Copyright 2004 by the
Colegio Oficial de Psicólogos. Spain

Psychology in Spain, 2004, Vol. 8. No 1, 106-121

COGNITIVE-BEHAVIOURAL TREATMENT OF A CASE OF VAGINISM AND PHOBIA ABOUT PELVIC EXAMINATION

María Eugenia Olivares Crespo[1] and Rocío Fernández-Velasco[2]
Universidad Complutense of Madrid. [1]Faculty of Psychology. [2]Clinical and Health Psychology Unit

The present article describes the cognitive-behavioural treatment of a woman with vaginism and specific phobia about gynaecological examination. The treatment took place in the Clinical Psychology Unit of the U.C.M. (Madrid) and consisted of 34 sessions (28 individual and 6 with the couple) on a fortnightly basis over a period of 12 months. The results of the intervention persisted after a period of follow-up, which proves the effectiveness of the intervention. The patient was referred from the "Hospital Clinico San Carlos", Madrid, where she had been assigned to a sterility treatment programme. Having got over the psychological and medical treatment, the patient is currently pregnant.

En el presente artículo se describe el tratamiento cognitivo-conductual de una mujer con vaginismo y fobia específica a la situación de exploración ginecológica. El tratamiento se lleva a cabo en la Unidad de Psicología Clínica y de la Salud de la Universidad Complutense de Madrid; consistió en 34 sesiones (28 individuales y 6 en pareja) con una distribución periódica bisemanal a lo largo de 12 meses. Los resultados de la intervención se mantienen tras el periodo de seguimiento, lo que demuestra la eficacia de dicho tratamiento. La paciente acude derivada por el Hospital Clínico San Carlos de Madrid, centro en el que estaba asignada a un Programa de Esterilidad. En la actualidad, la paciente ha superado el tratamiento psicológico y médico y se encuentra embarazada.

INTRODUCTION

Sexual dysfunctions are defined as alterations of one or more processes of the sexual response cycle or pain associated with sexual relations, and can be grouped in four categories: sexual desire disorders, arousal disorders, orgasm disorders and sexual pain disorders. Vaginism falls into the category of sexual pain disorders, being characterized by involuntary spasms of the musculature of the lower third of the vagina, which occur in response to any attempt at penetration. Attempts at penetration in spite of resistance result in pain (APA, 2000).

This sexual dysfunction often affects general sexual functioning, so that it is common to find other dysfunctions associated with the disorder, such as lack of interest in sexual contact, reduction in levels of arousal and enjoyment, and indifference to/lack of appetite for one's sexual relationship. Sexual problems indeed have a significant effect on relationships, leading to lack of satisfaction, decrease in expressions of affect, communication problems, and so on. Finally, at a personal level, sexual dysfunctions tend to be associated with problems of anxiety and depression, characterized by feelings of guilt and personal inadequacy and low self-esteem (Carrasco, 2001).

In general, the course of sexual dysfunctions is chronic, implying the need for specific treatment for their remission.

The priority objectives of psychological intervention in vaginism are to reduce the anxiety response associated with sexual contact and to eliminate the muscular spasms that impede entry to the vagina. The specific techniques used in the treatment of this type of problem are: a) psychoeducation, for providing information about anatomy and sexual response, with the aim of improving knowledge about aspects related to sexuality; b) training in relaxation, which favours the elimination of escape and/or avoidance responses, control of anxiety levels and control of the tensing-relaxing responses experienced in sexual interaction; c) training in self-exploration and self-stimulation, aimed at increasing knowledge of the reactions and responses of one's own body to stimulation; d) Kegel's pelvic muscle exercises (Spencer, 1991), which facilitate the identification and control of these muscles; e) programme of progressive vaginal dilation (Rosen & Leiblum, 1995), with the insertion of gynaecological swabs gradually increasing in size (by the woman herself and/or her partner); and e) program of sensory focusing, with the collaboration of the woman's partner, aimed at reducing anxiety about

The original Spanish version of this paper has been previously published in *Clínica y Salud*, 2003, Vol. 14, No 1, 67-99

....

Correspondence concerning this article should be addressed to María Eugenia Olivares Crespo, Departamento de Personalidad, Evaluación y Tratamientos Psicológicos I. Facultad de Psicología, Universidad Complutense de Madrid. Spain.
E-mail: meolivares@correo.cop.es

sexual contact, learning to give and receive pleasure and increasing communication.

Hartman and Daly (1983) have shown that relationship therapy can strengthen the effects of sexual therapy. Likewise, Cáceres (1993) argued that a combination of relationship and sexual therapy is necessary for resolving sexual problems, just as intervention in sexual problems is advisable, though not sufficient, for improving relationships.

As far as specific phobias are concerned, these are defined as persistent and irrational fears associated with specific stimuli or situations that present anxiety responses and active behaviours of avoidance and/or escape from those stimuli or situations. Phobic fear is triggered in the presence or in anticipation of the feared situation, and expressed in a typical pattern of physiological, cognitive and motor responses. According to the DSM-IV-TR, the category of specific phobia is presented as a residual category of phobic disorder, as all of the phobic fears caused by specific situations are included, with three broad groups currently recognized: phobia of animals, phobia of blood/wounds and situational phobia. In the case studied here, the phobia refers to the specific situation of gynaecological exami

the feared stimuli, since it emerges from behavioural theories that such exposure in the absence of the feared consequences will result in the extinction of the phobic reactions and habituation to the feared stimulus. In practice, a variety of techniques are used, which include exposure as a common element, but differ as regards presentation of the feared stimulus, type of patient's response to it, the way help is given to the patient and use (or not) of cognitive control techniques (Capafons, 2001).

Systematic desensitization, flooding or graded exposure (techniques that contain exposure as a common element) have demonstrated satisfactory levels of effectiveness for the treatment of specific phobia (Capafons, 2001), in vivo exposure being the most powerful technique in this context (APA, 1994).

The aim of combining exposure and cognitive techniques is for phobic patients to accede to phobic stimulus exposure with the lowest anticipatory anxiety possible and to make adaptive attributions of both their motor and physiological reactions (Anthony, Craske & Barlow, 1995). Also possible is the inclusion of techniques aimed at increasing patients' information about their disorder, such as informative therapy or psychoeducation (Capafons, Sosa & Viña, 1999), which help patients to improve their understanding of the origin and maintenance of the phobia and provide them with an explanation of the therapeutic package considered most effective in their particular case.

METHOD

Subject

E. is a 31-year-old woman, married for seven years. She is currently working as a private secretary. She was referred to the Clinical Psychology Unit of the Complutense University (Madrid) by the Sterility Unit of the Gynaecology and Obstetrics Department at the Hospital Clínico San Carlos, also in the Spanish capital. The main reason for requesting help is the impossibility of undergoing a gynaecological examination, due to intense contractions of the para-vaginal muscles.

History of the problem

This case involves two disorders (vaginism and phobia), which we shall present separately with a view to aiding their understanding.

History of vaginism

The patient was married seven years ago, after having lived with her partner for eighteen months. She considers this as her first stable relationship with real commitment. The couple decided to have sexual relations with penetration during the eighteen months prior to marriage, having seen a gynaecologist, who prescribed the contraceptive pill for E. This first gynaecological examination took place totally normally, and included a complementary smear test. E. felt totally relaxed, as she was a virgin and had nothing to be afraid of; she felt no pain during the examination.

After six months on the contraceptive pill, the patient permitted vaginal penetration.

In the first sexual relations with penetration, anticipatory thoughts of pain appeared, and these are confirmed, as she recounts that it was a highly unpleasant experience for her. In spite of this, she was able to have sexual relations with penetration subsequently, sometimes satisfactorily (with orgasm through penetration) and sometimes unsatisfactorily (with pain), so that the response was maintained through intermittent reinforcement. There began to appear responses of avoidance/escape with regard to sex, which became less frequent. During this time the relationship was not significantly affected, according to the patient.

The situations in which pain does not occur are during

summer holidays and in their weekend retreat. Such situations lead the patient to think that the problem has disappeared.

She describes the first years of marriage, until she stops taking the contraceptive pill, as unstable. There were periods in which they did not have sex with penetration. When they did have full coitus, the pain response appeared, unexpectedly for her, and this caused a sense of lack of control.

She had maintained for seven years a pattern of sexual interaction based on fear of saying no, of having to sex without sexual appetite and of faking where necessary in order to satisfy her husband.

