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Clinical Case Study

The Importance of Using Topical Glucocorticosteroid Drugs in the Treatment of Vulvovaginal-gingival Syndrome. A Clinical Case in a Young Patient

Chernova NI[1] and Zadorozhnaya IS[2]*

[1]*Department of Healthcare, Moscow Research and Practical Center for Dermatovenerology and Cosmetology, Moscow, Russian Federation*

[2]*Moscow State Medical and Dental University Named After A.I. Evdokimova, Moscow, Russian Federation*

***Corresponding Author:** Zadorozhnaya IS, Moscow State Medical and Dental University Named After A.I. Evdokimova, Moscow, Russian Federation.

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Abstract

The presented clinical case demonstrates the development of complications of the vulvovaginal-gingival syndrome (VVGS) in a 22-year-old patient. The pathognomonic clinical symptoms of the disease from erosions of the oral mucosa, vulva and vagina to the loss of the labia minora, stenosis of the vaginal opening, scarring and strictures on the background of systemic therapy are displayed. Establishment of remission with the use of ultrapotent topical glucocorticoid drugs and personal hygiene products.

Keywords: Vulvovaginal-gingival Syndrome; Vulvovaginal Lichen Planus

Introduction

Lichen planus (LP) of the vulva and vagina is a chronic inflammatory disease that is a variant of the classic LP of the skin and mucous membranes. Currently, there is no exact information on the frequency of lesions of the genital LP due to the difficulties in diagnosing the disease in this area, but some authors believe that it is quite high. Lewis F.M., *et al.* found a lesion of the vulva in 50% of 37 patients with cutaneous manifestations of lichen planus of the vulva [1]. According to the data obtained in the last decade, a significant number of women before the diagnosis were unsuccessfully and for a long time in gynecological institutions with a diagnosis of vulvitis and/or vaginitis [2].

There are three forms of vulvar and vaginal LP: typical (papular), hypertrophic and erosive [3]. The erosive form has the greatest prevalence and severity of the course. Vulvovaginal-gingival syndrome (VVGS) (Hewitt-Pelisse syndrome) is a severe variant of the erosive form of lichen planus, which simultaneously affects the mucous membranes of the mouth (most often the gums), the vulva and the vagina, sometimes involving the cervix in the pathological process [4].

Clinically characterized by well-defined, shiny erosions in the vulva, the vestibule of the vagina and vagina, along the edge of which a white hypekeratotic cushion (Wickham striae) can be located. When the vagina is affected, the clinical picture may resemble desquamative vaginitis: profuse mucopurulent discharge with a pH of 5.5 - 7.5. Subjectively, patients are worried about pain, burning and itching. Lack of adequate therapy leads to a change in the normal architecture of the vulva with complete loss or fusion of the labia minora, loss of interlabile grooves and clitoris overgrowth, and vaginal stenosis. Chronic inflammation leads to a significant decrease in the quality of life and impairment of sexual and reproductive function [5].

To date, VVGS treatment remains one of the most difficult tasks. The mainstay of therapy is ultrapotent topical corticosteroids (TCS) and clobetasol propionate 0.05% is the drug of choice [6,7]. Second-line drugs (tacrolimus 0.1% and pimecrolimus 1%) are inferior in strength to TCS and are recommended if they are ineffective or at the stage of maintenance therapy. About 40% of patients require complex treatment with systemic corticosteroids [8].

In case of ineffectiveness of local treatment, immunosuppressive drugs (cyclosporine, azathioprine, methotrexate), retinoids, photodynamic therapy can be prescribed, however, the use of systemic therapy is inferior in efficiency to local treatment [9].

An important role in the treatment and maintenance of VVGS remission belongs to basic care, which in the vulva and vagina area includes gentle cleansing with neutral or acidic pH agents, limiting the use of agents that can increase itching (wet wipes, sanitary and panty liners, rough tissues), use predominantly hypoallergenic agents and it is imperative to moisturize the affected area using emollients. In case of damage to the oral mucosa, it is important to maintain oral hygiene, eliminate mechanical and physical factors, follow a diet, and give up smoking and alcohol.

