# **Research Article**

# Characteristics and Treatment in Patients with Vaginismus in Surabaya, East Java, Indonesia

Eighty Mardiyan Kurniawati<sup>1</sup>, Gatut Hardianto<sup>1</sup>, Hari Paraton<sup>1</sup>, Tri Hastono Setyo Hadi<sup>1</sup>, Anis Widyasari<sup>2</sup>, Nur Anisah Rahmawati<sup>3</sup>

<sup>1</sup>Department of Obstetrics and Gynecology, Faculty of Medicine, Universitas Airlangga, Surabaya, Indonesia

<sup>2</sup>Department of Obstetrics and Gynecology, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Dr. Sardjito Hospital, Yogyakarta, Indonesia <sup>3</sup>Faculty of Vocational Studies, Universitas Airlangga, Surabaya, Indonesia

#### **Abstract**

Background: Vaginismus is still an under-researched case of women's health despite its universal prevalence.

Aim: This study aims to explore the characteristics of vaginismus in East Java, Indonesia.

**Methods:** The subjects in this study were all new female patients with Vaginismus found in a single hospital, Surabaya, East Java, Indonesia, in 2022. The data used in this study are secondary data obtained from the medical records. Descriptive data are presented as numbers and percentages for categorical data.

**Results:** Vaginismus was found in a single hospital - East Java, Indonesia. Based on medical record data, throughout 2022, there will be 60 patients with a diagnosis of Genito-Pelvic Pain Penetration Disorder (GPPPD). The assessment of patient characteristics showed that almost all patients were of reproductive age. Most of the respondents have been married for more than 1 year. Management is carried out independently and collaboratively. A total of 60 patients underwent anamnesis and physical examination. Complaints experienced by patients are the failure to penetrate. Treatment was done using Botox injections, dilatation, hymenectomy, and consultation with a psychiatrist and an andrologist.

**Conclusion:** Management in cases of Vaginismus requires cross-professional collaboration, such as psychiatrists and andrologists. The treatment given also tends to be complex.

Keywords: pelvic pain penetration, hospital, women's health.

Correspondence Author. Eighty Mardiyan Kurniawati, Department of Obstetrics and Gynecology, Faculty of Medicine, Universitas Airlangga, Surabaya, Indonesia. Email; eighty-m-k@fk.unair.ac.id, HP: +628113534449

#### **INTRODUCTION**

Vaginismus is an involuntary spasm of the vaginal muscles that interferes with sexual intercourse. Study on the epidemiology of these cases is rarely done. This is due to the lack of research interest in terms of diagnostic, etiological, or treatment results. These cases tend to be difficult to diagnose or treat, resulting in the unavailability of definitive epidemiological data regarding the prevalence of vaginismus in the population. Investigators will require stressful gynecological examinations that sufferers may often avoid. Consequently, there are various estimates of the prevalence of this problem.

Not everyone will report this problem, and women with this disease are vulnerable to being marginalized.<sup>1</sup> A systematic review reported that the incidence of vaginismus in the general population of women was reported to be 0.4% to 8%.<sup>2</sup>

Women who experience Vaginismus can experience various problems, such as infertility. The risks do not stop until the woman can get pregnant. Pregnant women with vaginismus are at risk of not being followed up during their pregnancy because of feelings of shame and a lack of understanding by medical staff. These cases may affect a woman's perception of her femininity and her potential for motherhood.<sup>3</sup>

Infertility impacts the mental health, quality of life, and sexual connection of a couple.<sup>4</sup>

The variables of fear of sex, positive cognition and negative self-image, sexual intimacy, quality of sexual life, and education were the final predictors of vaginismus diagnosis score.<sup>5</sup> One of the predictors of successful treatment for vaginismus is the attribution of the problem to psychological causes rather than physical. In order to fully understand vaginismus, it must be explored at intrapersonal, interpersonal, and cultural levels, and of all of these, the interpersonal level continues to be under-researched.<sup>6</sup>

Vaginismus is predominantly unknown among clinicians and women. It is a poorly understood and underdiagnosed condition, for which many women do not gain support. To understand cases and detect them early, clinicians and researchers need to understand the characteristics of the patient and the therapies that have been carried out before. This study aims to explore the characteristics of vaginismus patients in East Java, Indonesia.