Two years previously she had stopped taking the contraceptive pill, with the aim of having a child; this caused a hormonal imbalance and a reduction in sexual desire, which affected both her own sexual response and that of her partner.

The vaginal contraction and muscular tension response began to occur more frequently, with an increase in fear of pain and also fear of pregnancy and childbirth, so that she avoided sex more determinedly, while concealing from her husband the fact that she did not want children.

Until one year before seeking psychological help, she was unable to fully insert a tampon due to pain when she attempted to do so, and she therefore refrained from using them, though she explained to the psychologist that she could insert a tampon without the pain response "if she was in control".

Currently, sexual relations were quite infrequent. Due to the fact that her husband was out of the house all day long, they had sex only at weekends, so that the frequency of sexual contact was two to four times a month, with penetration rare. Her husband reproached E. for never taking the initiative, which led to arguments and increased the patient's feelings of guilt. This situation has affected the relationship, especially in the area of communication.

History of the specific phobia (gynaecological examination)

The first gynaecological examination took place completely normally. There was no negative anticipation, nor fear of pain, since E. was totally confident that nothing would happen to her, given that "she was a virgin". Nevertheless, a smear test was performed using the customary procedure, apparently with no contraction response, nor associated pain, though she did find it considerably uncomfortable.

At the second gynaecological check-up the vaginal contraction appeared, produced by anticipation of the pain and/or discomfort it could produce, and which in turn facilitated exposureto the situation with high levels of tension maintained. The muscular tension and contraction of the vagina impede the entry of the speculum, making the examination impossible. She was recommended to seek psychological help, which did. However, she ceased to attend the help sessions after just two visits, since, in her words, "the problem disappeared". This supposed spontaneous remission actually referred to an attribution of the patient of disappearance of the problem through an active avoidance reaction: on not exposing herself to the feared situation, the problem response ceased to appear.

In the third examination the sequence of the second was repeated. The report mentions the difficulties encountered on attempting the examination, resulting in the doctor's decision to postpone it. The patient was told to try practising with a tampon before returning. The nurse suggested to E. that such things happened to all women, but this attempt to make the situation seem less dramatic had the opposite effect, increasing E.'s feelings of inadequacy. In turn, there appeared feelings of shame, leading the patient to ignore the doctor's instructions, and this reinforced the fear of examination.

The next two check-ups were successfully completed, in a private clinic in which the staff minimized the negative impact of the examination through humour, lack of time pressure, more privacy, and so on. A smear test was carried out in which the patient felt no pain, and only slight discomfort.

The final examination (which did not take place in the private clinic) was, according to E., quite unpleasant. She reports it as an extremely painful experience (she was given a smear test and a vaginal ultrasound test) which she likened to rape, and defined as traumatic. From this episode onwards the problem behaviour became exacerbated, so much so that no further examinations were possible. Although she did manage to attend other appointments, she did not allow doctors to do any kind of test; subsequently, she even failed repeatedly to turn up for appointments.

PROCEDURE

We employed an A-B design, with within-subject replication. The one-hour sessions took place weekly at first, and then fortnightly over a period of twelve months. The objective of the first four sessions was to analyze the

problem and establish the baseline. The remaining sessions focused on the specific treatment and follow-up.

ASSESSMENT

The assessment was carried out by means of semi-structured interviews, self-records, questionnaires and self-reports. Three individual interviews took place (with each member of the couple), as well as one joint interview.

From the first session onwards the patient was required to make self-records, with the aim of obtaining information for the problem baseline. The register suggested for recording the patient's sexual interactions is shown in Table 1:

With a view to obtaining complementary information, we applied Gambrill and Richey's (1975) Assertion Inventory, which allows the detection of difficulties patients may have in adapting to social and interpersonal situations that in some way require them to be assertive. The most relevant deficits indicated by the

Table 1
Record of sexual interaction

Day/Time Start/End	Situation	What you think What you imagine	What you feel Arousal level (0-10)	What you are doing	What happens next (penetration/no penetration	Consequences: Satisfaction level (0-10)

Table 2
Functional analysis of vaginism

ANTECEDENTS	BEHAVIOUR	CONSEQUENCES
REMOTE VARIABLES - First aversive coitus - Absence of previous sexual experience - Lack of knowledge of her own body - Lack of initiative and direction **GREATER FREQUENCY/GREATER INTENSITY** ***External:*** - When the weekend comes - Siesta time - Affectionate gestures/slaps from her husband - When her husband asks (directly or indirectly) her to have sex (e.g., do you want to play?) - On vaginal penetration or insertion of fingers ***Internal:*** - Anticipation of having to have sex - Performance pressure thoughts: *"I have to try and do it", "Let's see if I can manage it this time"*, etc. **LOWER FREQUENCY/LESS INTENSITY** ***External:*** - When she is distracted (e.g., country retreat with people) - When she needs to put in a tampon	**PHYSIOLOGICAL:** - Muscular tension in lower extremities - Irregular menstruation **COGNITIVE:** - Thoughts of uselessness ("*I don't think I'm capable of doing things alone*") - Guilt thoughts - Performance pressure *("I have to manage it, I have to do it well"*) - Hypervigilance of her bodily response - Self-observation of her body, husband's reactions, situation, etc. - Focusing of attention on pain - Thoughts focused on her bodily sensations (*"I'm really nervous", "It hurts a lot"*) - Self-instructions of relaxation - Fear of pregnancy/childbirth **MOTOR:** - Weeping - Avoiding/delaying sexual relations - Changing of role, acting like a child in sexual relations (voice, gestures, etc.) - Guiding husband's penis or hand during sexual interaction - Verbal expressions of pain - Closing legs - Contraction of muscles of lower third of the vagina - Checking that she is menstruating/Pregnancy tests - Lying (concealing the situation from her husband) - Hyperactivity: doing many activities **EMOTIONAL:** - Sadness	**SHORT-TERM:** ***Positive reinforcement:*** - Attention from partner/professionals ***Negative reinforcement:*** - Relief of unease/discomfort (relief from pain/anxiety when partner leaves or when the sexual relation is interrupted) - Escape from/avoidance of sex ***Positive punishment:*** - Feelings of guilt/anger - Arguments ***Negative punishment:*** - Failure to reach orgasm - Interruption of sexual relation **LONG-TERM:** ***NEGATIVE*** - Worsening of mood state - Less sexual desire - Pressure to be successful in future - Uncontrollability - Guilt feelings - Feelings of failure - Drop in self-esteem - Feelings of uselessness - Reproaches/self-punishment - Worsening of the relationship: sex, communication, etc.

patient in this case involve the following aspects: arguing about issues or being critical, expressing opinions or preferences, and asserting rights.

TESTING OF HYPOTHESES

The strategies used for testing the hypotheses in the two problems presented by the patient were as follows:

1. In the vaginism: first of all, imaginary exposure to the situation of coitus with penetration; secondly, the self-report; thirdly, the information provided by the husband and his external observation; and finally, the patient's own observations as provided in the self-records.

   The self-observation and the external observation of the response by the husband made it possible to make a differential diagnosis with dispareunia, since, in this latter disorder, the pain is superficial during penetration or strong during coital movements, whilst in vaginism, the pain begins during penetration, in the muscles of the lower third of the vagina.
2. In the specific phobia: imaginary exposure to the situation of gynaecological examination in session, with recording of the anxiety responses, medical report on the impossibility of making an examination and behaviours of escape/avoidance in relation to the feared situation.

FUNCTIONAL ANALYSIS/PROBLEM BEHAVIOURS

From the initial assessment it is considered that the patient presents two types of problem: on the one hand, a sexual dysfunction, vaginism, and on the other, a specific phobia (of the blood-injections-harm type) (both according to the DSM-IV-TR criteria).

Functional analysis of vaginism

The first problem (vaginism) is characterized by the involuntary contraction of the perineal muscles of the lower third of the vagina, which interferes with coitus. This alteration has a significant effect on the couple's sexual relations, as shown in Table 2.

Functional analysis of the specific phobia

The second problem (specific phobia) is characterized by a pattern of anxiety responses associated with the feared stimuli, with active avoidance behaviours, anticipatory anxiety and mistaken interpretations. Table 3 illustrates the functional analysis of the problem.

