

Two Cases of Vulvodynia with Unusual Causes

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Two women with vulvodynia are described. In one patient, severe chronic vulvodynia developed secondary to contact dermatitis. Patch-testing confirmed the offending allergens. A second patient with vulvodynia was severely dermatographic. Evaluation of patients with vulvodynia should include an appropriate medical history and diagnostic studies to exclude contact dermatitis and dermatographism. Effective treatment for these disorders may lead to dramatic relief of symptoms. Key words: Contact dermatitis; Dermatographism; Dyspareunia; Patch tests.

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"Vulvodynia" is a term used to describe pain and paresthesias of the vulvar region. Pain, burning sensation, or stinging sensation (or all three) can be constant, severe, and disabling in some women. Dyspareunia is also a frequent complaint.

The cause of vulvodynia is not always readily ascertained. Subclinical human papillomavirus infection has been noted in some patients (1). Psychologic influences have also been suggested in selected cases (2).

We report on two patients with chronic disabling vulvodynia. Both patients were responsive to treatment with oral corticosteroids, with dramatic resolution of their symptoms. This prompted our further investigation, which disclosed contact dermatitis in one patient and dermatographism in the other.

CASE REPORTS

Case 1

A 39-year-old woman complained of dyspareunia and constant pain and burning sensation of the vaginal introitus and the adjacent labia minora. Pruritus was also described but was mild and inconsistent. The burning sensation and pain began suddenly and were persistent and unrelenting despite treatment with topical lubricating agents, oral and topical antifungal drugs, topical steroids and antiseptic compresses. Short courses of methylprednisolone given orally helped significantly in relieving all symptoms.

Physical examination showed mild erythema of the labia minora. The patient's description of symptom severity was out of proportion to the findings on clinical examination. Skin biopsy of the labia minora revealed minimal perivascular lymphocytic inflammation and no spongiosis.

Patch tests with a standard and a preservative series of allergens were applied to the patient's back by using a standard Finn chamber method. Results at 48 and 72 h were identical and showed 3+ reactions to quaternium 15 and parateritary butylphenol formaldehyde resin. Colophony was 2+ reactive and triethanolamine was 1+ reactive. Other allergens, including formaldehyde, were not reactive.

The patient was treated with 2.5% hydrocortisone in a preservative-free cream base and tap water wet dressings. Her symptoms abated

immediately. Meticulous avoidance by the patient of products that contained allergens confirmed to incite a hypersensitivity response led to remission of vulvodynia.

Case 2

A 38-year-old woman presented with a 3-year history of constant burning sensation and irritation around the vaginal introitus. The patient described marked dyspareunia and dysmenorrhea. She had no complaint of pruritus. Her medical history was significant for documented recurrent vaginal yeast infections, and she had used multiple topical products for treatment. She also applied a feminine hygiene deodorant daily to the vulvar area. The burning sensation was unresponsive to treatment with topical antifungal agents and topical steroids. A short course of methylprednisolone given orally provided dramatic but temporary symptom relief. The patient's medical history was positive for allergic rhinitis.

Examination of the vulvar area revealed no erythema or scaling. There was no clinical evidence for the severe symptoms expressed by the patient. Results of potassium hydroxide examination of secretions and scale from the vagina were negative for yeast or dermatophytes. Cultures for yeast were also negative. Biopsy was performed in an area on the labia minora where the patient complained of the most intense burning sensation. Examination of this area revealed clinically normal skin. The biopsy showed mild acanthosis of the epidermis, with minimal perivascular lymphocytic inflammation in the upper reticular dermis. Spongiosis was absent.

Patch tests (standard and preservative series) were applied to the patient's back by using the Finn chamber method. Removal of the patch tests at 48 h elicited an immediate and marked dermatographism. Otherwise, allergen readings at 48 and 72 h showed negative reactions. Treatment was instituted with terfenadine, 60 mg twice daily, supplemented with cyproheptadine, 4 mg three times daily as needed. The patient reported significant relief from her vulvar symptoms.

DISCUSSION

Patients with vulvodynia complain of vulvar discomfort, characterized by burning sensation, stinging sensation, irritation, or rawness. Pruritus is not a frequent complaint.

Vulvodynia can be a frustrating condition for patients and physicians. In some cases, the problem can be attributed to cyclic vulvitis, vulvar papillomatosis, vulvar vestibulitis, pudendal neuralgia or vulval dermatosis (1,3). Several investigators have noted signs of occult human papillomavirus infection (1,4,5). Iatrogenic factors have also been implicated (1). However, despite repeated attempts, a specific cause cannot be identified in all patients. Psychosomatic causes should be considered only when other diagnostic possibilities have been excluded.

Although contact dermatitis can be a source of vulvitis, vulvovaginitis and pruritus vulvae (6,7), it is generally not considered by most physicians as a diagnostic possibility when a patient presents with vulvar burning sensation, particularly in the absence of pruritus and morphologically recognizable signs.

In neither of our patients was pruritus a prominent symp-

tom. We did not initially consider allergic contact dermatitis or dermatographism as a cause of vulvodynia, primarily because of the inconsistency or absence of pruritus and the lack of any suspicious clinical or histopathologic features.

Each patient was given a 1-week course of oral corticosteroids in an empiric attempt to relieve the severe symptoms. Oral corticosteroids were provided only after multiple failed therapeutic attempts.

The sudden and dramatic improvement in vulvar discomfort described in both patients while taking systemic corticosteroids prompted our further investigation. Both patients were screened for allergic contact dermatitis with a series of patch test allergens. Patient 1 was sensitive to multiple allergens. It is plausible that this woman had vulvodynia from an unrelated cause, and that contact dermatitis developed only after various topical preparations were applied to relieve vulvar discomfort. Secondary contact dermatitis is a relatively frequent complication in patients with vulvodynia (3). However, before patch-testing, patient 1 had regularly used several body lotions and deodorant products containing quaternium 15. Quaternium 15 is a preservative commonly incorporated in skin lubricants and other products intended for topical application, including topical steroids (8). Also, this patient's prompt and complete response to oral and preservative-free topical corticosteroids and her continued remission with allergen avoidance allowed us to make the diagnosis of primary contact dermatitis.

In patient 2, we diagnosed dermatographism when the patch tests were removed for interpretation at 48 h. Dermatog-

raphism had not previously been noted by either the patient or us. The dermatographism was extraordinary, with large, deep urticarial lesions. This woman also complained of severe discomfort around the vaginal introitus within minutes after the vulvar manipulation associated with examination and biopsy. We theorize that dermatographism alone caused vulvodynia, which was particularly severe in this patient during sexual intercourse and menstruation.

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