

REVIEW

Recommendations for the management of vaginismus: BASHH Special Interest Group for Sexual Dysfunction

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Summary: We present the British Association for Sexual Health and HIV (BASHH) Special Interest Group for Sexual Dysfunction recommendations for the management of vaginismus. The recommendations outline the history, prevalence, aetiological factors, patient assessment and management for this sexual problem. Treatment strategies are discussed along with general recommendations and auditable outcomes.

Keywords: vaginismus, recommendations, management, BASHH

Introduction

An American gynaecologist, James Marion Sims when addressing the obstetrical society of London in 1862, first coined the term 'vaginismus' when describing one of his patients:

'But the most remarkable thing in her history was the fact that she had remained a virgin notwithstanding a married state of a quarter of a century ... Amongst other investigations of her case, I attempted to make a vaginal examination but failed completely. The slightest touch at the mouth of the vagina producing most intense suffering. Her nervous system was thrown into great commotion; there was a general muscular agitation; her whole frame was shivering as if with the rigors of an intermittent. She shrieked aloud, her eyes glaring wildly, while tears rolled down her cheeks and she presented the most pitiable appearance of terror and agony. Notwithstanding all these outward involuntary evidences of physical suffering, she had the moral fortitude to hold herself on the couch, and implored me not to desist from any efforts if there was the least hope of finding out anything about her inexplicable condition. After pressing with all my strength for some minutes, I succeeded in introducing the index finger into the vagina up to the second joint, but not further. The resistance to its passage was so great, and the vaginal contraction so firm, as to deaden the sensation of the finger, and thus the examination

revealed only an insuperable spasm of the sphincter Vaginae'.¹

He recommended excision of the hymen and the use of a glass bougie as treatment. Recent work has suggested that vaginismus may cause marital and interpersonal problems.^{2,3}

Prevalence

Vaginismus is thought to be one of the most common female psychosexual dysfunctions. The exact prevalence rate among the general population is not known.⁴ Sexual dysfunction has been reported in over 20% of men and 9% of women attending a London Genitourinary (GU) medicine clinic, of whom 25% had vaginismus.⁵ Figures from sexual dysfunction clinic populations vary from 5% to 17%.⁶⁻¹¹ A study of women attending a family planning clinic in Iran found 12% of women suffered vaginismus at least 50% of the time, with 4% always suffering vaginismus.¹² A survey of 49 gynaecologists in Holland found vaginismus accounted for 4.2% of all sexual problems or concerns seen over a one-week period.¹³ The prevalence rate among Irish women attending a sexual dysfunction clinic was much higher at 42%.¹⁴

Definition

The Diagnostic and Statistical Manual of Mental Disorders (DSM IV) defines vaginismus as occurring when there is recurrent or persistent involuntary spasm of the musculature of the outer third of

Table 1 Level of evidence table

Levels of evidence	
Ia	Evidence obtained from meta-analysis of randomized controlled trials
Ib	Evidence obtained from at least one randomized controlled trial
IIa	Evidence obtained from at least one well designed controlled study without randomization
IIb	Evidence obtained from at least one well designed quasi-experimental study
III	Evidence from well designed non experimental studies such as comparative studies, correlation studies and case studies
IV	Evidence obtained from expert committee reports or opinions and/or clinical experiences of respected authorities

the vagina that interferes with coitus and causes marked distress or interpersonal difficulty.¹⁵ In addition, the difficulty cannot be better accounted for by another Axis 1 disorder and is not caused exclusively by a physical disorder. Recent work has suggested that the spasm-based definition of vaginismus is not adequate as a diagnostic marker¹⁶ (Table 1, IIb). A review of the definitions of women's sexual dysfunction by Basson *et al.* states that the presence of 'vaginal spasm' has never been documented; they recommend the definition:

'The persistent or recurrent difficulties of the woman to allow vaginal entry of a penis, a finger, and or any object, despite the woman's expressed wish to do so. There is often (phobic) avoidance, involuntary pelvic muscle contraction and anticipation/fear/experience of pain. Structural or other physical abnormalities must be ruled out/addressed'¹⁷ (Table 1, IV).

Vaginismus usually occurs when a woman anticipates intercourse, but it may also occur in anticipation of any object being placed inside or even near the vagina.