Table 3
Functional analysis of the specific phobia

ANTECEDENTS	BEHAVIOUR	- Escape: not going to the appointment CONSEQUENCES
REMOTE VARIABLES - Lack of knowledge of her own body (anatomy and physiology). Inappropriate expectations. - Maternal model: restrictive moral and religious education. Rejection of medico- gynaecological interventions, due to association with promiscuity (prohibition of sex, fear of doctors discovering that she has full sexual relations) - Aversive experiences in gynaecological examinations (*"For me, it was like rape"*). **GREATER FREQUENCY/GREATER INTENSITY** ***External:*** - When the day of the appointment approaches - Going to the hospital/clinic for the examination - Metro station, traffic lights, storey, etc., on the route to the appointment - Waiting room - On preparing for the examination - On seeing the exploration instrument - Immediately before the examination: smear test ***Internal:*** Anticipation of having to have an examination	**PHYSIOLOGICAL:** - Trembling - Increased heart rate - Sweating - Sleep alterations **COGNITIVE:** - Fear of negative consequences/anticipation ("pain/they are going to touch my genitals") - Reading of thoughts *("I'm making a fool of myself; what will they think of a married woman who can't even stand an examination?"*) - Fear of taking off her clothes (shame) - Mental review of the sequence of the gynaecological examination - Focusing of attention on her own body/feelings - Imagining her mother pointing her finger at her, watching - Feelings of failure **MOTOR:** - Impeding approach - Avoiding/delaying gynaecological appointments - Taking tranquilizers (Valium) before the appointment - Verbalizing: *"I need time"*, *"It could wait"*	**SHORT- TERM:** ***Positive reinforcement:*** - Attention from partner/professionals ***Negative reinforcement:*** - Relief of unease/discomfort (worry) - Escape from/avoidance of the aversive situation **LONG- TERM:** ***NEGATIVE*** - Worsening of mood state - Uncontrollability - Feelings of failure - Drop in self- esteem - Feelings of uselessness - Reproaches/self- punishment

Parameters of the problem behaviours

Both problem behaviours currently occur with high parameters as regards duration (the response may last the whole time the subject is in the problem situation), intensity (rated as a mean of 9/10 on a scale of 0 to 10, with 0 = absent and 10 = maximum intensity) and frequency (higher in the case of the vaginism due to the greater probability of sexual interaction, and infrequent in that of the specific phobia, due to the patient's active avoidance).

Predispositional factors

Vaginism

- Negative cognitive style (the belief that one is not good enough: low self-esteem/self-concept).
- Inadequate sexual information: (1) lack of knowledge about anatomy and sexual physiology, and (2) inappropriate expectations with regard to sexuality ("*Having a child means the end of your life. I understand my life, before and after having a baby. Now I have to do a lot of activities (e.g., sports), because it'll all end when I have a baby", "Childbirth is butchery").*
- Myths and mistaken beliefs about sex ("*When you're menstruating you can't have sex, it's disgusting, you can't touch the genitals", "Watching a pornographic film with your partner is awful, for me it's taboo, because it seems you get turned on just because the others are")*
- Deficit in sexual skills: scarce sexual repertoire.
- The maternal model: restrictive moral and religious education. Inculcation of strong rejection of sex and relationships. Encouraged to mistrust males. Punishment or rejection of early sexual behaviour.

Specific phobia

- Inadequate sexual information: lack of knowledge about anatomy and sexual physiology *("Feeling of being hollow inside,that they're going to put something inside me that will come out through my mouth").*
- Traumatic event during gynaecological examination (see patient's case history).
- Maternal model: (1) restrictive moral and religious education and (2) rejection of medico-gynaecological interventions, by association with promiscuity (sex understood as indecorous behaviour: "*When they examine me they'll realize that I have sex", "I have the check-up coming up, and I can't have sex because they'll realize").*

Diagnosis (see Table 4)

Explanatory models

Starting hypothesis

In the problem of **vaginism**, the predispositional factors previously described act as variables of vulnerability for its development. In the case under study here, faced with a stimulus situation perceived as stressful (the first sexual relations with penetration), the patient developed

Table 4
Multiaxial diagnosis

AXIS I:
F 52.5 VAGINISM (306.51) (Not due to medical illness)

A. Persistent or recurrent appearance of involuntary spasms of the muscles of the lower third of the vagina, which interferes with coitus
B. The alteration causes acute discomfort or difficulty in personal relations
C. The disorder is not better explained by the presence of another disorder in Axis I (e.g., Somatization disorder), and is not due exclusively to the effects of medical illness.

Subtype:
Nature: Whole life; This subtype indicates that the disorder has existed since the start of sexual activity
Context: Situational: This subtype indicates that the sexual dysfunction is restricted to certain types of stimulation, situation or people. Although in the majority of cases the dysfunctions arise during sexual activity with a partner, in others it may be appropriate to identify dysfunctions presented during masturbation.
Associated etiological factors: Due to psychological factors: This subtype has been described for cases in which psychological factors are of great importance for the onset, severity, exacerbation or persistence of the disorder, and medical illnesses and substances play no role in their etiology.

F 40.2 Specific Phobia (300.29)

A. Acute and persistent fear that is at the same time excessive or irrational, triggered by the presence or anticipation of a specific object or situation (e.g., flying, precipices, injections, etc.)
B. Exposure to the phobic stimulus almost invariably causes an immediate anxiety response, which can take the form of an anxiety crisis that is situational or more or less related to a particular situation
C. The person admits that the fear is excessive or irrational.
D. The phobic situations are avoided, or borne at the cost of intense anxiety or unease
E. The avoidance behaviour, anxious anticipation or unease caused by feared situations can strongly interfere with the person's normal routine and social and work/academic relations and/or cause clinically significant unease.
F. In those under 18 these symptoms must have lasted for at least 6 months.
G. The anxiety, anxiety crises or phobic avoidance behaviours associated with specific objects or situations cannot be better explained by the presence of obsessive-compulsive disorder, post-traumatic stress disorder, separation anxiety disorder, social phobia, anxiety disorder with agoraphobia, or agoraphobia without history of anxiety disorder.

Specify type
Blood-injections-harm type: if the fear is related to seeing blood or wounds, or to receiving injections or other medical interventions of an invasive nature. This subtype clearly runs in families, and tends to be characterized by intense vasovagal response.

anticipatory thoughts of failure and pain associated with coitus. This generates anticipatory anxiety, which, together with insufficient stimulation and at the beginning of coitus (the point when her partner approaches her vagina with his penis), gives rise to a response of muscular tension in the lower extremities and contraction of the muscles in the lower third of the vagina. When penetration occurs for the first time (S.II), it causes the pain response (R.II), confirming the anticipatory thoughts.

This conditioning is produced in a single trial, the stimuli being associated intensely, causing predisposition to the anticipation of fear of coitus and pain on subsequent occasions.

In the **specific phobia**, the problem has a series of different sources, which together explain the genesis of the disorder.

First of all, through classical conditioning, in a single trial, since the gynaecological examination is a traumatic situation, in which the pain response appears.

Secondly, there appear stimuli that generate fear in the majority of people to their first sexual encounter without the need for any associative learning, be it direct or indirect (gynaecological examination). Through semantic learning there is generated the expectation of unpleasant exposure, which is subsequently confirmed when the stimulus situation occurs.

Finally, the transmission of threatening information, via warnings by her mother about a "highly dangerous situation", which, added to negative connotations (rejection by association with promiscuity and/or prostitution), gives rise to stigma. This leads to high predisposition to the feared situation.

