International Journal of Health Science

GENITO-PELVIC PAIN: ETIOLOGICAL ANALYSIS, IMPACT ON THE BIOPSYCHOSOCIAL SPHERE AND MEDICAL APPROACH

Júlia Lenza Goulart

Faculdade de Medicina de Rio Verde Rio Verde – Goiás https://orcid.org/0000-0002-1840-2564

Naiara Nunes Silva

Faculdade de Medicina de Rio Verde Rio Verde – Goiás https://orcid.org/0000-0002-0004-4834

Lara Cândida de Sousa Machado

Faculdade de Medicina de Rio Verde Rio Verde – Goiás https://orcid.org/0000-0002-0953-6560



All content in this magazine is licensed under a Creative Commons Attribution License. Attribution-Non-Commercial-Non-Derivatives 4.0 International (CC BY-NC-ND 4.0).

Abstract: INTRODUCTION: Vaginismus and dyspareunia constitute a disorder of genito-pelvic pain and penetration (PDGPP), making sexual intercourse difficult. This dysfunction has multifactorial causes and high prevalence. OBJECTIVE: The objective of this study is to address the main causes of PDGPP, its harmful effects on female quality of life and the relevance of knowledge about sexuality, in medicine, for a better prognosis for patients. METHODOLOGY: This is an integrative literature review. For this, the SciELO, PubMed and LILACS databases were used. To select the research, the keywords were used as described by Decs: "dyspareunia", "sexual dysfunctions", "epidemiology", "vaginismus" and "sexuality". Finally, 7 articles were used, from 2009 to 2022. **RESULTS AND DISCUSSION: The articles** analyzed showed the etiological, biological, psychological, relational and cultural causes of vaginismus. Furthermore, it highlighted the high prevalence of sexual dysfunctions and the lack of preparation in the approach by doctors, in addition to the effects on the quality of life of women with genital-pelvic pain and penetration. CONCLUSION: Genito-pelvic dysfunctions have a profound impact on women's sexual and personal sphere. In this sense, qualified care for affected patients is necessary in order to ensure their quality of life.

Keywords: "dyspareunia", "sexual dysfunctions", "epidemiology", "vaginismus" and "sexuality".

INTRODUCTION

Vaginismus, together with dyspareunia, constitutes genito-pelvic pain and penetration disorder (PDGPP). Such pain can occur in the vaginal vestibule, which is vaginismus, or with deep penetration, which is dyspareunia. Vaginismus involves the involuntary contraction of the pelvic floor muscles when an attempt is made to penetrate the vaginal entrance (TETIK et al., 2021).

In this context, population studies in Brazil demonstrate that, among women, around 49% have some type of sexual dysfunction, which is a relatively high rate. In the case of PDGPP, a multidisciplinary team may be necessary for clinical evaluation, but the role of the gynecologist is crucial for identifying the initial complaint, associating it with the clinical history and previous sexual history. When muscle spasms are identified, an evaluation by a physiotherapist is recommended for a better analysis of the pelvic floor. Diagnosis of dyspareunia and vaginismus requires at least 6 months of persistent or recurrent complaints of vulvovaginal or pelvic pain during penis-vagina intercourse or during attempted penetration, fear or anxiety regarding pain in anticipation of, during, or as a result penetration, tension or contraction of the pelvic floor muscles during attempted vaginal penetration that causes suffering to the woman. Whether these are associated or not. (FEBRASGO, 2017)

The etiology of this dysfunction is quite varied and may involve physical and psychological factors. Muscle contraction in vaginismus follows a cycle, an initial painful stimulus results in more intense contractions, which results in more pain. Vaginismus is closely related to anxiety around sexual intercourse. Factors such as punitive sexual education, sexual abuse and harassment are often associated with this disorder. In addition, there are physical causes such as endometriosis, sexually transmitted infections, injuries, among others. (TETIK et al.,2021).

In this context, vaginismus is classified as primary and secondary. Primary occurs when the woman, from her first attempt, is unable to achieve successful sexual intercourse due to involuntary contractions. Secondary vaginismus is observed in women who previously had successful sexual relations, but developed the dysfunction later in life. (AMARAL et al., 2017)

GOALS

The objective of this study is to address the main causes of PDGPP and analyze the consequences that this dysfunction has on the biopsychosocial sphere of women's lives. Furthermore, this research seeks to highlight the need to address this issue in society and among health professionals, aiming to increase the search, by affected women, for professional help and, consequently, a better quality of life.

