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Vaginismus (Causes, Symptoms and Treatment)

What is vaginismus?

Vaginismus is defined in the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) as a 'genitopelvic pain disorder and/or penetration disorder' (GPPPD), which attempts to bring together the concepts and full spectrum of painful vaginal penetration. This spectrum includes dyspareunia and also accounts for other penetration difficulties such as tampon use, finger penetration, difficulty with gynaecological examinations, and intercourse[1] .

This can occur when there is adequate arousal but may be related to other sexual problems, as vaginismus is part of a spectrum of female sexual dysfunction. These problems are common and may be related to numerous factors in the woman's life[2] :

- Overwork
- Depression
- Unrelated disease
- Relationship problems
- Drug abuse
- Alcohol problems
- Hormonal changes
- Prescribed drugs

Epidemiology

Vaginismus is an issue many women find difficult to bring to their doctor, and therefore figures are likely to be underestimates. The prevalence of vaginismus in the general population is 1-6%, and this ratio rises to between 5% and 17% in specialist sexual dysfunction settings[2] .

A Cochrane review found some studies quoted even higher prevalence rates and commented that the wide variety in the figures found for the prevalence of vaginismus may be the consequence of the unclear and differing definitions used in the studies[3] .

Risk factors

Research methodology is often flawed in this area and there is a lack of meaningful data on psychological causes[4] . Negative perceptions of the woman's own sexuality are common. Events such as an early adverse sexual experience (although not necessarily assault or rape) or unsympathetic genital examination are thought to contribute. Cultural factors are thought to contribute in some.

An organic factor may be a vestibulodynia - a tender area at the entrance to the vagina. This may be caused by postmenopausal oestrogen deficiency, trauma associated with genital surgery, abnormalities of the hymen, genital tract infections, skin disorders or pelvic radiotherapy.

Conditions leading to lack of arousal/lubrication may also increase the likelihood of vaginismus, such as diabetes mellitus, spinal cord injury, multiple sclerosis and relationship issues.

Organic vaginismus is due to congenital malformation of the genital tract[5] . It results from abnormal development of genital paramesonephric (Müllerian) ducts and the urogenital sinus. This is an important problem in adolescent gynaecology.

Presentation

Vaginismus may be primary in nature, or secondary. If primary, the woman has never been able to have penetrative intercourse without pain, or never been able to achieve penetrative intercourse. Vaginismus may also be discovered when first attempting to use tampons, or at a first gynaecological examination or smear. Secondary vaginismus describes these symptoms developing in a woman who has previously been able to allow penetration. In this situation, a precipitating cause, whether organic or psychological, may be easier to detect.

Most women are very reluctant to discuss their sexual problems and so, for them to consult their GP, the patient must view the problem as being serious. Alternatively, their partner may have encouraged them to consult their GP.

It is necessary to ask a number of questions to ascertain the exact nature of the problem. As well as the problem of inability to achieve penetration associated with vaginismus, the woman may complain of:

- Lack of interest in sex when their partner wants it.
- Inability to become aroused.
- Dryness and lack of lubrication.
- Inability to use tampons.

- Inability to achieve orgasm (anorgasmia).
- Dyspareunia - this may be due to lack of arousal and/or poor lubrication but may indicate other disorders, such as pelvic inflammatory disease (PID) and endometriosis or disorders causing irritation of the vestibule.
- A history of traumatic examination or sexual experience.

In the treatment of vaginismus, male sexual dysfunction should not be ignored. Spouses should be questioned for sexual dysfunction and included in the treatment process [6] .

Classification [1]

Vaginismus was divided into four grades by Lamont, based on the patient's history and examination.

- Grade 1: is the mildest form. These patients can control the contraction of their vaginal muscles with the suggestions given during the examination.
- Grade 2: despite the suggestions given to the patient, the patient continues to contract the pelvic floor muscles throughout the examination.
- Grade 3: throughout the examination, the patient raises or pulls her hip to the side, thus trying to prevent the gynaecological examination.
- Grade 4: during the examination, the patient lifts her hips, pulls herself back, closes her legs, and thus prevents the examination.

Grade 5 vaginismus was defined by Pacik and includes severe reactions such as tremors, hyperventilation, palpitations, crying attacks, fainting spells, nausea, vomiting, running away from the table, and attacking the doctor due to intense fear.

Management

- The clinician should take a careful gynaecological, obstetric, sexual and urological history to determine if there is any obvious likely cause.
- Examination of the external genitalia and vagina is essential, looking for any congenital urogenital anomalies, scarring, lichenification, ulceration or inflammation.
- Pelvic examination may be difficult with vaginismus and require patience and maybe a second visit. Time should be taken to explain examination and to obtain consent at each step. Reassure the woman that you will stop examining at any point if she wishes or if it is too painful to continue. During examination try to ascertain at what point there is pain or muscular contraction and what the trigger for this is. Establish if she is able voluntarily to relax the musculature and whether penetration is possible.

Treat any physical cause found. If a physical cause has been excluded, treatment usually consists of education, counselling and behavioural exercises. Cochrane reviews have found that studies have not been adequate to ascertain the relative benefit of the treatment options, and warn that results should be interpreted with caution [3] . Treatment should be tailored to the needs of the woman and her partner, if she is in a relationship. The woman's objectives should be explored. These may be penetrative painless intercourse, tampon use, or painless vaginal examination.

- Where the goal is for the woman to be more comfortable with her genitals, relaxation techniques and self-exploration of the genitals and insertion of 'vaginal trainers' can be used. These are smooth plastic rods that are graduated in size and length; they have a handle and lubrication gel to use when inserting them. The latest Cochrane review found some limited evidence for the efficacy of this 'systematic desensitisation' technique.
- If she is in a relationship, a sensate focus programme may be offered to the couple [7] . This is a series of structured touching activities to help couples overcome anxiety and increase comfort with physical intimacy. The focus is on touch rather than performance and intercourse is initially 'banned'.
- Other psychological and behavioural therapies used include cognitive behavioural therapy (CBT), relaxation therapy and hypnotherapy [8] . Education is an important component.
- Couples may refer themselves for sexual counselling to a service such as 'Relate' [9] .
- Lidocaine or bupivacaine is sometimes used where pain is a principal problem.
- Topical oestrogen may be useful when vulvovaginitis is a causative factor, in the absence of systemic symptoms [10] .
- When the main goal is conception, information about assisted conception should be given.
- Injections of botulinum toxin may be useful as part of a multimodal approach but there are no randomised controlled trials looking at efficacy and acceptability as yet [11] .

NB: pregnant women with vaginismus risk non-follow-up during their pregnancy, due to underlying feelings of shame and having experienced lack of understanding by medical staff. Obstetricians should be mindful of this. Doing so will ensure adequate medical care during pregnancy [12] .

Prognosis

A 2020 study found that patients are likely to have a worse prognosis if they have a history of vaginismus among relatives, or when one of the couple either takes complete responsibility for the issue, or blames the other partner [2] .

Couples that are in advanced-grade classifications should be advised that their treatment periods may be longer and more complicated, that dilators may be needed, and that more efforts are needed to improve sexual function [1] .

Another factor is the willingness of the woman to come forward with the problem and participate in treatment, although spontaneous improvement has been noted in up to 10% of women with vaginismus .

Complications

Vaginismus may result in marital or relationship difficulties and may affect quality of life adversely. It may be associated with poor self-esteem, depression and anxiety. Infertility may be an issue.

The woman may be unable to participate in the cervical screening programme, although if penetrative intercourse has never occurred, she would fall into a lower-risk group for cervical carcinoma anyway.

Further reading & references

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