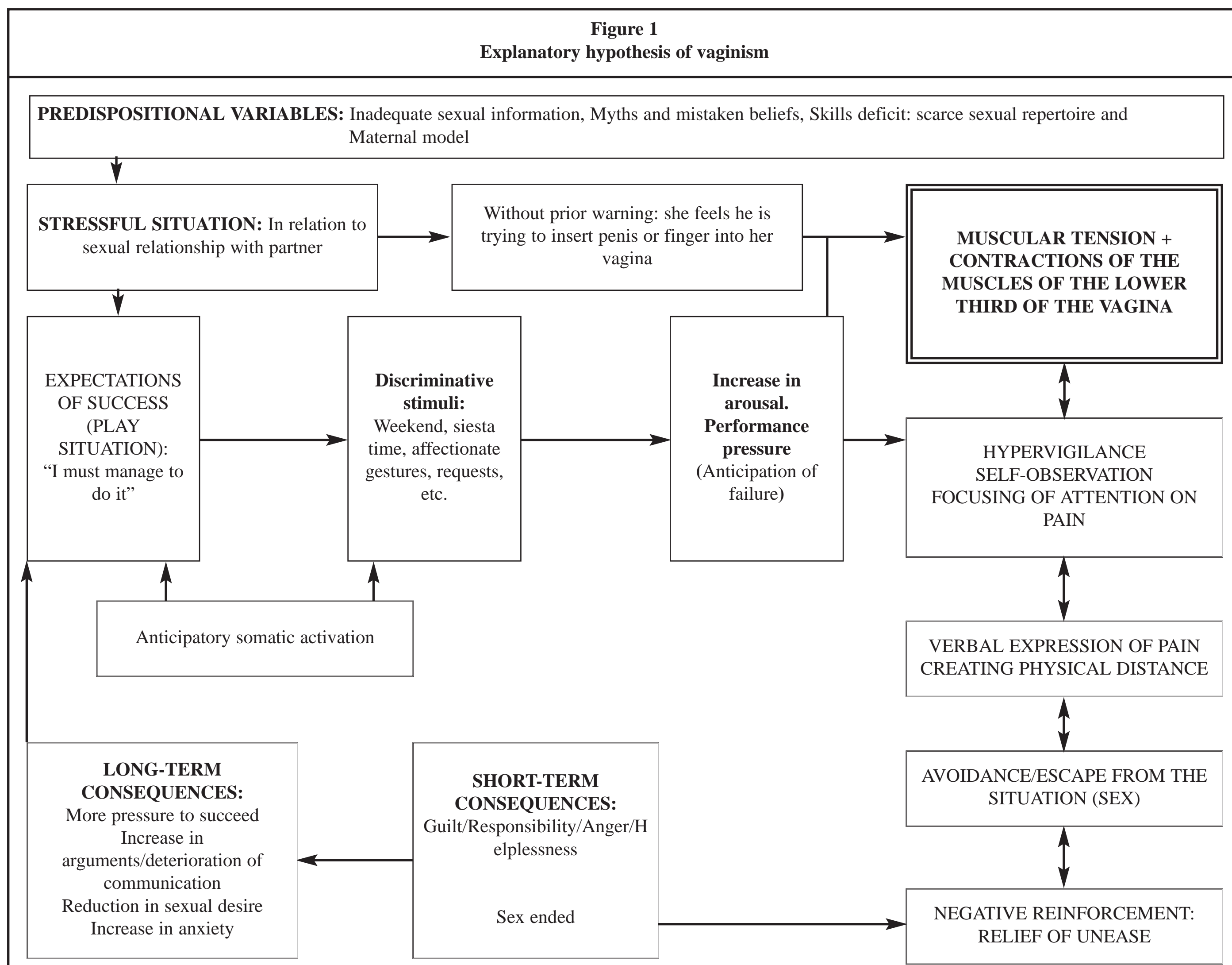
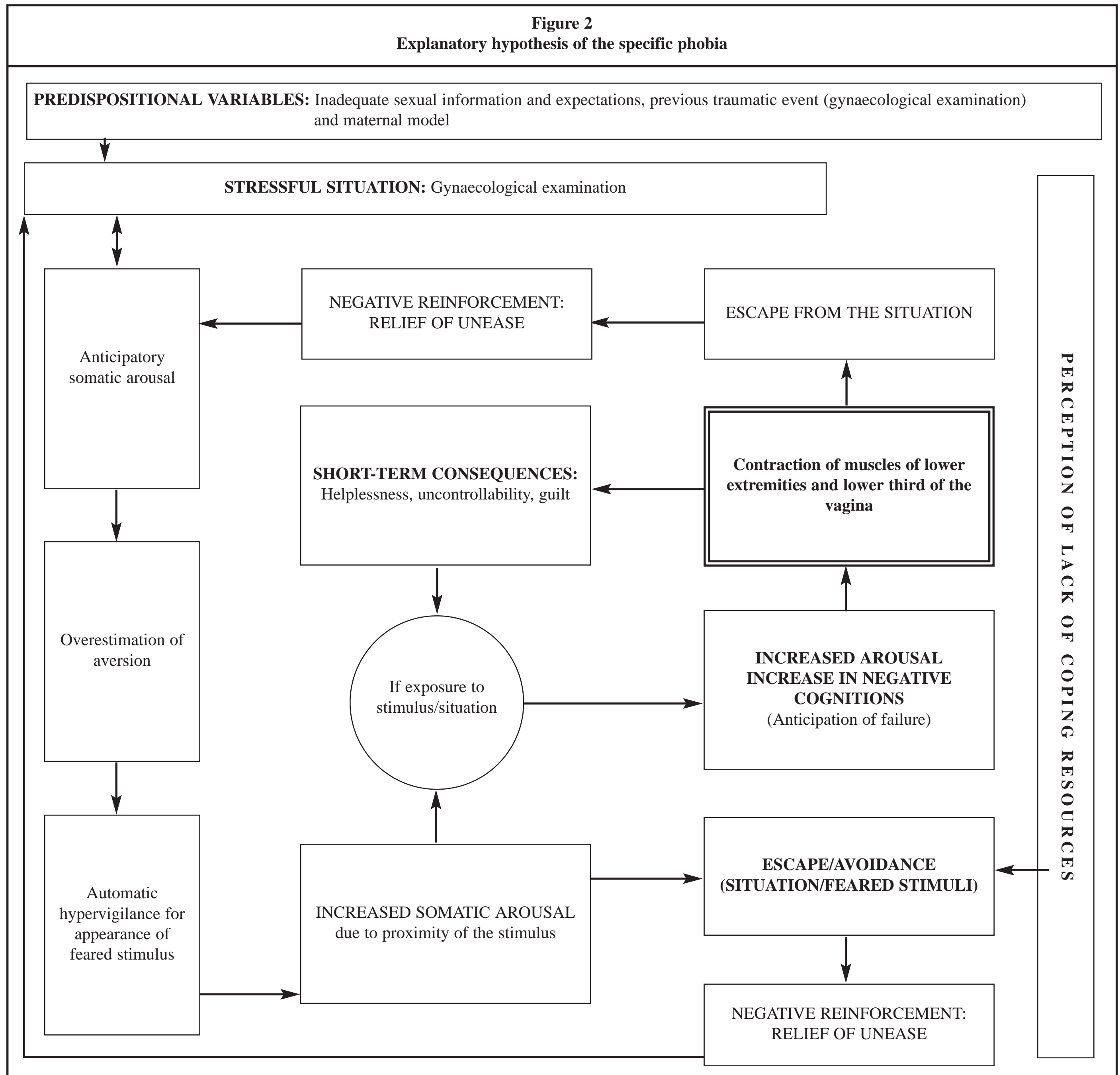


Figure 1
Explanatory hypothesis of vaginism

Maintenance hypothesis

In the **vaginism**, considering sexual interaction with the partner as a stressful situation, there are generated a series of expectations related to the patient's actions. These expectations begin in the play situation, being based on success ("*I must achieve it*"), and this foments the appearance of anticipatory somatic arousal. The two elements, in the presence of discriminative stimuli of sexual interaction (e.g., weekend, siesta time, request, affectionate gestures, etc.), give rise to an increase in arousal, combined with performance pressure and anticipation of failure. The response patterns generated are: (1) at a **physiological level**, the appearance of muscular tension (closing the legs) and contraction of the muscles of the lower third of the vagina, (2) at a **cognitive level**, the appearance of hypervigilance, acute self-observation and focusing of the attention on pain, and (3) at a **motor level**, verbal manifestations of pain that appear, leading to physical distancing from her partner and isolation. The appearance of muscular tension and contraction of

Figure 2
Explanatory hypothesis of the specific phobia



the lower third of the vagina can occur without prior warning, that is, when she feels that her husband is trying to insert his penis or finger into her vagina. These response patterns (physiological/cognitive/motor) may give rise to avoidance or escape responses with regard to sex, which in the short term leads to feelings of guilt, responsibility, anger and impotence. Moreover, the sexual encounter is interrupted, thus immediately relieving the unease, and reinforcing the problem behaviour. In the long term, the consequences may be as follows: performance pressure increases, there are more arguments and poorer communication, there is a reduction of sexual desire in the couple and in increase in anticipatory anxiety. These consequences favour the development and maintenance of the expectations of success in the following sexual interaction situation (see Figure 1).