#### **METHODS**

This is a descriptive observational study with a cross-sectional approach. The subjects in this study were all new female patients with Vaginismus who were found in a single hospital, East Java, Indonesia, in 2022. The data used in this study are secondary data obtained from the medical records. Descriptive data are presented as numbers and percentages for categorical data.

### **RESULTS**

Vaginismus was found in a single hospital -East Java, Indonesia. Based on medical record data, throughout 2022, there will be 60 patients with a diagnosis of vaginismus. The results of the assessment of patient characteristics showed that almost all patients were of reproductive age. A total of 56 respondents aged 20-35 years (93%) and 4 respondents aged more than 35 years (7%). Most of the respondents have been married for more than 1 year. Married less than 1 year, there were 6 people (10%), 1-5 years, 49 people (82%), and more than 5 years as many as 5 people (8%). Based on the table, the most frequently reported symptom was pain and fear during attempted vaginal intercourse, experienced by 56 respondents (93%). A smaller proportion of respondents reported a burning sensation in the vulvar area (3 respondents, 5%), while 1 respondent (2%) experienced a tightening sensation in the lower abdomen, perineum, buttocks, and upper thighs. These findings indicate that the primary complaints among respondents are pain and muscle tension in the genital area, which may suggest conditions such as vaginismus or dyspareunia.

Table 1. Characteristics of patients

Variable	Category	Total (Percentage)
Age	20-35 years	56 (93%)
	>35	4 (7%)
Duration of marriage	< 1 year	6 (10%),
	1-5 years	49 (82%)
	> 5 years	5 (8%).
Symptoms	Tightening sensation	1 (2%)
	in the lower	
	abdomen, perineum,	
	buttocks, and upper	
	thighs	
	Pain and fear at	56 (93%)
	attempted vaginal	
	intercourse	
	Burning in the vulva	3 (5%)
	area	

Management is carried out independently and collaboratively. A total of 60 patients underwent anamnesis and physical examination. Complaints experienced by patients are the failure to penetrate. The doctor examines by trying to insert 1 index finger. 3 patients failed the examination due to severe pain. Of the 3 patients, 2 were given Botox injections and 1 was referred to a psychiatrist because they did not want Botox and admitted that they had psychological trauma. Both patients who received Botox injections managed to continue with independent dilatation, and 1 patient managed to get pregnant. Of the other 57 patients, all underwent gynecological evaluation and successful finger insertion. However, 2 patients had problems with the hymen. The condition of the patient's hymen is one small hole, and the hymen is thick and stiff. The patient was then operated on for hymenectomy. Of the 55 patients whose finger insertion was successful, patients were trained to perform independent dilation with silicone dilators of sizes 1 to 5. Among the remaining 55 patients, there were 5 patients who had difficulty dilating independently, so Botox injections were performed. A total of 7 patients who underwent surgery or Botox were able to continue with independent dilatation. This success is aided by dilators. Of the 60 patients, there was 1 patient who was consulted by a psychiatrist who was still practicing dilators, and 5 people with independent dilation (without Botox and without surgery) who were still practicing with dilators. One patient practiced self-dilatation; her husband had erectile dysfunction and was therefore referred to an andrologist.

#### **DISCUSSION**

Case analysis shows that each patient has their own characteristics, so they require treatment according to the problem. Management in cases of Vaginismus requires cross-professional collaboration, psychiatrists such as andrologists. The treatment given also tends to be complex. Treatment has been carried out using vaginal dilators, psychotherapy, and psychiatric care. Gentle care and sensitive listening should be integral components in multidisciplinary teamwork to identify women with vaginismus and offer partners better quality care.<sup>7</sup> The use of a multidimensional approach in this study led to the acceleration of the diagnosis and treatment of vaginismus.8 One of the predictors of successful treatment for vaginismus is the attribution of the problem to psychological rather than physical causes. <sup>6</sup>. A multimodal program that treated the physical and psychological aspects of vaginismus enabled women to achieve pain-free intercourse, as noted by patient communications and serial female sexual function studies.9

