

# A CASE OF SUCCESSFUL TREATMENT OF ERYTHEMA MULTIFORME (STEVENS–JOHNSON SYNDROME)

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There has been represented a case of early diagnostics and successful treatment of Stevens–Johnson syndrome — systemic delayed allergic reaction (immune complex) — a severe course of allergic infectious form of erythema multiforme, which is characterized by combined irritation of skin, oral mucosa, eye conjunctive and other organs.

**Key words:** erythema multiforme; allergic reaction; Stevens–Johnson syndrome.

Stevens–Johnson syndrome is an acute muco-dermo-ocular syndrome, a severe course of infectious allergic exudative erythema multiforme. It develops more often in men at the age of 20–40 years (though cases of the disease are reported in 3 month-old children) as a result of the effect of bacterial and medication antigens on the organism, provoking formation of immune complexes, which damage vessel walls and precipitate on the basal membranes of epidermis and mucosa, causing polymorphous formations on the skin and mucous membranes of different organs. When mucous membranes of internal organs are affected, stenosis of the esophagus and narrowing of the urinary tract may occur. Lethality in Stevens–Johnson syndrome is 3–15%.

An example of successful treatment of the timely diagnosed case of erythema multiforme (Stevens–Johnson syndrome) is given below.

*Patient N., aged 30, was referred on Dec. 10, 2012 to a consultation to the dental polyclinic of Nizhny Novgorod State Medical Academy (Russia), complaining of the eruption in the oral cavity, pain when eating and speaking. He considered to have fallen ill 10 days before, when he attempted to treat acute respiratory disease by taking-in a tablet of sumamed and vodka with pepper, after which a high temperature 38.6°C, eruption in the oral cavity and on the eye conjunctiva appeared. He did*

*not note any recent or concomitant diseases, as well as allergic reactions to medications and food products.*

*On examination hyperemia, edema, reddening of conjunctiva and sclera of both eyes, and photophobia were revealed. Lymphatic nodes (submental, submaxillary, cervical) were enlarged, mobile, tender on palpation. A red margin of the low lip, mucous membrane of the nose and the skin of the nose wings were dry, covered with hemorrhagic squamous crusts and crusts.*

*Examination of the oral cavity showed: halitosis, CFE-coefficient (caries-filling-extracted tooth) — 2, orthogenic occlusion, oral hygiene index according to Green–Vermillion — 3.5 scores. Oral mucosa was edematous, hyporemic; total erythema was noted, multiple painful erosions, covered by fibrous coating, occupied 60% of the mucous membrane area. Scraps of vesicles were seen along the edges of large erosions; Nickolsky symptom was negative, Koebner symptom — positive, symptom of mirror “adhesion” — positive (Fig.1).*

*Diagnosis of erythema multiforme; Stevens–Johnson syndrome was made.*

*The following general treatment was recommended:*

*1. Disintoxication therapy: intravenous instillation of Rheopolyglucinum and/or Hemohes — 400 ml, prednisolone — 10 ml, daily, 5 procedures.*

*2. Sodium thiosulphate, 30% solution — intravenously, slowly, daily, 10 procedures.*

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3. Polyoxidonium — 6 mg, intramuscularly, 5 procedures, in a day.

4. Solcoseryl — 2 ml, intramuscularly, daily, 25 procedures

5. Milgamma — 2 ml, intramuscularly, in a day, 10 procedures.

6. Tavegil — 1 tablet 3 times a day, for 7 days; then 1 tablet twice a day for 7 days, and then 1 tablet once a day for 2 weeks.

7. Derinat, 0.25% solution — 2–3 drops in each nostril and oral cavity 3 times a day for 4 weeks.

8. Consultation, treatment, dynamic supervision by ophthalmologist in order to optimize the treatment.

9. Hypoallergic diet (liquid, grinded, nonirritating food, plenty drinking).

The following procedures were administered for topical treatment:

1. Proper hygiene of the oral cavity. Teeth should be brushed twice a day: in the morning after breakfast and before going to bed for 3–4 minutes, which amounts to 400–450 paired movements of the toothbrush. It is desirable to use toothpaste for sensible teeth, and a toothbrush of moderate hardness. After each food intake teeth should be brushed with a toothbrush and hygienic toothpaste for 1–2 minutes.

2. Applications of 0.25% solution of Derinat to the problem areas of the oral mucous membrane for 40 minutes twice a day during 2 weeks.

3. Dental adhesive toothpaste “Solcoseryl” is recommended to apply on the damaged regions of the oral mucosa twice a day: after breakfast and before bedtime.

4. Applications of 0.1% solution of enzyme (trypsin, lysozyme) for 10 minutes, once a day, in the morning after breakfast.

The patient was appointed to see a dentist in 7 days for treatment correction.

On Dec. 18, 2012 the patient visited the dental polyclinic a second time. He had been discharged from the in-patient department where he stayed for 7 days. He presented no complaints and noted some improvements. External examination did not reveal any abnormalities. Examination of



Fig. 1. Patient N. Multiple erosions and scrapes of vesicles on the mucous membrane of the lips in Stevens–Johnson syndrome before treatment



Fig. 2. Patient N. Mucous membrane of the lips and oral vestibule after treatment

## CASE PRACTICE

*the oral cavity showed hyperemic oral mucosa and erosions at the stage of epithelization.*

*Professional oral hygienic procedure was carried out using ultrasound scaler, abrasive paste "Detartrine Z." It was recommended to continue general and topic treatment according to the previously administered scheme. He was advised to come in a week for oral cavity examination.*

*On the appointed day, Jan. 15, the patient did not have any complaints. On oral examinations mucous membrane was of light pink color, sufficiently moistened and clean.*

*The patient was recommended to take medications*

*administered by doctors only, to undergo allergological tests for drug and food product intolerance, every spring and autumn to take measures directed to immunity improvement, to take in immunomodulators, prescribed by immunologist.*

Though the condition of the patient was rather heavy, timely diagnosis of the disease, rational complex drug therapy, a thorough care and dynamic supervision of his state of health enabled us to cure erythema multiforme (Stevens–Johnson syndrome) in the shortest period without complication development.