In the **specific phobia**, when faced with the gynaecological examination there is somatic arousal in anticipation of the situation, which gives rise to overestimation of aversion, resulting in automatic hypervigilance with regard to the occurrence of the feared stimulus. The hypervigilance and overestimation of aversion provoke an increase in somatic arousal in response to the proximity of the feared stimulus. If there is exposure to the stimulus, arousal increases further, resulting in an increase of negative cognitions and anticipation of failure. The increase in negative anticipations may, in turn, lead to escape from the stressful situation, causing a

Table 5
Objectives and intervention techniques for vaginism

OBJECTIVES	TECHNIQUES
PHASE I: PSYCHOEDUCATION ***Couple:*** - Better understanding of the current situation of the problem. Motivation to change - Improvement in the couple's sexual knowledge - Modification of attitudes and expectations with regard to the sexual relationship	- Return of information - Psychoeducation - Discussion of sexual myths
Her: - Improvement of sexual repertoire - Identification of feelings	- Psychoeducation: use of audiovisual material, basic/didactic information - Training in techniques of self-exploration and self-stimulation - Behavioural trials
PHASE II: TRAINING ***Couple:*** - Reduction in performance anxiety/performance pressure/hypervigilance/self-observation - Increase in bodily sensations and sensory pleasure	- Sensory focusing
Her: - Increase in control of vaginal muscles - Reduction in anxiety associated with penetration (fear of coitus)	- Training in Kegel's exercises - Progressive dilation
Couple: - Reduction in anxiety associated with sexual performance - Increase in genital excitement and sensual pleasure	- Genital focusing
Couple: - Decrease in anxiety due to approach or insertion of penis into vagina - Maintain arousal level of previous phases	- Training in penetration
Couple: - Increase in level of arousal achieved in previous phases - Obtain arousal level characteristic of plateau phase - Achieve pleasurable orgasm for the couple through coitus	- Training in full coitus
PHASE III: INTERVENTION SOCIAL AREA - Learn to express feelings/needs	- Training in assertive skills and expression of emotions
PHASE IV: PREVENTION OF RELAPSE - Revision of what was learned - Assessment of achievements	- Solution of problems - Behavioural trials

reduction in anxiety, which would turn into negative reinforcement. Negative reinforcement maintains the perception of the situation as stressful. There may also be contraction of the muscles of the lower third of the vagina, which in the short term produces helplessness, feelings of lack of control and feelings of guilt, thus favouring the maintenance of anticipatory somatic arousal. Another sequence may give rise to avoidance of or escape from the situation or feared stimuli, without getting as far as exposing herself to the situation, which occurs due to the perception of lack of resources on her part for dealing with the problem. Avoidance leads to an immediate reduction in unease, which constitutes negative reinforcement that maintains the situation as stressful (see Figure 2).

TREATMENT AND RESULTS

From the explanatory hypotheses, it was considered highly probable that the problem would become chronic as the response patterns established continued to function. Moreover, the active avoidance presented by the patient, both at the level of sexual relations and with regard to gynaecological examination, was significantly and progressively affecting her relationship and her sexuality.

Treatment objectives and intervention programme

The treatment objectives and techniques used for the two problems presented are described in Tables 5 and 6.

Course of the sessions

In the first phase (**sessions 1-4**) we carried out a behavioural analysis of the problem. For this purpose we conducted four *assessment interviews* (individual and joint, with partner), and proceeded to the collection of data through the application of questionnaires and self-records that provided information relevant to the case.

Sessions 5 and 6, involved the return of the information in the form of clarificatory schemes, as well as *psychoeducation* in relation to the two problems present. To this end, we provided the patient with information about the nature of the anxiety response and the human sexual response, differences between fears, anxiety and phobias, sexual anatomy, myths about sexuality, etc. The information was provided to the patient gradually, starting with a basic level, since excessive information could result in more worry and/or failure to assimilate the information initially; it was attempted to generate a motivational effect by beginning with relatively known information.

Given that the two problems had important aspects in common (such as arousal/anxiety response, especially in physiological symptomatology), the therapeutic component chosen was *training in de-arousal techniques*, with *diaphragmatic breathing* and training in Jacobson's *progressive muscular relaxation*, during **sessions 7 and 8**. Training in progressive muscular relaxation permits the rapid acquisition of relaxation responses that, in turn, facilitate discrimination of the feelings of tension and relaxation experienced on contracting and releasing the muscles. Furthermore, it is useful as training for carrying out *Kegel's muscular exercises* (Spencer, 991), whose objective is to enhance the patient's control over the paravaginal muscles.

Table 6
Objectives and intervention techniques for the specific phobia

OBJECTIVES	TECHNIQUES
PHASE I: PSYCHOEDUCATION Understanding of the problem.	Return of information Psychoeducation
PHASE II: TRAINING Control of arousal in its different phases	Training in diaphragmatic breathing
Reduction of catastrophic thoughts and negative cognitions (overestimation of aversion)	Stop thinking/Self-instructions Cognitive discussion
Exposure to the feared situation	In vivo exposure (successive approaches) Imaginary exposure (DS) Distractor techniques
Increase in coping resources	Training in problem-solving and decision-making
PHASE III: PREVENTION OF RELAPSE Revision of what was learned Assessment of achievements	Behavioural trials

Table 7
Kegel's Muscular Exercises (Carrasco, 2001)

1. Contract vaginal muscles, maintaining them contracted while you count to three, then release them and relax them. Breathe normally.
2. Contract the muscles while breathing in and push them outwards on breathing out. Try to keep the stomach in.
3. Contract and release the muscles rapidly, breathing normally.
4. Push with the muscles as though you were pushing something out of the vagina. Breathe normally.

Training with Kegel's exercises began with the identification of the paravaginal muscles, indicating to the patient that she must refrain from urinating (since these are the muscles responsible for this function). In the following sessions the patient learned the exercises as described in Table 7, to be carried out daily (four or five times, with five or six repetitions each time).

Also during these sessions the patient began *behavioural trials aimed at the discrimination of feelings*. The patient presented difficulties for distinguishing between feelings of pain-tension-anxiety and pleasure-relaxation-excitement. In order to interpret them properly a learning process was necessary, involving a series of stimulation exercises independent of pain (e.g., feelings through taste –bitter/acid– and touch –rough/smooth– using objects, and subsequently with non-genital and genital body areas hierarchically). One of the trials aimed at enhancing identification of these differences was imaginary exposure to the situation of gynaecological examination (which in turn could be used for checking the hypothesis). On inducing this situation in imagination the patient was asked to pay particular attention to the feelings experienced in the area of the lower extremities, waiting for feelings of anxiety to appear. It is important to describe the physical symptoms, noting the differences between these sensations and those of pain or tension. In order to differentiate anxiety, tension and arousal, imaginary exposure of coitus with penetration was employed (in accordance with the APA, 1994): *"the mere idea of vaginal penetration could produce a vaginal spasm"*). As a follow-up to these exercises, the patient was required to touch herself/explore herself after interactions with her partner (e.g., before and after having an orgasm, in different areas, such as the vulva or the vagina, and so on), with the aim of obtaining her own information.

Also trained in this period, at an individual level, were *cognitive techniques* aimed at reducing anticipatory thoughts and negative cognitions (especially overestimation of aversion), useful for both problems. The strategies chosen were *stop thinking, distraction techniques* and *positive self-instructions*, which would help the patient to cope with the two problematic situations.

During these sessions the intervention at a joint level (the patient and here husband) began, with the prohibition of full coitus during the period in which the training in *sensory focusing* took place. The objective was to reduce anxiety about sexual contact (eliminating performance pressure and fear of penetration), to learn to give and receive sexual pleasure (increased knowledge of the sexual response of each member of the couple, and introduction of new patterns of sexual behaviour), and to improve communication.

In the period of **sessions 9 to 12**, the first level of sensory focusing was programmed, *non-genital sensory focusing*. The couple were asked to maintain pleasurable physical contact through caresses, massages, kisses, and so on, for a few minutes, taking turns to give and receive pleasure. In this exercise the woman's breasts and the genitals of each partner were excluded. The instruction was to concentrate on enjoying the sensations produced by these caresses, saying what they liked/disliked/preferred, without steering things towards full arousal or the quest for pleasure through orgasm. These exercises were to be practised a minimum of three times a week, and noted down so that they could be discussed in session.

Likewise, the patient began, at an individual level, a *programme of self-exploration*. She was asked to do this in a quiet place, without interruptions. Initially, she was to explore herself visually, her whole body, and then the genitals. This was to be followed by a tactile exploration in the same order. She was again asked to record and analyze her thoughts and feelings during the self-exploration – both positive and negative – in order to discuss them in session. The aim of this task was to enhance knowledge of her body and the feelings she had on self-contact.