METHODOLOGY

The present study is an integrative literature review. To carry out the research, the following databases were used: PubMed (US National Library of Medicine), SciELO (Scientific Electronic Library Online) and LILACS (Latin American and Caribbean Literature in Health Sciences) of scientific data until July 4, 2022, without language restrictions with studies published between 2009 and 2022. Data from the Brazilian Federation of Gynecology and Obstetrics Associations (FEBRASGO) was also used.

SEARCH STRATEGY

The keywords were used to meet the theme with a prospective design: "dyspareunia", "sexual dysfunctions", "epidemiology", "vaginismus" and "sexuality". The Boolean operator AND was used to produce the research. To complement the database searches, all references of selected articles and review articles were reviewed.

INCLUSION AND EXCLUSION CRITERIA

The following inclusion criteria were used: original and non-original study, published in a journal with an editorial board. Editorials, commentaries, letters to editors, qualitative studies and studies that reported only a crosssectional analysis were excluded. Finally, 7 articles were selected.

SELECTION AND EXTRACTION OF ARTICLES

The selection of studies was carried out independently by the main author, following three steps: I- analysis of article titles, II- reading of abstracts and III- reading of full texts. At each stage, if there were disagreements, the second author was asked to judge, and the final decision was made by consensus.

RESULTS AND DISCUSSION

Sexual health is considered one of the four pillars that guarantee quality of life for individuals, alongside leisure, job satisfaction and family harmony. Disorders in this area are still little debated in clinical management as potential factors that deprive personal fulfillment and limit human life in its entirety, especially when it comes to women. The construction of female sexuality has a cultural, family, historical, emotional, environmental, psychological influence and is also dependent on how their sexuality was constructed throughout life. Due to this multifactorial nature of female sexual formation, possible dysfunctions, such vaginismus and as dyspareunia, will also be linked to causes beyond the biological body. In this context, vaginismus affects the quality of life of its sufferers in different areas. A study carried out analyzing the physical, psychological, social and environmental spheres of patients with the disorder highlighted that they were all

affected to varying degrees due to the disorder. Furthermore, understanding their condition and the possibility of treating it improved the well-being and self-esteem of these women. Finally, the resolution of complaints of pain during penetration resulted in an improvement in quality of life (SERRA, et al., 2009).

The etiological factors of genito-pelvic pain can be divided into: biological, psychological and relational. In vaginismus, pain follows a vicious cycle. Therefore, a first painful produces fearful experience thoughts regarding pain and its meaning. Which leads to somatic hypervigilance that increases all potentially negative sensations, amplifying the negative emotions associated with pain. Repeated experiences of pain during sexual intercourse confirm fear and the need for vigilance, leading to more pain and avoidance of penetration (DIAS-AMARAL, et al., 2018).

The biological factors associated with genital pain are mostly acute and transient, leading to inflammation of the skin and vulvar mucosa due to infections, for example genital herpes and candidiasis. Furthermore, malignant lesions, changes in hormonal aspects (such as menopause), and genetic factors (greater vulnerability to inflammatory diseases or painful hypersensitivity) also play an important role in causing vaginal pain. In this context, these conditions can provide the first painful stimulus that generates the development of vaginismus (Hill, et al., 2021).

Psychological factors vary, women diagnosed with genito-pelvic pain are more likely to have a history of sexual, physical and emotional abuse. Pain complaints are common in women with a history of depressive and anxiety disorders. Taking this into account, the psychosocial environment in which a woman is inserted directly interferes with her sexual sphere, considering that the human sexual response depends on the interaction and physical integrity of the genital organs and the psychological and emotional conditions of the individual. (DIAS-AMARAL, et al., 2018).

A woman's conception of sex is also associated with sexual dysfunctions. Studies have shown that in women with genito-pelvic pain dysfunction there is a greater activation of negative cognitive schemes, which results in less affective involvement, avoidance of intimacy and higher levels of anticipatory anxiety. Conceptions of incompetence, loneliness, depreciation and rejection are frequently observed in this group. With current data, it is not possible to say whether these thoughts are the cause or consequence of sexual inadequacies (SANTOS, et al., 2017).

With regard to anxiety, it is important to highlight that the pelvic floor is an "emotional organ", therefore, anxiety causes reflex contractions in these muscles. Therefore, anticipatory anxiety related to sexual intercourse can increase spasms in this structure, generating an increase in pain during penetration attempts (DIAS-AMARAL, et al., 2018).

