 to October 2003, all Saudi married women referred to the outpatient psychiatric clinic at King Abdul-Aziz University Hospital in Riyadh, Kingdom of Saudi Arabia due to vaginismus were consecutively recruited. Thirty-six women fulfilled the criteria for inclusion in this study: vaginismus according to the criteria of the Diagnosis and Statistical Manual of Mental Disorders, (DSM-IV).1 Those with somatic causes were excluded. Subjects were referred by many specialties including gynecology, general practice, family medicine and psychiatry as well as self-referrals. The same psychiatrist and a female psychologist interviewed all patients, providing informed consent. Patients were on average 23 years old (range 17-40; SD 6.78). They had suffered from vaginismus for several months (range 4-47), mean 9.52, (SD 10.32). After being assured of confidentiality, the patients were encouraged to freely discuss their complaints with a

focus on the evolution of a psychosexual construct system. Details of personal and marital histories were also obtained. A 5-point Likert type scale modified from the Brief Index of Sexual Functioning for Women BISF-W<sup>10</sup> and from the Brief Sexual Function Inventory BSFI<sup>11</sup> were used to assess the wife's sex-related anxiety and both spouses' sexual satisfaction before and after treatment. Wife sex-related anxiety: 0 = no anxiety, 1 = seldom, 2 = sometimes, 3 = usually, 4 = always.Sexual satisfaction: 0 = very dissatisfied, 1 = mostlydissatisfied, 2 = neutral, 3 = mostly satisfied, 4 = very satisfied. After the first consultation patients were assigned on an alternative basis to either hypnotherapy group or behavior therapy group. There were no significant differences between the 2 groups in terms of sociodemographic and clinical characteristics, Table 1.

Hypnotherapy group (18 women). Trance was induced psychologically by standard eye fixation and arm levitation technique. After trance induction, in the first session, sexual fears were carefully examined and faulty mental images were explored. The main recognized faulty perceptions and cognitions were: 1. Violence of penile-vaginal penetration: rupture, damage, pain, bleeding. 2. Vagina was too small, too narrow or too tight. 3. Negative attitude to sex (filthy, shameful ...) 4. Disgust for the penis, testis or semen. We looked for mental images reflected in the client's speech patterns, then we used these to invite the client to activate her imagination and to enter into the inner experience beyond the conscious rational and reality-oriented mental activity, for example, one of the clients visualized her hymen as a very rigid barrier which during the hypnotherapy session transformed into a fold of breakable mucous membrane. Verbal interaction was encouraged all along, thus getting constant feedback from the patient so that the hypnotic suggestions could be accommodated to her ongoing mental experience. There was suggestions for pleasurable visual images of sexual scenes and events to increase sexual arousal. Hypnotherapy sessions were carried out once a week (45-60 minutes/session) and in between sessions patient was encouraged self-hypnosis to increase her sexual fantasies and to enforce positive self-beliefs. Under self-hypnosis, the client employs imagery to focus on negative states, while at the same time learning to identify cognitive accompanying irrational ideas or distortions. Next, the client imagines a more favorable or constructive emotional/behavioral sequence and concurrently experiences more rational and realistic thoughts associated with the more positive outcome states. When full penetration of the penis could be imagined without anxiety, the patient was then asked to apply it in reality with her husband, the situations that she had imagined successfully.

**Table 1** - Sociodemographic and clinical characteristics before treatment.

Variable	Behavior therapy (n = 15)	Hypnotherapy (n = 16)	P-value
Age (mean ± SD) / years	$21.2 \pm 2.6$	$21.7 \pm 2.4$	NS
Education / years 12 > 12	6 9	7 9	NS
<b>Residence</b> Rural Urban	11 4	13 3	NS
Occupation Housewife Student Employee	3 10 2	4 11 1	NS
Duration of the illness/months (mean $\pm$ SD)	$11.1 \pm 4.5$	$10.6 \pm 3.9$	NS
Severity of sex-related anxiety (BISF-W Scale)	$3.4 \pm 0.9$	$3.7\pm0.5$	NS
Sexual satisfaction (BISF-W Scale)	$1.5 \pm 0.7$	$1.5\pm0.6$	NS

Table 2 - Wife's sex-related anxiety and sexual satisfaction scores for both spouses before and after treatment.

Scores	Treatment				
	Behavior therapy $(n = 15)$		Hypnotherapy $(n = 16)$		
	Before Mean ± SD	After Mean ± SD	Before Mean ± SD	After Mean ± SD	
Wife's sex- related anxiety	3.4 ± 0.9 p<	$1.5 \pm 0.5$ $0.001$	3.7 ± 0.5 p< 0	1.0 ± 0.7	
Wife's sexual satisfaction	$1.5 \pm 0.7$ p<	$2.9 \pm 0.6$ $0.001$	$1.5 \pm 0.6$ p< 0	$3.6 \pm 0.5$	
Husband's sexual satisfaction	$0.8 \pm 0.4 \\ p <$	$0.001$ $2.5 \pm 0.5$	$0.7 \pm 0.6$ p< 0	$3.5 \pm 0.5$	

Behavior therapy group (18 women). After the initial interview the spouses were seen together. Graded desensitization approach with "Masters and Johnson" techniques<sup>6</sup> was suggested aimed at recognizing and reducing the wife's performance anxiety and increasing her pleasure and confidence. Vaginal intercourse was prohibited for the first 2 weeks during which spouses were encouraged to take turns in caressing each other avoiding genital areas initially "sensate focus." The woman was also helped to practice muscle relaxation to desensitize herself gradually by inserting her finger into her vagina. The sessions were once a week (45-60 minutes).