Also used were techniques for the *improving self-esteem*, encouraging the focus of attention on positive aspects and achievements, through the noting down of ten positive things (activities, skills, events) in relation to herself achieved in the course of the day.

In parallel, a programme of *training in communication in the couple* was set, which concentrated on the acquisition of assertive skills, with a view to achieving appropriate expression of positive and negative feelings and of needs and desires. The couple were guided towards setting special moments for communicating, in which they would deal with all their difficulties and achievements at the personal and joint levels.

Between **sessions 13 and 25** the programme moved on to the second level of *sensory focusing (genital)*, in which the genitals of each partner could be involved in sexual interaction, though in which penetration was still not allowed. The same type of instructions were given, that is, a relaxing setting free from interruptions, the participation of the two of them, the use of caresses, and communication of feelings, emotions, needs, etc. They

were told that, in contrast to the previous level, they should move forward gradually, inducing a state of arousal, and could finish the interaction with orgasm if they wished. Both were to be receptive to requests and suggestions, making changes in the sexual interaction, such as changes of position, locations used, and so on.

There was promotion, moreover, of improvement in the quality of the relationship, in terms of *reciprocity*, given that work had been done on improving communication. This was attempted through the use of exercises such as the programming of gratifying joint activities and the observation of the partner doing something pleasant for the other, such observations being expressed verbally. These two tasks are designed to enhance and strengthen the relationship, providing mutual satisfaction, an increase in the number of positive interactions and an appreciation of what one does for the other.

At the individual level, the patient proceeded to performing *exercises of progressive vaginal dilation*, which were developed over the course of the therapeutic process and aimed at providing help for both problems. The exposure began through progressive vaginal insertion by the patient, of: one finger, a gynaecological swab, two fingers, tampons (from smaller to larger, and maintaining them inside the vagina for a few hours with and without menstruation) and gynaecological specula, first of all special ones for virgins, and then normal ones (using them all in different positions, and moving from smaller to larger opening of them). The instruction was to seek success in each of the exposures, without moving on to the following element until the previous task had been fulfilled several times without anxiety or discomfort. These exercises were to be combined with Kegel's muscle exercises, using them for feeling the tensing and relaxation of the muscles in contact with the objects inserted into the vagina.

Once the patient had acquired a feeling of control in the vaginal dilation exercises, the exposure was continued with the collaboration of the husband. The objective now was for him to insert first a finger, then two, and then the specula, in the same order as above, into his wife's vagina, in all cases with and without movement. Initially, she was to control the insertion, acting as a guide and steadying her husband's hand, with him gradually taking over full control.

From a *cognitive intervention* level (on an individual basis), there was a discussion of the dysfunctional beliefs and assumptions about sexuality that were not modified during the psychoeducational period, especially in relation to automatic thoughts, such as polarization and catastrophism.

During the period of **sessions 26 to 30**, the final level of *sensory focusing* was reached. This level included the gradual inclusion of *coitus*. First of all, the penis was inserted into the vagina without movement, for a few minutes, until the anxiety decreased significantly. Movement was begun slowly, and finally, it could become more rapid. The couple told each other about how this felt, and also noted it down afterwards. The objective of this level was reduction of the anxiety associated with insertion of the penis into the vagina and maintenance of the levels of arousal of previous phases, to achieve an arousal level appropriate for the plateau phase. In order to ensure good practice, the process was begun as in the previous levels, that is, first of all under the control of the patient, who guided her partner's penis in order to acquire control of the moment and position of penetration, with the partner gradually taking over, though at all times telling his wife what he was going to do and when.

This phase also included *imaginary exposure to gynaecological examination*, with the aim of achieving habituation, and elimination of the anxiety responses associated with that situation. Imaginary exposure, like the previous tasks, must be carried out in the period between sessions. The patient also took the first steps towards in vivo exposure, through successive approximations, such as guiding the patient towards calling to arrange an appointment for the gynaecological check-up, visiting the hospital to test her feelings, practising the techniques trained and telling her gynaecologist that she had arranged an appointment in order to make a commitment and prevent avoidance (all under the control, and with the supervision and collaboration, of the hospital).

It was during this period that *cognitive discussion* took place, so as to achieve a good interpretation of the thoughts brought on by the practice of full coitus, and to begin a restructuring of mistaken beliefs and fears about pregnancy and the fertility programme. The exercises aimed at improving reciprocity and communication in the couple were also kept up.

In **sessions 31 and 32** we worked on *prevention of relapse and in vivo exposure to gynaecological examination*. These sessions, which were more spaced out (thus enhancing the patient's independence), included a detailed assessment of the achievements made, with identification of problems that may emerge in the immediate future. In order to deal with these, the patient

trained in the problem-solving technique and reflected upon the procedures and objectives of the techniques already trained throughout the intervention. The aim was to provide the couple with resources and strategies for maintaining long-term the achievements made, and to set realistic and positive expectations, at both a sexual level and in relation to gynaecological examination, that is, to promote overlearning. The patient was reminded of the importance of programming times devoted to her and husband as a couple, and to sessions of sensory focusing, with a view to maintaining intimacy, reciprocity, communication and the free, pleasurable sexual interaction of coital demand.

The final two **sessions, 33 and 34**, were for follow-up, and included a summing-up of the progress made and a reflection on the difficulties encountered and how they were dealt with. The central aim of these sessions was the maintenance and generalization of the results.

Results of the intervention

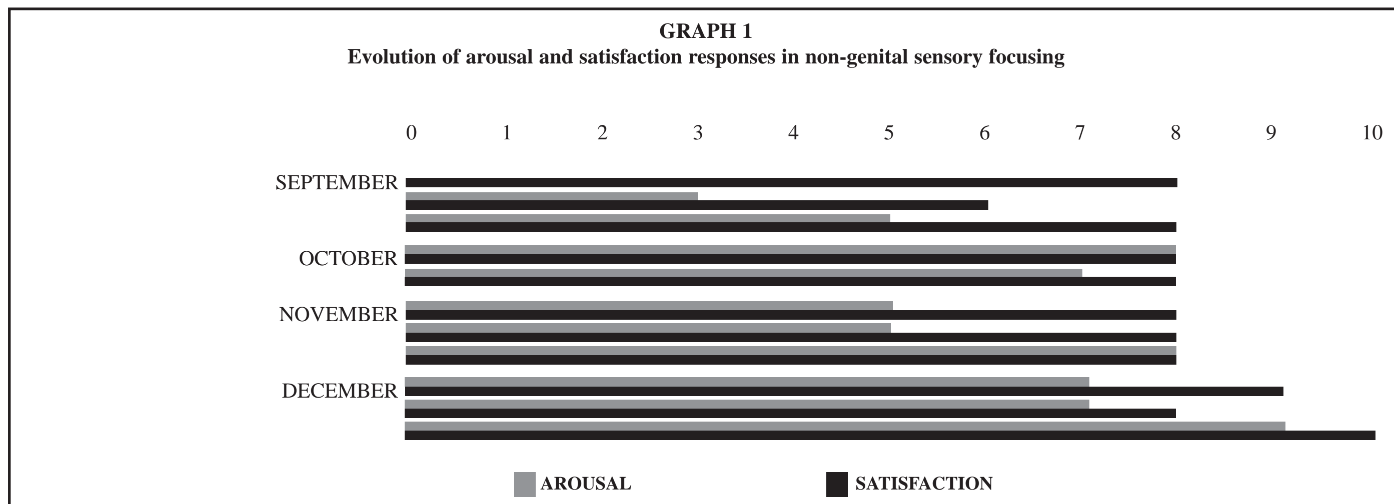
The following objectives were achieved through the therapeutic process:

First of all, the establishment of a pattern of complete sexual interaction, with full satisfaction and absence of pain associated with penetration, accompanied by an enrichment of the repertoire of sexual skills and improved knowledge about sex. Graphs 1 and 2 show the evolution in the excitation and satisfaction responses (information obtained through the records filled out by the patient after sexual interaction) during the process of sensory focusing.