It can be classified as follows:

- Primary (the woman has never experienced non-painful penetrative intercourse.)
- Secondary (the woman has previously experienced non-painful penetrative vaginal sexual intercourse.)
- Consistent (it occurs each time any form of penetration is attempted.)
- Global (it occurs independent of the partner or the circumstances.)
- Situational (it occurs only with certain partners or circumstances.)

Aetiology

Vaginismus may arise as part of a conditioning response that is acquired secondary to adverse physical and/or psychological stimuli. Predisposing factors include environmental, childhood sexual trauma and a background of religious orthodoxy.¹⁸ It is suggested that a cycle evolves in which subsequent fear and anticipation of pain increases the likelihood that future attempts at penetration will produce such a sensation of pain. This results in avoidance and the accompanying relief reinforces the avoidance.^{19,20} There may be an

associated phobia or fantasy, for e.g., that the vagina is too small to accommodate a penis. It may be considered to be part of a pain syndrome.

Physical causes of pain as contributory factors

Physical causes of pain include genital tract infections, vestibulitis, post-menopausal oestrogen deficiency, trauma associated with genital surgery (such as episiotomy) and radiotherapy.²¹ Problems with arousal result in poor lubrication and painful intercourse. Arousal dysfunction is commoner in women with diabetes, multiple sclerosis or spinal cord injury.^{22,23}

Psychological associations

Reported psychological associations are early traumatic sexual experiences, sexual assault, inadequate sexual information, familial, religious and cultural taboos.¹⁹ Some women describe traumatising gynaecological examinations by unsympathetic health professionals. Relationship problems may be a contributing factor.

Presentation

Vaginismus affects heterosexual and homosexual women and is commoner in younger women.²⁰ There may be a direct request for help with non-consummation or dyspareunia. The problem may present during the course of a genital examination when a woman may show variable degrees of distress. Some women have severe adductor spasm and an inability to tolerate even one finger per vagina and show signs of great distress.

Assessment

A detailed medical history including contraceptive, gynaecological, obstetric and GU details is essential.^{24,18} A clear description of the pain, fear of pain, and avoidance responses are required from the clinical history. The ability to use tampons should be elicited. A careful sexual history should ascertain whether the problem is primary, secondary, situational or global. An exploration of the woman's social circumstances and relationship history as well as any current relationship and identification of areas of conflict should be undertaken.¹⁸

Examination of the external genitalia, to exclude any organic pathology as discussed above, is mandatory.²⁵ This should be followed by a gentle pelvic examination. However, this may not be appropriate or possible initially. Examination of women with vaginismus prematurely or before they are ready may cause extreme pain and exacerbation of their problem. Indeed, some women develop vaginismus as a result of a traumatic medical examination. We recommend that women should be examined when they are comfortable and ready, and by therapists/clinicians who are experienced in genital examination. The differentiation between vulvar vestibulitis syndrome (VVS) and vaginismus is particularly difficult as vaginismus patients may show signs of allodynia on cotton bud test. The woman's attitude to her own genitals and whether or not she can self examine or tolerate touching herself is also important.

Management overview

Ideally, a multidimensional multidisciplinary approach for sexual pain is recommended. The evidence is that the syndromes of vaginismus and VVS overlap, as do the syndromes of vaginismus and dyspareunia not due to VVS.^{18,26-29} Treatment should be individualized for each woman and/or partner, whenever possible with their input. Psychological issues as well as interpersonal issues should be first addressed early on with psychotherapy. Therapy is tailored to the needs of the woman and her partner, if she is in a relationship. Patient choice of gender of physician/therapist should also be considered, and chaperones should be available.

Involvement of the partner in the treatment should be encouraged but remains the decision of the woman. Education to correct any misinformation about sexual functioning and genitals (e.g. a perception of the vagina as very narrow, delicate, etc.) is also useful. The basis of treatment is to enable the woman to become more comfortable with her genitals, followed by graded exposure to different types of vaginal penetration to overcome her fears of penetration. Where there is a high level of anxiety and fear, resistance to genital examination, or other mental health or relationship problems, referral to a cognitive behavioural therapist (e.g. a clinical psychologist) may be helpful. Treatment for vaginismus is usually based on the principles of problem-orientated short-term therapy and with behavioural and desensitization exercises using graded vaginal trainers, sometimes combined with relaxation techniques.

A gradual approach is necessary to facilitate the overcoming of this disorder, including education, homework assignments and cognitive therapy.¹⁹ There are case reports of treatment of vaginismus with local injection of botulinum toxin; however, this is not easily available in the UK³⁰ (Table 1, III).