Patients, in both groups, were treated until symptoms abated. During the treatment period no additional help was offered (for example, pharmacotherapy, marital therapy ...). All patients were independently and carefully assessed by a

female psychologist before and after treatment. Pre and post-treatment results for each group and for both groups were compared.

Results on women sexual anxiety and both partners' sexual satisfaction scores were presented as means ± standard deviation. Within-group comparisons of before versus after treatment scores were carried out using the Wilcoxon test. Between group changes in scores were compared using the Mann-Whitney test. A p-value less than 0.05 indicates statistical significance.

**Results.** During the study period, 3 women in the behavior therapy group were excluded; 2 were divorced and one traveled outside Riyadh City. Two patients in the hypnotherapy group dropped out after the second session; both expressed ambivalent emotions toward their husbands. Table 2 shows the within group treatment effect. In both groups there were significant improvements in the 3 variables: wife's sex-related anxiety, wife's sexual satisfaction and husband's sexual satisfaction. Between groups comparison showed that hypnotherapy performed better than behavior therapy in reducing the level of wife's sex-related anxiety, the mean  $\pm$  SD score for changes were 2.7 $\pm$ 0.5 and 1.9 $\pm$ 0.6, p=0.0015. The mean ± SD change in wife's sexual satisfaction scores was  $2.1\pm0.5$  for patients assigned to hypnotherapy and  $1.5\pm0.8$  for behavior therapy group and the difference between the 2 means was statistically significant, p=0.0123. Similarly, the corresponding results for mean ± SD change in husband's sexual satisfaction scores were 2.7±0.5 and 1.8±0.6 for husbands of the wives treated with hypnotherapy and behavior therapy, and the difference between the 2 means was significant p=0.0003. Success tended to occur faster in women treated with hypnotherapy as they received significantly fewer treatment sessions (mean  $\pm$  SD  $4.7 \pm 1.26$ ) than patients on behavior therapy (mean  $\pm$  SD 10.0  $\pm$  1.22) *p*<0.001. No significant correlation was found between success of treatment and any of the variables from the subjects' sexual case histories.

**Discussion.** Patient's personality, motivation, and shame are possible confounding factors in this study. However, given the alternating randomized method of assigning the patients to either group of treatment, the effects of these variables on the validity of the comparison can be considered negligible. Drop out rate was 13.9%. In the previous studies, drop out rate varies between 1.2-47.8%.3 In the hypnotherapy group drop out occurred after the second session which conforms with recent findings by Kabakci and Batur<sup>12</sup> who reported that most of the couples who seek therapy for vaginismus either attend treatment until symptoms end, or they quit after the first or second session. Possible explanations for early abandonment in this study include: patients' unrealistic expectations of very rapid improvement and/or patients were afraid of the success and it's consequences. However. abandoning therapy is not necessarily a therapeutic failure.

The results indicate that both behavior therapy and hypnotherapy were successful in treating vaginismus. Success in this study includes not only achieving coitus but also improving quality of sexual experience for both spouses. Most of the previous studies reported similar excellent results of with high percentage of patients maintaining their achievement without evidence of symptom substitution.<sup>2,3,7,9</sup> However, success in this study tended to occur faster with hypnotherapy than with behavior therapy and hypnosis tended to enhance significantly better sexual satisfaction in

both spouses than behavior therapy. A possible explanation for this finding includes vaginismus, from a hypnotherapy point of view, is considered as a protective symptom reflecting an existing conflict in the patient's subconscious mind. Hypnosis can set aside the usual perception of reality assisting the patient to bypass her shame and guilt feelings and defense mechanisms. Patient's suggestibility is heightened under hypnosis leading to quicker achievement of therapeutic goals. While psychosexual conflicts deal with the most tender and the most shame-inducing feelings, sexual memories and fantasies are the most pleasurable feelings. Under hypnosis, patients can perceive sexual intercourse (with penile-vaginal penetration) as a natural pleasurable experience and when deeply attached with such pleasurable feelings the subconscious mind can reawaken the natural neuropsychological responses responsible for sexual interest, desire, and stimulation making sexual intercourse more pleasurable and less fearful or shameful. Thus, hypnotherapy can achieve rapid emotional cognitive and attitudinal positive reconstructs that are rapidly reflecting on the patient's sexual behavior. Sexual imagery has been found to act as a communication process between perception, emotion, thinking and physiological changes. Empirical evidence indicates that sexual imagery can be so vivid that the physiological response can cause increased heart rate, a rise in temperature, rapid breathing, vasocongestion, and even orgasm.<sup>13</sup>

Behavior therapy views vaginismus as a conditioned fear that causes spasm of the vagina and depends on deconditioning of the learned response through gradual desensitization a process that requires considerable effort and time before it shows its success. Behavior sex therapy is likely to be successful if both spouses are highly motivated and if the dysfunction is based on performance anxiety.

Hypnotherapy and behavior therapy are not mutually exclusive and can be natural compliments to each other. However, in the present study hypnotherapy involved more than what is considered as imaginal systemic desensitization of sex-related anxiety. Compared to cognitive-behavior therapy, hypnotherapy is more suitable for the less intelligent.

In conclusion, hypnotherapy can provide an acceptable cost and time effective therapeutic tool that helps resolve vaginismus and improves sexual satisfaction in both spouses, particularly when time and finances are significant considerations. Women with vaginismus can be treated by hypnotherapy without simultaneous and direct treatment of their husbands. However, great caution should be taken in hypnotherapy as there is little control over when, how and what kind of sexual images would flood

into the patient's mind. Follow-up is necessary to ensure enduring normal sexual adjustment. To confirm the findings of this study a multicenter study with larger sample size and follow-up would be necessary. Finally, there is a value for psychiatrists, psychologists and gynecologists to be trained in hypnotherapy.

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