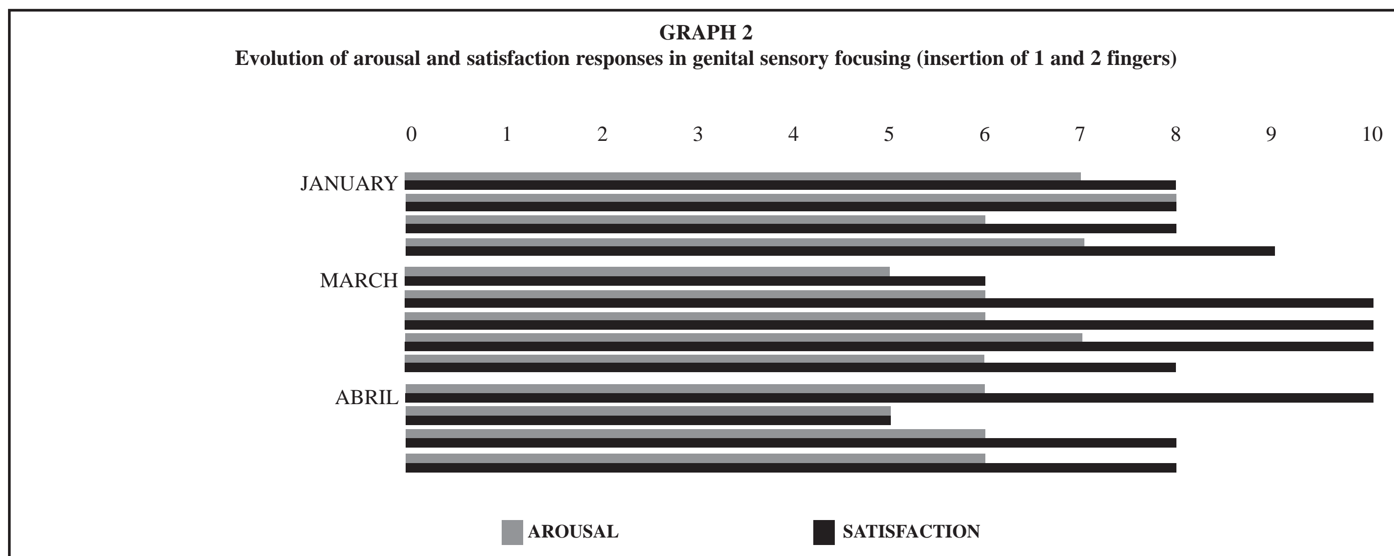
Secondly, the patient achieved a high level of control of the vaginal muscles and absence of anxiety response to the two feared situations, gynaecological examination and full coitus. The results of the exposure by means of vaginal dilation are shown in Graphs 3 and 4.

Throughout the therapeutic process, the patient was

GRAPH 1
Evolution of arousal and satisfaction responses in non-genital sensory focusing



GRAPH 2
Evolution of arousal and satisfaction responses in genital sensory focusing (insertion of 1 and 2 fingers)



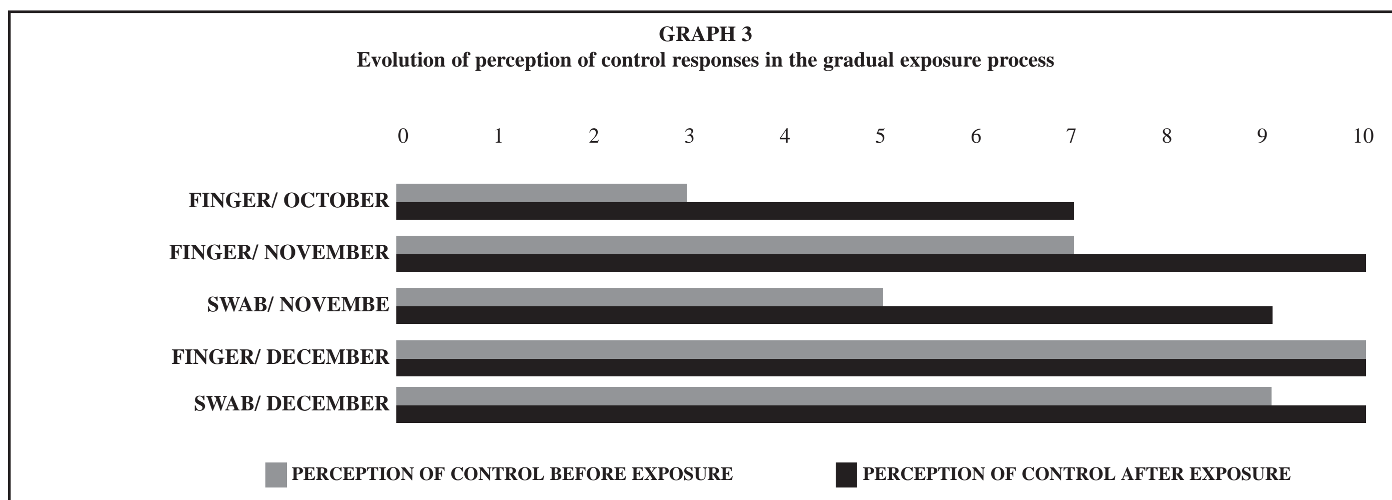
required to make a list of achievements as she went along. Below is the list of achievements at an intermediate stage of the intervention (session 15), drawn up by the patient herself:

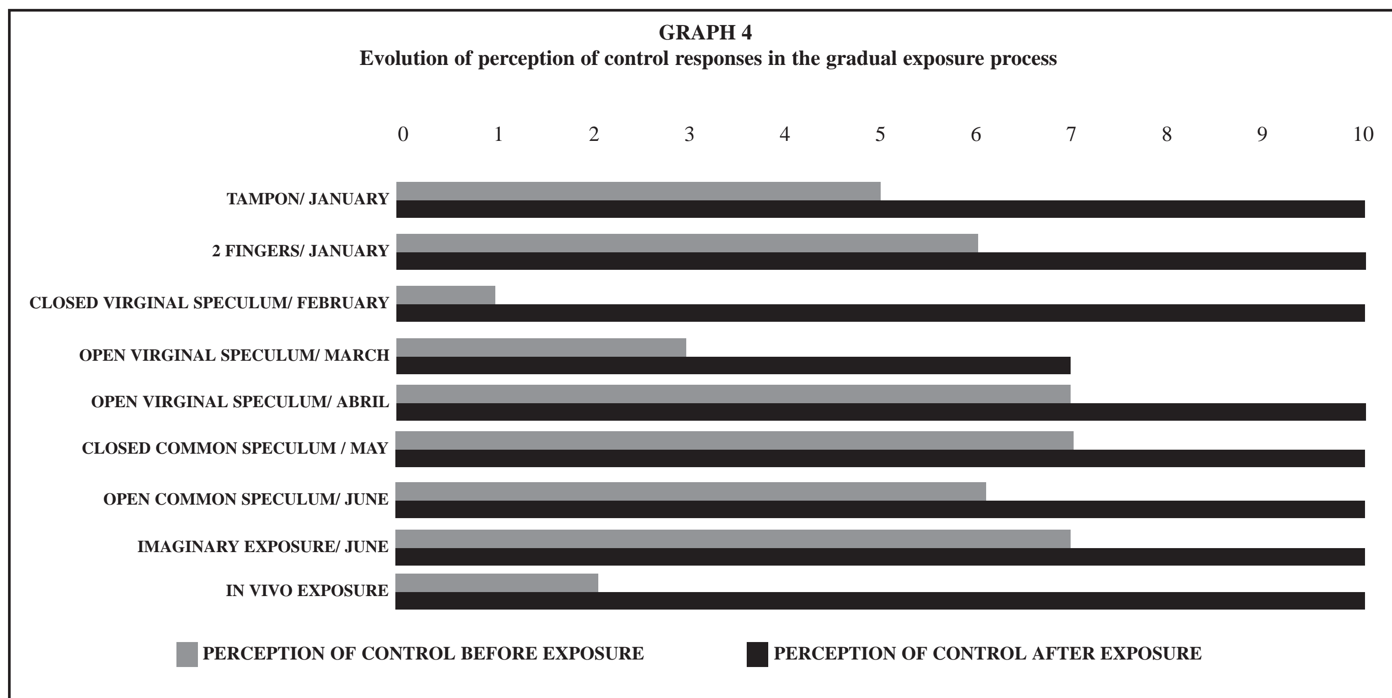
List of achievements:

- *Learning to love myself a bit more.*
- *Appreciating the "good things" of my body, and to know that not everything is negative.*
- *Walking naked around the whole house.*
- *Managing to insert "foreign objects" in my vagina and seeing that there was no problem.*
- *A considerable improvement in my marital relationship.*
- *Reducing my obsession with coitus and being able to appreciate other aspects: the objective of sex is not penetration, but enjoyment, pleasure.*
- *Expressing myself, that is, giving my opinion when I don't agree.*
- *Focusing on my happiness and giving importance to what truly brings it.*

A third achievement concerns the fact that the patient was able to get through gynaecological examinations on repeated occasions, undergoing all the necessary tests (smear test and vaginal ultrasound) without experiencing high levels of anxiety, and maintaining high levels of perceived self-control.