Management points

It is very important to give the woman control over the examination by describing what you are going to do. For example, show her the speculum if you intend to use it and give her permission to change her mind at any point in the proceedings even if this means no examination is done on that day. Some women choose to hold the speculum or the doctor's wrist in order to feel that they are in control of the process^{19,21} (Table 1, IV).

If she can accept one finger you can teach her how to contract and relax her pelvic floor. Establishing a connection between her need to be in control and the 'involuntary' contraction of pelvic floor muscles can be therapeutic and helps to introduce the concept of exercises to gain conscious control of her vaginal opening through self-examination and pelvic floor exercises.

The use of simple anatomical diagrams to encourage the woman to examine and become familiar with her own genitals is important. The woman can then be encouraged to insert her own finger. This may be done by the patient or partner at home or with supervision by the doctor/nurse.

Over a number of sessions the patient learns to accept more fingers or larger vaginal trainers. Use of lubrication may be helpful in addition to the repeated practice of vaginal exploration using fingers or trainers³¹ (Table 1, Ib). Where a phobic response is present, it is important to retain the finger or trainer in the vagina until anxiety decreases (e.g. 30 minutes). Early removal only increases the fear/vaginismus conditioning. Some therapists recommend concurrent pelvic floor exercises ('Kegel' exercises)¹⁸ (Table 1, IV). If a physiotherapist with expertise in pelvic floor problems and biofeedback is available, they are potentially very useful.³²⁻³⁴

It is important that at follow-up visits the woman's reactions to this process are discussed and any resistance explored. There may be a disclosure of some fantasy or phobia about penetration. The patients can also be taught relaxation exercises. In some instances, the vaginal 'homework exercises' are carried out within a sensate focus programme involving a graded series of massage exercises for a couple in which there is an initial ban on intercourse. The couple should also be instructed in using lubricant and vaginal containment to facilitate initial attempts at penetration. In severe cases, some patients feel more comfortable starting desensitization in clinic with the therapists being present to guide and reassure them.

Outcome

There are no treatment comparison studies of vaginismus. However, there is some evidence that therapy involving insertion training appears to be effective, where the outcome measure is the ability to have penetrative vaginal intercourse. Success rates

from 72% to 100% have been reported with short-term treatment varying from two to 15 sessions³⁵⁻³⁸ (Table 1, III). However, some women are particularly resistant to treatment and may require either skilful couple therapy or long term individual therapy. In such cases, the vaginismus is probably the presenting symptom of a more complex sexual or relationship problem. A Cochrane systematic review of published trials states that there is only limited evidence from uncontrolled trials to recommend the use of systematic desensitization.³⁹

In a study by Schnyder, 44 patients were randomly allocated to two forms of systematic desensitization.³¹ Both groups received information and relaxation exercises. In the first group, the physician introduced an appropriately sized dilator. In the second group, the physician provided verbal instruction for introducing the dilator. Four sizes of vaginal dilators made of silicon were used with a lubricant. The programme included a desensitization exercise and journal entries after each exercise. The patients were told to perform the exercise for 10 to 15 minutes, five times per week. Therapy sessions were every two weeks to follow and support progress, to reduce resistance, and to provide larger dilators as needed. Patients were advised to refrain from coitus during therapy. There were no differences between the groups at the end of the study; 43 out of 44 patients reported successful penetrative sexual intercourse suggesting that common elements of the therapies used were successful (Table 1, 1b).

This result was comparable with the reported success rate of uncontrolled trials and case series.^{7,37,40,41} Results from earlier work report that 44 out of 49 (89.7%) women were successfully treated in combined systematic desensitization groups and six out of six (100%) were successfully treated in a hypnotherapy group⁴² (Table 1, 1b). However, methodological flaws in this study mean that the results must be treated with caution.

Summary

Conventional treatment of vaginismus involves education, cognitive behavioural therapy, psychosexual therapy, and the use of vaginal inserts is recommended. However, there is a marked lack of scientific outcome evidence. We recommend an eclectic approach for this complex sexual problem.

Recommendations

- Diagnosis of vaginismus should be made only after a clinical examination and full history.
- The use of vaginal trainers should be discussed with all patients.
- Vaginal penetration by a penis should not be assumed to be the desired outcome of women presenting with vaginismus.

- Information regarding sexual function and pelvic anatomy should be made available to all patients.

Auditable outcomes

All patients with a diagnosis of vaginismus should have a full psychosexual history and clinical examination.

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