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# Case Report

# VAGINISMUS AND SUBFERTILITY: CASE REPORTS ON THE ASSOCIATION OBSERVED IN CLINICAL PRACTICE

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# **ABSTRACT**

**Objective:** To analyse the features of patients with vaginismus first presented to a gynaecologist for infertility before being referred for psychiatric evaluation and management. The case series aim to provide some insight on features and presentations of Asian women with vaginismus. Vaginismus is characterised by persistent or recurrent difficulties in vaginal penetration despite the woman's wish for coitus. Avoidance, phobia, anticipatory fear of pain and involuntary pelvic muscle contraction are the most common symptoms.

**Method:** We report a series of cases of Malaysian women who had been suffering from vaginismus and 'infertility'. All the cases had never been attended to medically and there were long delays in seeking intervention. There was no history of traumatic sexual experience or any major psychiatric illness in these patients. Majority of the patients had prominent symptoms of anxiety. **Conclusion:** The cases illustrate that it is important to rule out the possibility of vaginismus among patients with infertility. The former have unique psychological features which require psychological interventions.

**Keywords:** Case reports, vaginismus, infertility, psychological approach, Malaysian women.

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# INTRODUCTION

Vaginismus and dyspareunia are classified under sexual pain disorders. They are closely interrelated and commonly overlooked in clinical practice. 1 Pain may be experienced at vaginal entry, (superficial dyspareunia) or deep in the pelvis (deep dyspareunia). It is characterised by the over tightening of vaginal muscles causing strong, involuntary muscle spasms or intense pain during intercourse. The aetiology of sexual pain disorders is multi factorial.<sup>2</sup> The aetiology of vaginismus specifically may be due to trauma or surgery; the latter could be from childbirth, endometriosis and chronic urinary tract infections. Psychological triggers such as anxiety, stress, or past emotional or sexual abuse also play a part.3 Apart from physical causes, vaginismus also has strong psychological aetiology. Fear, anxiety, partner distrust, negativity towards sex and traumatic childhood experiences are among the nonphysical components. Dyspareunia and vaginismus can lead

to sexual impairment, emotional disturbances and marital disharmony.<sup>4</sup>

About 5-47% of the population suffer from vaginismus and it is not race-specific. It is observed among people presenting for sex therapy or complaining of sexual problems, with significant differences across cultures.<sup>5</sup> However, in Malaysia, we do not have specific data on the prevalence of vaginismus. Vaginismus prevents both intercourse and the ability to conceive and it appears that society's expectations of women's sexuality and fertility may particularly impact on the sufferers.<sup>6</sup>

The aim of the report is to share with readers the cases with common presentations and underlying psychological causes. This help researchers plan effective strategies using sound multi-modal treatment. Four vaginismus cases are highlighted.

# **CASE REPORTS**

#### Case 1

A 32-year-old Malay housewife and married for five years with two children. She refused vaginal examination during antenatal and postnatal check-ups. She was reported to be 'uncooperative' and 'difficult' during her previous deliveries in addition to being overwhelmingly fearful when it came to pelvic examinations.

She had no communication problem with her husband but her marriage was never consummated. Despite having normal libido, she had persistently refused sexual intercourse. There was intense fear of pain with screaming and crying before genital contact. Non-penetrative sexual satisfaction was not explored. She had associated 'sexual contact' with pain. She had misconception of sexual intercourse due to her friend's influence, and had been associating the act with painful experience and vaginal bleeding. There was no previous trauma or sexual abuse. Her 35-year-old spouse from an arranged marriage was described as calm, supportive and caring.

She was timid, anxious and 'simple-minded'. She had only Primary 6 education and had never worked. There were no psychotic symptoms such as auditory hallucination, delusion, anxiety or depression.

She managed to conceive on both occasions through "splash pregnancy". Her treatment regime consisted of supportive psychotherapy, sexual education and relaxation exercise. However, she showed poor outcome and defaulted on the treatment.

# Case 2

A 36-year-old Malay lady, married for seven years and childless. She presented to a gynaecologist for primary infertility. The gynaecologist reported difficulties during vaginal examination. She displayed intense fear of digital and speculum examinations. Hormonal and biological investigations to find causes of infertility did not produce any negative results. She refuted any traumatic childhood sexual incidents. Her husband related that the patient commonly gave various medical excuses such as feeling unwell, headache and gastric problems to avoid sexual intercourse.

It was clearly an unconsummated marriage as there was no penetration during their seven years of marriage. During psychiatric assessments, the patient displayed anxious and obsessive personality traits. She was aware of the intense dilemma that her husband faced and felt very guilty for not

being able to execute her 'duties' as a wife. She confessed to being fortunate to have a supportive, understanding and patient husband.

The couple were given psycho-education related to aspects of the illness, physiology and anatomy of sex organs. We combined cognitive and behavioural approach with anxiolytic. After a few months of treatment, the husband reported some improvement as the wife was more cooperative and less fearful of sex. They managed to have superficial coitus but not deep penetration.

# Case 3

A 35-year-old Malay housewife, married for 10 years. She had seen a gynaecologist during investigation of her primary infertility. Her marriage was non-consummated and she feared sexual intercourse. It was difficult to perform digital insertion or speculum examination on her. She was depressed, quiet, withdrawn, anxious, had bouts of insomnia, severe mood swings, poor appetite and low self esteem. Patient was stressed by her inability to conceive and faced mounting pressure from in-laws to have a child. Her recent decision to stop working in attempts to conceive aggravated her condition. There was no family history of infertility or depressive illness.

She was an anxious child and not a very bright student but managed to earn a degree and a certificate in bakery. She claimed to have had a fall and injured her vagina during her childhood.