Fourthly, she has succeeded in getting pregnant, expressing great satisfaction at this and showing ade-





quate coping, saying that she feels prepared, and is does not feel afraid of childbirth.

The exposure sessions, together with the cognitive and psychoeducational techniques, succeeded in achieving a reduction in negative automatic thoughts and mistaken beliefs with regard to the problem behaviours (before/during and after exposure to the problem situation), as well as habituation to anxiety in the problem situations. Reduction of anxiety, elimination of distorted thoughts and confirmation of the ability to be exposed to the feared situations have permitted the patient to improve sexual relations with her partner, expose herself repeatedly to gynaecological examinations and embark once more on a fertility programme (with all that entails), laying the foundations to become pregnant and cope successfully with childbirth.

A clinically significant improvement has occurred with regard to communication and reciprocity in the couple. Both consider that their relationship has improved, with more intimacy and more enjoyment of the activities they do together (which they did not do prior to the treatment); they also both remark that they feel more respect and understanding from their partner. Furthermore, the patient adds that the training in assertive skills has enhanced her work relationships, having become generalized to that context, leading, moreover, to an increase in her self-esteem. Results on the Assertion Inventory (Gambrill & Richey, 1975) in post-treatment indicate remission of the deficits the patient expressed at the start of the treatment.

During the therapeutic process there arose a series of problems that significantly delayed the patient's progress. The gradual change demanded in the intervention involved a high cost to her, especially in view of the perceived threat from the tasks set. Thus, there emerged a series of difficulties that had to be dealt with in parallel:

1. Failure to carry out the tasks set between sessions or to perform them with the required frequency. This problem arose after the setting of a new type of task, perceived by the patient or couple as threatening or excessively demanding (e.g., the requirement of three sexual interactions per week in the sensory focusing, or insertion of the speculum). Both partners gave excuses such as lack of time, tiredness or failing to find the right moment. As a solution to this problem they were given even more precise guidelines on how to do the exercises (including instructions on the time to do them, the person responsible for initiating the interaction, and so on); the problem-solving technique was used for other difficulties encountered with the tasks, and the therapists also stressed the importance of practice for any type of learning.
2. Lack of cooperation from the husband in the initial stages of the therapy. It was necessary to make special requests for his collaboration by telephone and in writing. The importance of this collaboration was explained to him on the basis of three aspects. First of all, he was needed to corroborate the data provided by his wife; second, the therapist needed to check whether he needed any help himself; and third, the problem of one member of a couple is the problem of both, so that the success of the programme depended on his help, which would constitute an instrument of great importance, giving support to the therapy and making it work more quickly and effectively. An agreement was reached with him through a therapeutic contract, in which he committed himself to attending sessions when required to do so by the therapist and to cooperating in the exercises and tasks to be carried out between sessions.

DISCUSSION

This study reports the case of a woman with two psychological problems, on the one hand a pain-related sexual dysfunction, vaginism, and on the other, a phobia specific to the situation of gynaecological examination. The two disorders are closely related, especially with regard to factors of psychological predisposition or vulnerability in the patient. However, the two disorders originate at different points in time, with the vaginism appearing first.

Sexual dysfunctions are frequently related to other problems, which in this particular case are relationship problems (deterioration of communication, reciprocity and sexual relations).

The intervention was thus carried out on an individual and joint (with the patient's husband) basis, with the aim of fomenting participation of the partner and promoting the appropriate skills in relation to communication, sex and problem-solving. As described above, it was difficult at first to achieve the active cooperation of the husband in the treatment, and throughout the intervention his attitude was less than wholehearted, and this slowed down the process of learning and acquisition of therapeutic achievements. Nevertheless, the patient showed a

high level of adherence during the period of treatment, carrying out the tasks set and observing the restrictions indicated, thus neutralizing in part the husband's lack of collaboration.

Research on the effective treatment of vaginism does not currently have recourse to empirically validated cases. Nevertheless, different techniques, sometimes in combination, have been described that tend to produce good results. These include systematic desensitization and/or exposure techniques, training of the pubococcal muscle and insertion of vaginal dilators of gradually increasing sizes. Cognitive techniques do not tend to be included in the treatment of sexual dysfunctions, though in the case described they are used, given the close link between irrational beliefs and maintenance of the problem.

For the problem of vaginism in the case reported here, we combined different techniques of a cognitive-behavioural type, such as: psychoeducation, techniques of exposure and progressive dilatation of the vagina, sensory focusing, training in self-exploration and self-stimulation, and problem-solving. For the specific phobia, we used techniques of de-arousal, in vivo exposure and imaginary exposure, distractor techniques, positive self-instructions and stop thinking, cognitive discussion and problem-solving. Given that the treatment programme was developed in a parallel fashion, the techniques trained could be applied to both problems (especially in those aspects related to coping strategies). We thus combined cognitive and behavioural techniques, including exposure as the most powerful technique for treating the phobia and the cognitive therapy in combination, as it strengthens and increases the positive results. Finally, for the relationship problem, we included in the treatment programme specific training in assertive skills and expression of feelings for both members of the couple, with the aim of improving the relationship.

The two problems appear to have been eliminated definitively, since not only were the results maintained in the follow-ups at one month and three months, but the patient actually made notable achievements, in the form, first of all, of embarking on a fertility programme, which involved numerous gynaecological check-ups and the corresponding tests, and second, of becoming pregnant. News of the pregnancy was received with great satisfaction by both members of the couple.

Thus, in view of these results, we can conclude that the treatment programme designed for this case of vaginism and phobia about gynaecological examinations was indeed effective.

REFERENCES

A.P.A. (1994). *Diagnostic and Statistical Manual of Mental Disorders* (4ª Ed.) (DSMIV). Washington: A.P.A. (Spanish translation, Barcelona: Masson, 1995).

A.P.A. (2000). *Diagnostic and Statistical Manual of Mental Disorders*: DSM-IV-TR. Washington: A.P.A. (Spanish translation, Barcelona: Masson, 2002).

Anthony, M.M., Craske, M.G. & Barlow, D.H. (1995). *Mastery of your specific phobia*. Albany, New York: Graywind Publications.

Caballo, V. (1997). *Manual para el tratamiento cognitivo-conductual de los trastornos psicológicos.* Vol.1. Madrid: S.XXI.

Cáceres Carrasco, J. (1993). *Problemas de pareja: diagnóstico, prevención y tratamiento*. Madrid: Eudema.

Capafons, J.I. (2001). Tratamientos psicológicos eficaces para las fobias específicas. *Psicothema, 13, 447-452*.

Capafons, J.I., Sosa, C.D. & Viña, C.M. (1999). A reattributional training program as a therapeutic strategy for flying phobia. *Journal of Behavior Therapy & Experimental Psychiatry, 30, 259-272.*

Carrasco, M.J. (2001). *Disfunciones sexuales femeninas*. Madrid: Síntesis.

Costa, M. & López, E. (1999). *Como vencer la pereza sexual*. Madrid: Temas de Hoy.

Gambrill, E. D. & Richey, C. A. (1975).
Assertion inventory for use in assessment and research. Behavior Therapy, 6, 550-561.

Hartman, L.M. & Daly, E.M. (1983). Relationship factors in the treatment of sexual dysfunction. *Behaviour Research and Therapy, 21,153-160.*

Labrador, F.J. (1994). *Disfunciones sexuales*. Madrid: Fundación Universidad-
Empresa.

Labrador, F.J. (Dir.) (1994). *Guía de la sexualidad*. Madrid: Espasa Calpe.

Rosen, R.C. & Leiblum, S.R. (1995). Treatment of sexual disorders in the 1990s: an integrated approach. *Journal of Consulting and Clinical Psychology*, *63, 877-890*.

Spence, S.H. (1991). *Psychosexual Therapy. A cognitive-behavioural approach*. London: Chapman and Hall.

Vallejo, M. (1998). *Manual de terapia de conducta*. Vol.1. Madrid: Dykinson.