That said, it appears that patients with depressive disorder have a 50% to 70% increase in the risk of developing sexual dysfunctions. A normal sexual response, at a physiological level, requires the joint action of the autonomic nervous system, pituitary-pituitary-adrenal axis, sexual hormones and neurotransmitters. In the desire phase, dopamine is the main controlling agent. During the excitement phase, acetylcholine and nitric oxide are essential. Finally, during orgasm, regulation is carried out by serotonin, norepinephrine and prolactin. However, the etiopathogenesis of depressive disorders comes, for the most part, from the imbalance of serotonin, norepinephrine, dopamine and alterations in the hypothalamic-pituitary-adrenal axes. In view of this, it is clear that disorders in the initial phases (desire), generated by the biological imbalance of depression, may be highly related to cases of dyspareunia and vaginismus. (FEBRASGO, 2017)

Regarding relationships, it is necessary to point out that, despite being the woman who experiences the pain, the partner is also affected by vaginismus. Since the fear of pain leads to avoidance of sexual activity and also of your partner. Given this, communication between the parties enables an open discussion about pain and increases women's sexual satisfaction. Thus, the partner's response to pain in the relationship has an influence on women's perception, and men who encourage the search for adaptive coping strategies and reinforce attempts at sex are associated with lower rates of pain and better sexual functioning. On the other hand, hostile partners and also those who are excessively understanding and helpful are associated with greater pain, more depressive symptoms and less sexual satisfaction in women. The explanation is that excessively understanding men do not encourage the search for coping strategies, but rather the avoidance of sexual intercourse (DIAS-AMARAL, et al., 2018).

Furthermore, another factor that increases vaginismus and dyspareunia is the lack of knowledge among health professionals regarding sexual physiology. Approximately 49% of Brazilian women have some type of sexual dysfunction, however, during medical consultations, many professionals do not take an anamnesis related to sexual health. This is derived from the lack of theoretical and semiological approach to the subject, resulting from a taboo surrounding sexual pleasure during undergraduate studies (FEBRASGO, 2017). This failure in medical teaching institutions results in a number of doctors unprepared for this type of issue. This can be seen in a study with Brazilian gynecologists, which found that approximately 50% of the specialists interviewed did not feel confident in addressing demands related to sexuality. Therefore, it appears that the lack of knowledge on this subject leads to a delay in diagnosis and, consequently, greater suffering for affected patients. (SERRA, et al., 2009).

FINAL CONSIDERATIONS

It is concluded that vaginismus is a sexual dysfunction resulting from the involuntary contraction of the pelvic floor muscles and, together with dyspareunia, constitutes the dysfunction of genito-pelvic pain. Around 23% of Brazilian women have PDGPP, which comes from multifactorial causes. The etiology may arise from biological, psychological factors and factors associated with the nature of the relationships of the affected women. Penetration pain disorder follows a vicious cycle in which, with the reinforcement of an initial painful stimulus, the disorder is triggered. However, the lack of knowledge about one's own sexuality and the unpreparedness of doctors to approach the subject reduces the search for help and harms the quality of life of affected women. There is a need for more research and discussions regarding female sexuality and the urgency of medical training in dealing with sexual dysfunctions.

REFERENCES

AMARAL, Priscila Pereira. **Intervenção da fisioterapia uroginecológica no tratamento coadjuvante do vaginismo.** Revista Visão Universitária, v.2, n.1, 2017.

DIAS-AMARAL, Ana e Marques-Pinto, André. Perturbação de dor Gênito-pélvica e da penetração: revisão dos fatores associados e abordagem geral. Revista Brasileira de Ginecologia e Obstetrícia [online]. v. 40, n. 12, pp. 787-793, 2018.

FEDERAÇÃO BRASILEIRA DAS ASSOCIAÇÕES DE GINECOLOGIA E OBSTETRÍCIA (FEBRASGO). **Tópicos em Saúde Sexual**. [S. l.]: Elsevier, Julho 2017. 141 p.

HILL, D Ashley. Dyspareunia in Women. Am Fam Physician, p. 597-604,2021.

SANTOS, Camila Elidia Messias dos. **Relato de um caso clínico de disfunção sexual feminina sob a ótica da abordagem cognitivo-comportamental breve.** Revista Brasileira de Psicoterapia, v. 19, n. 3, p. 63-76, 1 dez. 2017.

SERRA, MELINA. **Quality of life and sexual dysfunction: the vaginismus**. 2009. 123 f. Dissertação (Mestrado em Psicologia) - Pontifícia Universidade Católica de São Paulo, São Paulo, 2009.

TETIK, Sinan et al. Vaginismus, Dyspareunia and Abuse History: A Systematic Review and Meta-analysis. J Sex Med, v. 18, p. 1555-1570, 2021.