There are patients undergoing hymenectomy. This causes difficulties when penetrating. Another studyexamined the use of hymenectomy in patients undergoing cognitive behavioral treatment alone. One of the most common anatomical causes is hymen abnormalities. Treatment of vaginismus is facilitated by removing the physical barrier through hymenotomy or hymenectomy when there is a septate hymen with a half-moon shape and a high edge or an inflexible hymen.<sup>10</sup> In addition to the treatment using hymenectomy, the other treatment is Botox injection. This is in accordance with other study, who conducted a meta-analysis study. Botox injection can be an option for vaginismus patients and is effective even though the number of RCT studies is still limited 11. Chronic pelvic pain, vaginismus, and vulvar and vaginal dyspareunia have all been observed to improve after botulinum toxin injections. No permanent adverse consequences were found. Constipation, rectal pain, and temporary urine or fecal incontinence were the main adverse effects. 12 One study identified as many as 20 articles discussing the use of BoNTA in PFM dysfunction. The most injected sites were the levator ani muscles. Success rates varied between 62 and 100 % 13. Botox is a safe drug when used according to the manufacturer's recommendations 14.

More than half of the respondents were patients who had been married for 0-2 years. Another study showed that problems among couples who are unable to have natural sexual intercourse and vaginal penetration considered unconsummated marriages. After 6 years, the couple's main problems are vaginismus and post-traumatic stress. 15. The important risk factors for vaginismus were duration of marriage, sexual intercourse frequency, sexual satisfaction, marital satisfaction, and consensus. 16. In marriage, treatment must involve two people, namely a man and a woman. One study examined interventions in couples. The average age of women is 29.5 years, and men is 32 years. The average length of marriage is more than 5 years. The FSFI score has increased. The couple is getting a therapy session. During a 30-45-minute pre-treatment consultation session, anxiety and fear and avoidance models of vaginal penetration were debated, considering the participants' individual beliefs, behaviors, and emotions. At the first visit, the therapist allows examination of the external genitalia. Neither of them allowed a complete vaginal examination (finger penetration) due to pelvic floor contractions at the first visit. Examination was carried out after informed consent. A couple has a private consultation session. The number of sessions was estimated between 4 to 6 sessions, and the duration of each session was 45-60 minutes. 17.

The results of the assessment of patient characteristics showed that almost all patients were of reproductive age, namely 20-35 years, were diagnosed with vaginismus, and received VT procedures. Female sexual function declines with age. This decline starts in the late 20s to the late 30s. Desire, frequency of orgasms, and frequency of intercourse decrease with age. The prevalence of most sexual difficulties or dysfunctions changes little with age, except for sexual pain, which may decrease.<sup>18</sup> The most frequently reported

problems in middle-aged women are vaginal dryness and dyspareunia. Dyspareunia, but not vaginal dryness, is associated with decreased frequency of intercourse during the climacteric period.<sup>19</sup>

Complaints related to sexual function among patients vary in severity. According to various statistics, between 4.2% and 42% of women of childbearing age report experiencing mild to severe sexual dysfunction. A study involving 258 patients diagnosed with vaginismus found that the mean maternal age was 29.2 ± 4.7 years. Among these patients, 86.86% had experienced at least one pregnancy and childbirth. The rate of caesarean delivery among treated individuals with vaginismus was comparable to that of the general population. Furthermore, vaginal delivery following treatment for vaginismus appears to be safe, with no observed increase in perineal morbidity or recurrence of the condition <sup>4</sup>.

The limitation of this research is that it has not been able to explore deeply into patient complaints and management. Recommendations for further research are to examine patient experiences in depth regarding vaginismus treatment.

# **CONCLUSION**

Case analysis shows that each patient has their own characteristics, so they require treatment according to the problem. Management in the study of Vaginismus requires cross-professional collaboration, such as psychiatrists and andrologists. The treatment given also tends to be complex.

### **ACKNOWLEDGEMENT**

None

# **REFERENCES**

- Kurniawati EM, Hardianto G, Paraton H, Setyo Hadi TH, Widyasari A, Nur Rahmawati A. Pregnancy Following Treatment in Patients with Vaginismus in East Java, Indonesia in 2022. J Obstet Gynecol Cancer Res. 2023;8(5):541–4.
- Sabetghadam S, Keramat A, Malary M, Rezaie Chamani S. A Systematic Review of Vaginismus Prevalence Reports TT مرور نظام مند مطالعات گزارش شيوع واژينيسموس . arumsj [Internet]. 2019 Oct 1;19(3):263–71. Available from: http://jarums.arums.ac.ir/article-1-1721-en.html

