THE JOURNAL OF
SEXUAL MEDICINE

Comorbidities Among Women With Vulvovaginal Complaints in Family Practice

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ABSTRACT

Background: The lifetime prevalence of women suffering from provoked vestibulodynia (PVD) is estimated to be approximately 15%. The etiology of PVD is not yet clear. Recent studies approach PVD as a chronic multifactorial sexual pain disorder. PVD is associated with pain syndromes, genital infections, and mental disorders, which are common diseases in family practice. PVD, however, is not included in the International Classification of Primary Care. Hence, the vulvovaginal symptoms, which could be suggestive of PVD, are likely to be missed.

Aim: To explore the relationship between specific vulvovaginal symptoms that could be suggestive of PVD (genital pain, painful intercourse, other symptoms/complaints related to the vagina/vulva), and related diseases such as pain syndromes, psychological symptom diagnoses, and genital infections in family practice.

Methods: A retrospective analysis of all episodes from 1995 to 2008 in 784 women between 15 and 49 years were used to determine the posterior probability of a selected diagnosis in the presence of specific vulvovaginal symptoms suggestive of PVD expressed in an odds ratio. Selected comorbidities were pain syndromes (muscle pain, general weakness, irritable bowel syndrome [IBS]), psychological symptom diagnoses (anxiety, depression, insomnia), vulvovaginal candidiasis, and sexual and physical abuse.

Results: Women with symptoms suggestive of PVD were 4 to 7 times more likely to be diagnosed with vulvovaginal candidiasis and 2 to 4 times more likely to be diagnosed with IBS. Some symptoms suggestive of PVD were 1 to 3 times more likely to be diagnosed with complaints of muscle pain, general weakness, insomnia, depressive disorder, and feeling anxious.

Conclusion: Data from daily family practice showed a clear relationship between symptoms suggestive of PVD and the diagnoses of vulvovaginal candidiasis and IBS in premenopausal women. Possibly, family doctors make a diagnosis of vulvovaginal candidiasis or IBS based only on clinical manifestations in many women in whom a diagnosis of PVD would be more appropriate.

J Sex Med 2016;13:220–225.

Key Words: Vulvodynia; Provoked Vestibulodynia; Dyspareunia; Comorbidity; Chronic Pain; Candidiasis; Primary Care

INTRODUCTION

Although infections and dermatoses are well-known causes of vulvar pain, in most cases vulvar pain is unexplained.[1] The International Society for the Study of Vulvar Disease defines provoked vestibulodynia (PVD) as "vulvar discomfort, most often described as burning pain, occurring in the absence of relevant visible findings or a specific, clinically identifiable, disorder."[2] The unexplained pain can be provoked upon, during, and after penetration of the vagina and by touching the vestibulum and the introitus of the vagina. Dyspareunia, pain during sexual intercourse or during other forms of vaginal penetration with sexual activity, is the most common symptom experienced by women with PVD. Although sometimes present, erythema, warts, nevi, and cysts are usually normal findings, and therefore they are neither relevant for diagnosing PVD nor responsible for vulvar discomfort. Other names used in the past to describe PVD included vulvar vestibulitis syndrome and focal vulvitis, both with the misleading suffix of -itis. However, PVD is not an inflammation.[2]

The lifetime prevalence of women suffering from PVD has been estimated at 8% to 16%.[1] It occurs in women of all ages,

Received September 10, 2015. Accepted December 9, 2015.

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http://dx.doi.org/10.1016/j.jsxm.2015.12.010

but women between 20 and 40 years old are especially affected.[1] A Dutch population study showed that 4.9% of women between 18 and 70 years old suffer from dyspareunia and 11% of women younger than 25 years of age report regular to frequent complaints of dyspareunia.[3,4]