We present a clinical case of VVGS development in a young patient with the formation of complications and high efficiency of topical TCS therapy.

Case Presentation

Patient E., 22 years old, a student, complained of painful rashes in the mouth and genitals, itching in the vulva, pain and dryness in the vagina during sexual intercourse (Figure 1).

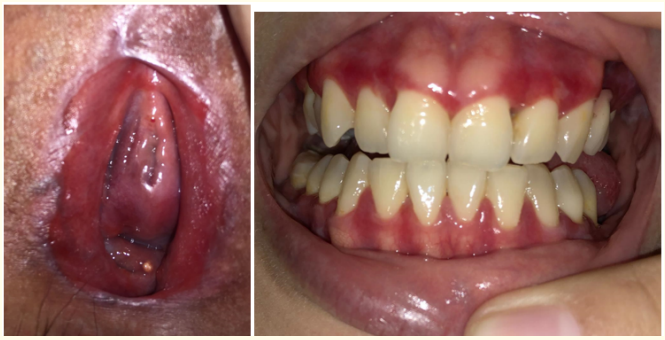

Figure 1: Hewitt-Pelisse syndrome (before treatment).

Medical history

Sick for 2 years, when she first began to notice the appearance of the above complaints. The onset of the disease is associated with moving to another city and stress. She consulted a gynecologist at the place of residence, and was diagnosed with lichen planus of the vulva, vagina and oral mucosa, and therefore the patient was referred to a dermatovenerologist for further examination and treatment. For several months the patient received short courses of prednisolone tablets at a dose of 20 - 30 mg. The effect was negligible. In this connection, azathioprine was prescribed for 2 months, there was no positive effect, then methotrexate was prescribed for 2 months, which also did not lead to a significant effect. A year after the onset of the disease, the patient began to notice a decrease in the labia minora and a narrowing of the vaginal opening.

Status localis

At the time of examination, swelling and bright hyperemia with indistinct boundaries are noted on the oral mucosa in the gums of the upper and lower jaw. The mucous membrane of the entrance to the vagina is edematous, brightly hyperemic, bleeds when touched, along the periphery of the erythematous area there is a white non-removable plaque forming a lace pattern and lines. The labia minora are lost, the entrance to the vagina is narrowed.

Clinical diagnosis

Vulvovaginal-gingival syndrome.

The results of the clinical diagnostic examination:

- In clinical analysis of blood, general analysis of urine - without pathology;
- Serological tests for syphilis, HIV and hepatitis B and C viruses are negative;
- Biochemical blood test: Total protein, alanine aminotransferase, aspartate aminotransferase, gamma-glutamyl transferase, creatinine, urea, total cholesterol, triglycerides, total bilirubin, glucose, serum iron, C-reactive protein within the reference values;
- Microscopic examination of the vagina revealed more than 30 leukocytes in the field of view;
- The results of a molecular genetic study of the vaginal discharge and cervical canal showed the absence of pathogenic microorganisms.

According to the literature, VVGS is often associated with a number of autoimmune diseases [10], in connection with which a clinical and laboratory study was carried out, according to the results of which the patient was diagnosed with autoimmune thyroiditis

and appropriate treatment was prescribed. The patient also noted complaints from the gastrointestinal tract, about which she was examined by a gastroenterologist, autoimmune pathology (including celiac disease) was excluded, but inflammation of the colon mucosa was found, a diet was recommended.

Treatment

According to clinical recommendations, the patient was locally prescribed 0.05% clobetasol propionate ointment 2 times a day for 10 days, then once a day for only 1 month and an intravaginal emollient based on dihydroquercetin 0.4%, lecithin 35, glycine 5%, sanguirithrin 0, 5% for 1 vaginal applicator once a day for 15 days. For rashes of oral mucosa - gels of fluocinolone acetonide 0.025% and healing gel. Already on the 5 - 7th day, the patient noted a significant decrease in itching and dryness in the vulva, pain when eating, which was clinically accompanied by a decrease in mucosal hyperemia and a decrease in their bleeding (Figure 2).