Though her marriage was not an arranged one, she was fearful of sexual intercourse despite having normal sexual responses. She was afraid of the night and would find reasons to avoid her husband. She disliked any physical contact with her husband for fear it would end up in sex. In addition, her husband who was as a chef was described as being always tired and unmotivated. He was a responsible man and denied having extra-marital affairs.

Her mental state showed she was depressed, anxious, diffident and withdrawn. She never disclosed her problems and admitted to having few friends. She was diagnosed as having a major depressive disorder co-morbid with vaginismus. Her underlying depression was treated with Venlafaxine. The treatment regime also consisted of psychoeducation, breathing exercise, sexual psychotherapy and couple therapy. She showed some improvement but her marriage was still non-consummated. It was difficult to engage the husband in treatment as he had developed hypoactive sexual arousal.

# Case 4

A 35-year-old housewife came for infertility treatment after 10 years of marriage. The couple admitted to having non-penetrative sexual intercourse and insisted on a treatment regiment that comprised sperm insemination via intrauterine insemination. She was reluctant to see the psychiatrist for further evaluation and treatment for her vaginismus. The couple appeared anxious and denied any marital difficulties.

Semen analysis indicated the husband had severe oligospermia. Despite being referred to a psychiatrist twice, the wife opted not to undergo any treatment.

# DISCUSSION

All four cases demonstrated association between infertility and vaginismus. Patients presented to the gynaecologists for infertility without knowing their problems were due to vaginismus. The cases also showed that there is significant delay in seeking treatment; between five to 10 years. Among the reasons cited were diffidence, negative perception regarding sexual matters and difficulties in discussing the subject with medical practitioners of the opposite sex. This is partly true as in certain circumstances there is a shortage of female sexual therapists dealing in sexual dysfunctions. One of the cases shows that pregnancy was still possible despite the woman suffering from vaginismus. The term splash pregnancy refers to a phenomenon where no actual penetration occurred but ejaculation at the vicinity of the exterior of the vagina propelled the sperm to the ovaries. In some cases, sufferers of vaginismus can still have vaginal delivery.

Vaginismus is defined as a persistent tightening of the vulva due to involuntary, painful, spasmodic contraction of the vulvo-vaginal canal preventing normal coitus or insertion of any object despite the woman's wish to do so.<sup>7</sup> It has been further described as a recurrent or persistent involuntary spasm of the musculature of the outer third of the vagina which interferes with intercourse. However, the experience of pain is not necessary for this diagnosis.<sup>8,9</sup> In Malaysia, the prevalence of sexual pain disorder is more than 60% among patients in primary care.<sup>10</sup> Patients in the four cases above related the experience of pain or fear of sexual pain.

Research findings in Iran showed that the most common sexual dysfunction (in infertility treatment) was orgasmic disorder (83.76%) and the rate of sexual desire disorder, dyspareunia and vaginismus were 80.7%, 67.7% and 76.7% respectively. More than 50% of cases reported decreased frequency of coitus after diagnosis of infertility.<sup>11</sup>

There is a wide range of modalities that can be used to treat women with vaginismus. It ranges from psychological and behavioural intervention, the use of medicines and minor surgery. Before commencement of treatment, clinicians should perform a complete psychosocial history, physical and genital examination. This is important to establish the dynamics of the aetiology and impacts of the disease on marital relationship. Studies have shown the effectiveness of treating vaginismus. Systematic desensitisation methods have produced success rates of 90-95%. 12-14 It is thought to be more prevalent in younger women, women with negative attitudes towards sex and those with a history of sexual abuse or trauma. 11 In these four patients, all experienced difficulties in pelvic examination. As reported by Masters and Johnson, distress reactions during a routine pelvic examination that includes observation of the external genitalia and manual vaginal exploration may indicate an important symptom of vaginismus.15

This disorder is partly attributed to unresolved psycho-sexual conflicts. Phobic perception towards painful penetration, lack of knowledge on sexual physiology and anatomy, fear and anxiety would result in involuntary vaginal muscle spasm. <sup>16-18</sup> Therefore, treatment must consist of psycho-education on the illness and instillation of awareness on the importance of anxiety resolution. Cognitive behavioural therapy (CBT) was used to resolve negative perceptions regarding sexual intercourse as many sufferers view penetration as harmful and painful. Behavioural approach such as breathing exercises and relaxation techniques assist in overcoming sexual anxieties.

Progressive vaginal dilatation using a dilator for treatment of vaginismus was attempted on the four patients. However, patients appeared to be in discomfort and not receptive believing that their sexual problem should be resolved through medication instead of physical manipulation.

Pharmacological approach such as the use of local anaesthetics (lidocaine), muscle relaxants (nitroglycerin ointment and botulinum toxin) and anxiolytic medication has been touted for its efficacies. 19-23 The evidence though is scarce as the efficacy was based on a few case reports and not a comprehensive or credible study.

Surgical intervention is indicated only in patients with unusually thick hymen. Otherwise, surgical approach is not proven to be effective. Dilatation alone appeared to result in favourable outcomes.<sup>24</sup> Traditionally, progressive vaginal dilatation for desensitisation, sexual education, psycho-sexual therapy to reduce fear, negative conditioning and phobia, hypnotherapy, and biofeedback generally produced good outcome.

Anxious or incompetent male partners can cause or exacerbate vaginismus.<sup>25</sup> However, in all four cases reported above, this did not appear to be the case.

# **CONCLUSION**

There is a trend for sufferers of vaginismus in Malaysia to present late to clinicians, preferring to meet a gynaecologist first before seeking psychiatric attention. Inability to conceive was the main presentation at the infertility unit. Pregnancy and vaginal delivery are still possible in isolated cases. There are many couples who would benefit from assisted pregnancy. Close cooperation between gynaecologists and psychiatrists would ensure the best outcome in the management of vaginismus.

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