- 3. Achour R, Koch M, Zgueb Y, Ouali U, Hmid R Ben. Vaginismus and pregnancy: Epidemiological profile and management difficulties. Psychol Res Behav Manag. 2019;12:137–43.
- Zulfikaroglu E, Yaman S. Obstetric outcomes of 297 women treated for vaginismus. Eur J Obstet Gynecol Reprod Biol [Internet]. 2022;276:134–8. Available from: https://www.sciencedirect.com/science/article/pii/ S0301211522004407
- Banaei M, Kariman N, Ozgoli G, Nasiri M. Biopsychosocial factor of vaginismus in Iranian women. Reprod Health [Internet]. 2021;18(1):210. Available from: https://doi.org/10.1186/s12978-021-01260-2
- McEvoy M, McElvaney R, Glover R. Understanding vaginismus: a biopsychosocial perspective. Sex Relatsh Ther [Internet]. 2021 Dec 5;1–22. Available from: https://doi.org/10.1080/14681994.2021.2007233
- Chalmers KJ. Clinical assessment and management of vaginismus. Aust J Gen Pract. 2024;53(1–2):37–41.
- 8. Raveendran AV, Rajini P. Vaginismus: Diagnostic Challenges and Proposed Diagnostic Criteria. Balkan Med J. 2024;41(1):80–2.
- eserdag süleyman. Evaluation Of Characteristics And Clinical Outcomes Of Vaginismus Treatment During Pregnancy. South Clin Istanbul Eurasia. 2021;32(2):134–40
- 10. Kurban D, Eserdag S, Yakut E, Mishra PC. The treatment analysis of the patients suffering from vaginismus and the correlation with the psychological issues. Int J Reprod Contraception, Obstet Gynecol. 2021;10(4):1328.
- Velayati A, Jahanian Sadatmahalleh S, Ziaei S, Kazemnejad A. Can Botox Offer Help to Women With Vaginismus? A Systematic Review and Meta-Analysis. Int J Sex Heal [Internet]. 2019 Jul 3;31(3):233–43. Available from: https://doi.org/10.1080/19317611.201 9.1616029
- 12. Parenti M, Degliuomini RS, Cosmi E, Vitagliano A, Fasola E, Origoni M, et al. Botulinum toxin injection in the vulva and vagina. Evidence from a literature systematic review. Eur J Obstet Gynecol Reprod Biol [Internet]. 2023 Dec 1;291:178–89. Available from: https://doi.org/10.1016/j.ejogrb.2023.10.028
- 13. Gari R, Alyafi M, Gadi RU, Gadi SU. Use of Botulinum Toxin (Botox®) in Cases of Refractory Pelvic Floor Muscle Dysfunction. Sex Med Rev [Internet]. 2022 Jan 1;10(1):155–61. Available from: https://doi.org/10.1016/j.sxmr.2021.04.003
- Pacik PT, Geletta S. Vaginismus Treatment: Clinical Trials Follow Up 241 Patients. Sex Med [Internet]. 2017;5(2):e114–23. Available from: http://dx.doi. org/10.1016/j.esxm.2017.02.002
- 15. Bokaie M, Khalesi ZB, Yasini-Ardekani SM. Diagnosis and treatment of an unconsummated marriage in an Iranian couple. Afr Health Sci. 2017;17(3):632–6.
- Çankaya S, Aslantaş BN. Determination of Dyadic Adjustment, Marriage and Sexual Satisfaction as Risk Factors for Women with Lifelong Vaginismus: A Case Control Study. Clin Nurs Res [Internet]. 2021 Sep 14;31(5):848–57. Available from: https://doi. org/10.1177/10547738211046136
- 17. Bokaie M, Bostani Khalesi Z. Couple Therapy and Vaginismus: A Single Case Approach. J Sex Marital Ther [Internet]. 2019 Nov 17;45(8):667–72. Available from: https://doi.org/10.1080/0092623X.2019.1610126

- 18. Gesselman AN, Bennett-Brown M, Dubé S, Kaufman EM, Campbell JT, Garcia JR. The lifelong orgasm gap: exploring age's impact on orgasm rates. Sex Med. 2024;12(3).
- 19. Eichler S, Panz M, Harder A, Masur C, Häuser M, Wiesche ES zur. An effective non-hormonal option with high tolerability for mild to moderate symptoms of vaginal dryness associated with menopause. Maturitas [Internet]. 2024;185:107978. Available from: https://www.sciencedirect.com/science/article/pii/S0378512224000732