

# Chronic recurrent urticaria in a patient with recurrent herpes labialis: complete remission after administration of aciclovir and antihistamines

Georgi Tchernev,1,2 Simona Kordeva1

<sup>1</sup>Onkoderma - Clinic for Dermatology, Venereology and Dermatologic Surgery, Sofia; <sup>2</sup>Department of Dermatology and Venereology, Medical Institute of Ministry of Interior, Sofia, Bulgaria

#### **Abstract**

Chronic recurrent urticaria, occurring in the context of infections, represents a major challenge for clinicians. Chronic genital herpes infection has been perceived in the literature as a possible trigger of chronic recurrent urticaria. The administration of a systemic corticosteroid regimen in these cases has no long-lasting effect and the subsequent relapses are difficult to control. In these cases, treatment of the urticaria with antihistamine (as monomedication) is often not sufficient and does not suppress the symptomatology. The administration of acyclovir or valacyclovir according to a specific therapeutic regimen as monotherapy or in combination with antihistamine has been shown to be quite effective. The doses of this administration vary and can be tailored to clinical symptomatology. We present a 41-year-old female patient with chronic recurrent urticaria associated with angioedema and bron-

Correspondence: Simona Kordeva, Onkoderma - Clinic for Dermatology, Venereology and Dermatologic Surgery, General Skobelev 26, 1606 Sofia, Bulgaria.

Tel.: 00359884959176

E-mail: simonakordeva97@gmail.com

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chospasm, in whom her herpes genitalis was found to be concurrent within the history and clinical examination. According to the history, the herpes was also recurrent and dated back about a year. Chlamydia trachomatis infection was also found, with serological findings corresponding to vaginal discomfort. Treatment with acyclovir 400mg thrice daily for an initial period of 7 days in combination with desloratadine 5mg daily was started as we observed complete remission of the urticarial rash. Due to worsening vaginal discharge, it was decided to temporarily discontinue systemic acyclovir therapy and treatment for the chlamydial infection was initiated with doxycycline 100 mg twice daily for 21 days. Already on day 1 after stopping acyclovir, a severe relapse with generalization of the urticarial rash was observed. Control of symptomatology was achieved by reintroduction of acyclovir to the regimen in according combination antihistamine. Chronic infections are one of the common causes of chronic recurrent urticaria with a tendency to generalization and possible complications such as angioedema and bronchospasm. An academic, analytical approach to patients and the consistent exclusion of each possible trigger for chronic recurrent urticaria often guarantee the success of subsequent treatment.

### Introduction

The existing data in the world literature regarding herpes simplex virus infections and urticaria are limited. The presented information suggests both acute and chronic relapsing urticaria as possible related events within labial herpes simplex type 1 infection. Therapy with Aciclovir 200 mg five times a day in combination with an antihistamine reported sufficient control of the infection and cessation of the urticarial rash.

# **Case Report**

Laboratory tests were done before the hospitalization: negative test for Helicobacter Pylori in feces; negative test for intestinal protozoa and helminths; negative testing for HBsAg/Anti HCV antibodies. The panoramic photo of teeth showed no pathological changes; abdominal echography showed the liver slightly enlarged with a more hyperechoic structure, and the other organs were without complaints; also the chest x-ray reported no complaints. Immunoglobulin M for toxoplasmosis came back negative. The patient reported an occurrence of labial herpes in the last 3-4 years.

She was treated for generalized urticaria with beginning systemic involvement in the form of angioedema and bronchospasm with Prednisolone and Methylprednisolone (according to the scheme, with a temporary effect), and Montelucast 10 mg,





Levocetirizine dihydrochloride 5 mg, Loratadine 10 mg, betamethasone/clotrimazole/gentamicin cream. The treatment caused no significant effect. The last application of Methylprednisolone 100 mg was made in the Emergency Department due to angioedema and bronchospasm occurring 2 days before the hospitalization.

Concomitant diseases include chronic herpes simplex type 1 infection; chronic chlamydial infection. The patient presented with a request for a change in her therapeutic regimen.

The dermatological examination showed an urticarial rash, located in the area of the face (Figure 1a), right shoulder region (Figure 1b), right forearm (Figure 1c), and right abdomen (Figure 1d). A skin biopsy was taken from the right shoulder area (Figure 1d). The histological picture corresponded to urticaria.

During the hospitalization, an elevation in immunoglobulin G (IgG) for herpes simplex type 1 IgG>58.40 (reference values up to 0.90-1.10) and IgG for chlamydia trachomatis IgG>2.25 (0.90-1.10) were observed. Additionally, the patient reported slight but permanent vaginal discharge with an unpleasant odor and occurring discomfort during sexual intercourse.

Systemic therapy was started with Methylprednisolone 40 mg and Desloratadine 5 mg, one then two tablets, without improvement. Due to the positive herpes serology, it was decided to switch the systemic therapy to Aciclovir 400 mg three times a day in combination with an antihistamine (Desloratidine 5 mg). Already within the first two administrated tablets, we observed a complete reverse development of the urticaria and a significant reduction in itching.

The patient was discharged from the hospital with a change in her therapeutic regimen. Due to the chronic chlamydial infection, it was decided to discontinue systemic therapy with Aciclovir for 21 days and proceed with Doxycycline 100 mg twice a day. After finishing the regimen, a prophylaxis for the chronic herpes simplex labialis, Aciclovir 400 mg twice daily for a minimum of 6 months to 1 year was recommended. Recurrence of the urticaria and massive pruritus were observed on the first day after discontinuing the Aciclovir therapy. The condition was successfully managed again with the administration of Aciclovir. A diagnosis of chronic recurrent urticaria in a patient with recurrent herpes labialis was made.

#### Discussion

A successful solution for chronic recurrent urticaria in terms of recurrent genital herpes infection with herpes simplex virus type 2 was reported with the combination of systemic administration of Aciclovir and an antihistamine.<sup>2</sup>

Valaciclovir in doses of 500 mg/twice a day, similar to Aciclovir, also appears to be a good alternative in the treatment of recurrent urticaria associated with chronic genital herpes.<sup>3</sup> In the case presented, the patient, with a 5-year history of complaints and reactivation of the virus at least 10 times a year, was successfully treated with Valaciclovir.<sup>3</sup>

Aciclovir, used for chronic recurrent urticaria treatment, could be administered in different doses: from 100 mg every 6 hours /that is, 400 mg per day/- to 800 mg every 4 hours-/ or up to 4800 mg per day. $^4$ 

Publications in the scientific literature associate the initial systemic administration of corticosteroids in combination with hydroxyzine 25 mg daily (in herpes-associated/mediated urticaria) with a temporary, episodic improvement of the symptoms and inevitable relapses after discontinuing the treatment.<sup>5</sup>

We observed a rapid decrease in the urticarial skin rash after

switching the initial therapy with Aciclovir at a dose of 400 mg three times a day to 400 mg twice daily in combination with an antihistamine.

An analogous case reported an acute, subsequently transformed into chronic recurrent facial urticaria following single labial herpes. However, in the patient we present, chronic urticaria developed in parallel with recurrent labial herpes.

In conclusion, we presented a 41-year-old patient with chronic recurrent urticaria developed within recurrent herpes labialis, which was successfully treated with Aciclovir and antihistamines, resulting in complete remission.



**Figure 1. a)** Urticarial rash, located in the area of the face; **b)** Urticarial rash in the right shoulder region. A skin biopsy was taken from the right shoulder area; **c)** Urticarial rash on the right forearm; **d)** Urticarial rash in the right abdomen.





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