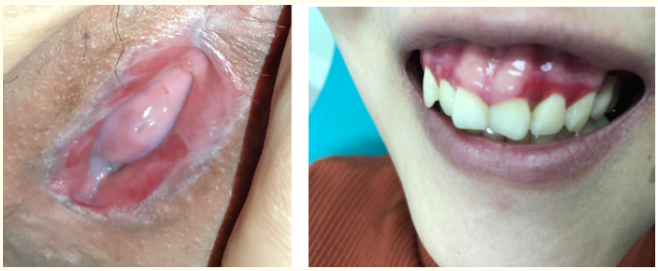

Figure 2: Hewitt-Pelisse syndrome (on the 14th day of treatment).

On oral mucosa, the patient continued to use healing gel for up to 1 month. After 2 months from the start of treatment, the patient resumed sexual intercourse while using intimate hygiene products, while the positive dynamics persisted: itching, soreness and dryness in the vulva area resolved, objectively - the mucous membrane of the vaginal entrance acquired a normal color, stenosis of the vaginal entrance does not progress, the oral rash resolved (Figure 3).

Discussion

In the presented clinical case, attention is drawn to the development of VVGS in a patient at a fairly young reproductive age (22 years) with the development of complications. The insignificant effect of therapy with systemic glucocorticosteroids and cytostatics, which were prescribed in stages throughout the year, should be noted. Attention is drawn to the violation by specialized specialists of the staging of the management of patients with dermatoses of the vulva and vagina, namely, the neglect of topical corticosteroids by dermatologists, which are the drugs of choice according to modern domestic and world recommendations for the management of patients with vulvar diseases. The lack of effective treatment during the year, despite the timely correct diagnosis, led to a change in the anatomy of the external genital organs with the loss of the labia minora and stenosis of the vestibule of the vagina.

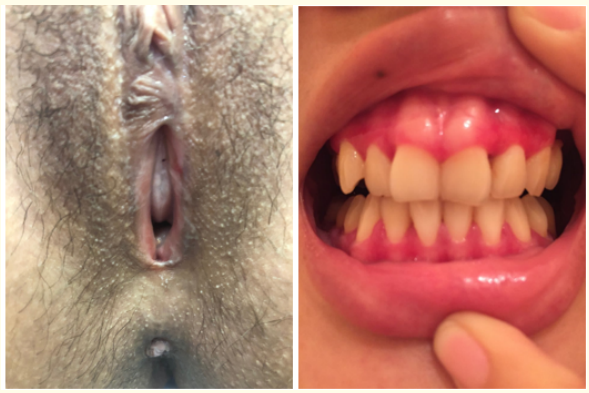

Figure 3: Hewitt-Pelisse syndrome (2 months after treatment).

Also, the given clinical example demonstrated the combination of VVGS with autoimmune thyroiditis, which is comparable with the literature data and once again confirms the high frequency of the syndrome's association with autoimmune diseases, the correction of which is important in achieving remission of dermatosis.

Patient management, which included basic therapy: the use of ultrapotent TCS for a month, with the transition to medium-potency drugs according to an intermittent scheme and pharmaceutical intimate hygiene products showed high clinical efficacy, which contributed to a stable remission of the disease in this patient, after 12 months of observation.

Conclusion

The use of TCS in VVGS is the first line of therapy, has high efficiency and is able to prevent the development of complications. VVGS is associated with autoimmune diseases, their identification

and correction is important for achieving remission of the disease. The appointment of emollients helps to accelerate the relief of clinical manifestations of LP in the vulva and vagina and to maintain remission.

Conflict of Interest

We have no conflicts of interest to disclose.

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