

TOP 10 FACTS

10 Facts overlooking co-morbidities associated with vulvodynia

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Vulvodynia is a chronic vulvar pain often experienced by many women but is often misdiagnosed or undiagnosed. Often, patients with vulvodynia also manifest with comorbidities. The following details can aid in recognizing a diverse array of chronic pain conditions that may coincide with or trigger vulvodynia, and vice versa. These conditions include IBS, oral contraceptives, menorrhagia, post-menopausal, depression, anxiety and suicidal, interstitial cystitis and bladder pain syndrome, allergies, endometriosis, sexual abuse and Ehlers Danlos syndrome.

Introduction

Vulvar pain is a common concern that impacts women across different age groups. Around 16% of women in the United States grapple with persistent vulvar pain, frequently associated with vulvodynia.¹ Vulvodynia is defined by the presence of vulvar pain persisting for three months or more, often accompanied by symptoms such as a burning sensation, irritation, and tenderness.¹ A notable subtype, vestibulodynia, manifests as pain in the vestibule near the vaginal entrance, often triggered by vaginal penetration.¹ The diagnosis itself is challenging since vulvodynia is a diagnosis of exclusion with no obvious physical findings. The vulva typically appears normal, or only mildly inflamed or swollen. A diagnosis of vulvodynia involves taking a detailed history including pain characteristics and any accompanying bowel, bladder, or sexual problems, performing a physical exam with a cotton swab test to assess vulvar tenderness, and possibly testing for infections or skin conditions.²

As a chronic pain disorder, vulvodynia impacts women with more than just localized vulvar symptoms. One study found that 66% of women with vulvodynia had at least one other chronic condition associated with it.³ The following details can aid in recognizing various chronic pain conditions that may coincide with or trigger vulvodynia, and vice versa.

1. **A strong link has been found between fibromyalgia, chronic musculoskeletal pain, and vulvodynia.** One study reported an 18% incidence of fibromyalgia in patients with provoked vestibulodynia (a form of vulvodynia), which is much higher than the 2.2-6% prevalence in the general

population.³ A population-based study found that compared to women without vulvodynia, those with vulvodynia were 3.3 times more likely to also have fibromyalgia.⁴ Despite the strong correlation, the underlying factors contributing to both fibromyalgia and vulvodynia and the exact mechanisms are not fully understood.

2. **Women with vulvodynia are approximately 2 to 3 times more likely to also have Irritable Bowel Syndrome (IBS).**⁵ Though the underlying mechanisms are not fully studied, suggestions have been made that IBS and vulvodynia share the same nervous system pathways resulting in the overstimulation of pain signals.⁶ Other explanations include dysregulation of the immune system, gut microbe and gut-brain communication, and chronic stress.⁶
3. **Vulvodynia has been strongly linked to increased rates of depression, anxiety, and even suicidal ideation in women who suffer from it.** Studies have shown that women with vulvodynia are over 3 times more likely to have a history of mood or anxiety disorders compared to women without the condition.^{7,8} The psychological distress associated with vulvodynia appears to be multifaceted. Women report feelings of shame, guilt, and social isolation due to the taboo nature of discussing vulvar pain.^{7,8}
4. **There has been a link between childhood sexual abuse and adult vulvodynia.**⁹ One study shows that there is a strong association with the adult onset of vulvodynia if the patient has been sexually abused as a child.¹⁰ Patients who reported the pain of vulvodynia also reported that there had been a negative sexual experience.¹¹
5. **Ehlers-Danlos syndrome (EDS) and Hypermobility Spectrum Disorders (HSD) an inherited connective tissue disorders are associated with vulvodynia.**¹² The rate of vulvodynia in women with EDS/HSD (50%) is much higher than the general population rate of 8% in the U.S. The reasons for this high rate are not fully understood, but researchers hypothesize that the connective tissue abnormalities in EDS/HSD may predispose these women to vulvodynia and dyspareunia.¹³
6. **Studies have found that up to 25-28% of women with Interstitial Cystitis (IC) and Bladder Pain Syndrome (BPS) also report having vulvodynia.**¹⁴ Potential reasons

for the link include shared embryological origins, similar mechanisms of chronic pain, and overlapping risk factors like chronic widespread pain conditions, pelvic floor dysfunction, anxiety, and history of abuse.¹⁴

7. **Women with vulvodynia were more likely to report heavier menstrual flows lasting over 6 days, compared to controls without vulvodynia.**¹⁵ The authors suggest that the heavier menstrual flows observed in vulvodynia cases may be related to hormonal factors that influence both menstrual bleeding patterns and vulvar pain.
8. **Studies have shown that individuals with allergies including food allergies and seasonal allergies were more likely to suffer from provoked vestibulodynia, a form of vulvodynia.**¹⁶ The link between allergies and vulvodynia may be due to the presence of mast cells in the vestibular tissues that were collected from women who are reportedly suffering from vulvodynia.¹⁶ One study found that, from their study group, 17.5% of patients reported having vulva pain allergies, where 10.1% reported they suffer from food allergies, while 7.4% suffered from respiratory allergies.¹⁷ Lastly, women who presented with vulvodynia reported to have a history of suffering from hives, allergic reactions to insect bites, and seasonal allergies.¹⁶
9. **Case-control studies have found an association, reporting that women with vulvodynia are more likely to also suffer from Chronic Fatigue Syndrome (CFS) compared to controls without vulvodynia.** Clinical profiles suggest more than half of women with vulvodynia may have additional chronic conditions like CFS. While the exact prevalence rates vary across studies, the co-existence of these two chronic conditions is well-recognized.¹⁸
10. **Few studies found a link between the use of oral contraceptives (OC) and the presence of vulvodynia.**¹⁹ The proposed mechanism is that the hormonal changes induced by OCs may impact the sensitive vulvar tissues and lead to the development of vulvodynia in some women. On the contrary, a study found no link between the two.²⁰ It is important to consider that more research is still needed to fully understand the complex relationship between OC and vulvodynia risk and symptom severity.

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