Recent studies approach PVD as a chronic pain disorder, which is likely multifactorial. The pain is explained as an abnormal pain perception, where peripheral pain turns into neuropathic pain.[5–8] PVD is associated with pain syndromes such as fibromyalgia, fatigue, sleep disorders, interstitial cystitis, and irritable bowel syndrome (IBS).[9–11] Dysmenorrhea is common in women with pelvic pain and PVD.[12] In addition, compared to women without PVD, women with PVD experience more pain during intercourse and a reduced sexual response with loss of sexual satisfaction and desire, and they report more anxiety, in addition to more catastrophizing, hypervigilance, and fear of pain.[13,14] Vulvodynia may lead to new or recurrent depressive or anxiety disorders and vice versa.[15] Women with PVD more often have a history of sexual and physical abuse than women without PVD.[16]

PVD is not included in the International Classification of Primary Care (ICPC), nor are the terms vulvar vestibulitis syndrome or focal vulvitis. Hence, the multifactorial nature of vulvovaginal symptoms that could be suggestive of PVD is likely to be missed in family practice. In Dutch family practices the incidence of painful intercourse is about 1.0:1000, especially in young women (incidence of 3.4 in age cohort of 20 to 24 years).[17] About half the women with vulvar pain seek medical care, visiting multiple health care providers.[18] Not all of these providers are familiar with the symptoms of PVD. This lack of knowledge may lead to the delay in diagnosis and management, as 1 study found an average duration of 38 months of symptoms before consulting a health care provider for the first time.[19] It also may explain the gap between the relatively high prevalence of these complaints in the general population and the low incidence in Dutch family practice.

AIMS

Although some studies show that there are associations between PVD and other conditions such as genital infections and pain syndromes, it is not yet clear which comorbidities are associated with PVD in women visiting a family practitioner (FP). The aim of this study was to examine comorbidities of women with specific vulvovaginal symptoms (which could be suggestive of PVD) between 15 and 50 years old in family practice. The presence of these specific vulvovaginal symptoms in the context of these comorbidities could assist FPs to recognize and treat PVD at an earlier stage. Therefore we formulated the following research question: Do women between 15 and 50 years old, who are visiting an FP with specific vulvovaginal complaints suggestive of PVD, have a higher probability of certain specified comorbidities than women of a similar age without PVD?

METHODS

Study Design

In this retrospective cohort analysis, the collected data were based on a set of specific diagnoses registered in a research database of family practices, the "Transition project."[20] Therefore we selected a broad range of diagnoses that seem most likely to be associated with PVD and some symptoms suggestive of PVD. The episodes of comorbidities should at least comprise 10 episodes to achieve reliable data analysis. Otherwise the odds will have very broad confidence intervals with no clinical importance.

Data Source

All encounters between 1995 and 2008 recorded in the data set of the "TransHis recording" system (electronic medical recording in family practice), representing 48,959 patient-years in the age group 15 to 49 years, were used. Because the data set should be considered as an open cohort (some patients are included only for some months), a patient-year is a better epidemiological variable than a patient. The family practices participating in the project recorded details of all their patient encounters in the electronic medical record. The urban (n = 4) and rural practices (n = 3) participating in the Transition project are situated in the western and northern parts of the Netherlands. All encounters were documented according to the ICPC.[21] The diagnoses were stored in "episodes of care," which are followed longitudinally. An "episode of care" is defined as a health problem in an individual from the first encounter until the completion of the last encounter with a health care provider. During the "episodes of care" the episode title (the diagnosis) can be modified, for example when vulvar pain has been caused by a *Candida* infection. During each visit a patient's reason for encounter is documented and coded, as well as the episode title, treatment, and referral. The reliability of the registration and coding precision of this recording system is estimated to be higher than usual for family practices because of the use of well-defined diagnostic criteria and a warning system in case of errors or inconsistencies.[21]

PVD

The ICPC system does not provide a specific code for PVD. X-codes present in the ICPC system were examined to identify codes representing or suggesting PVD. The following codes were included to approximate the diagnosis PVD: X01 (genital pain), X04 (painful intercourse), X15 (other symptoms/complaints vagina, excluding an infection), and X16 (other symptoms/complaints vulva, excluding an infection).

Comorbidities

Based on the literature, a selection of comorbidities associated with PVD was made, including pain syndromes, mental disorders, vulvovaginal candidiasis, and sexual and physical abuse.[7–16]