

# CLINICAL FEATURES OF THE COURSE OF ERYSIPELAS OF THE SKIN AT THE PRESENT STAGE

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## Abstract

Streptococcal infections continue to be among the most pressing health problems in all countries of the world. Purpose of the study: To describe the clinical features of the course of erysipelas in the Samarkand region. Materials and methods of the study: Analysis of the incidence of erysipelas was carried out in the period from 2014-2019. according to a retrospective analysis of medical records of patients diagnosed with "Erysipelas" according to ICD-A46.0, who were hospitalized in the regional clinical infectious diseases hospital of the city of Samarkand. Conclusions. Contacts with patients with chronic tonsillitis are equally common for patients with both primary and recurrent erysipelas. Separation of patients plays a key role in recurrent erysipelas. Proper organization of clinical examination of patients after hospital treatment prevents relapse of the disease.

**Keywords:** erysipelas, treatment, relapse, prevention.

## Introduction

Treptococcal infections continue to be among the most pressing health problems in all countries of the world. The problem of erysipelas is caused by a constantly increased level of diseases among the population, without a downward trend and amounts to 14 - 25 per 10,000 population [1, 3,4]. Worldwide About 100 million people get erysipelas every year. Erysipelas is a widespread infectious disease, the treatment of which in a clinic is carried out by doctors of various specialties (infectious disease specialists, therapists, surgeons, dermatologists, physiotherapists). The incidence of erysipelas in Uzbekistan has shown no tendency to decrease in recent years, second only to influenza, viral hepatitis and acute intestinal infections. Clinical and epidemiological features of erysipelas at the present stage are: an increase in the proportion of severe forms and complications with a predominance of intoxication syndrome in the clinical picture of the disease, up to the development of infectious toxic shock [5,6, 8], the predominant localization of the



pathological process on the lower extremities, a pronounced tendency to recurrence (up to 60%) and the formation of chronic lymphovenous insufficiency with elephantiasis, leads to disability and a significant deterioration in the quality of life of patients, often even at working age [1,2,7]. Also, if in the 70s hemorrhagic forms of erysipelas accounted for no more than 20% of all cases, then in the late 90s - 85-95%, and in the 2000s this figure remains at the same figures. In addition, cases of the disease with a relapsing course have become more frequent. In connection with the above, our goal was to assess the course of erysipelas in the Samarkand region over the past 5 years.

### Purpose of the Study:

To describe the clinical features of the course of erysipelas in the Samarkand region.

### Materials and methods of the study:

Analysis of the incidence of erysipelas was carried out in the period from 2014-2019. according to a retrospective analysis of medical records of patients diagnosed with “Essipelas” according to ICD-A46.0, who were hospitalized in the regional clinical infectious diseases hospital of the city of Samarkand.

The diagnosis was established on the basis of clinical manifestations, epidemiological data and laboratory etiological studies in the context of a standard case definition.

### Results of the study:

In accordance with the stated goal, 62 patients with various forms of erysipelas were analyzed. There is a consensus among researchers of erysipelas that gender should be considered as one of the main predisposing factors in the development of the disease. However, we have established another trend: of the total number of patients examined, 66.4% were men, 33.6 % were women , aged from 18 to 78 years (Table 1).

**Table No. 1. Distribution of patients by age**

Floor	Age				Total
	18 - 25	26 - 50	51 - 60	61 - 78	%
Men	4.2%	5.6%	34.3%	22.5%	66.6
Women	7.9%	8.5%	8.5%	8.5%	33.4
<b>Total</b>	<b>12.1%</b>	<b>14.1%</b>	<b>42.8%</b>	<b>31%</b>	<b>100</b>

As can be seen from our observations, the disease is registered 1.5-2 times more often in men than in women (Figure 1).



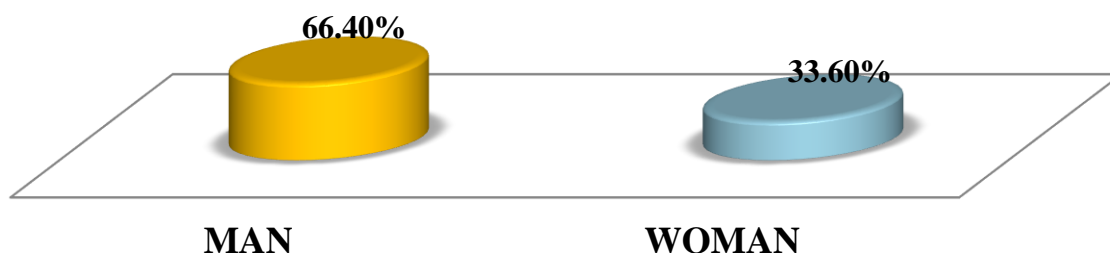


Figure No. 1 . Distribution of patients by gender

According to the literature , among patients with erysipelas, people engaged in physical labor predominate, which we also established. Thus , in our studies, the disease was often observed in those people who are engaged in agricultural activities and lead an active lifestyle in the open air (76.8%), to a lesser extent (23.2%) erysipelas is common among mental workers. Unlike other researchers, in our studies the incidence of erysipelas did not have a specific seasonality.

We all know that the source of infection during erysipelas can be a patient with other streptococcal diseases such as tonsillitis, scarlet fever, and otitis media. In our studies, when analyzing the medical history, it was found that in 23.4% of cases there was contact with patients with streptococcal infections, that is, with sore throat, in 19.8% with patients with scarlet fever, in 26.7% of cases with patients with acute otitis and in 1/ In 3 cases, it was not possible to establish the cause of the disease. In case of primary erysipelas, the provoking factors were microtraumas (35.6%), tonsillitis (35.7%) and purulent processes on the skin (28.7%). This suggests the exogenous nature of the infection in these forms of the disease. Contacts with patients with chronic tonsillitis are equally common for patients with both primary and recurrent erysipelas . Therefore, separation of patients plays a key role in recurrent erysipelas .

By order of the Ministry of Health of the Republic of Uzbekistan and according to the classification of V.L. Cherkasov, 1986. We divided patients **according to the nature of local manifestations:** 22.8% of patients were diagnosed with an erythematous form of erysipelas, 47.6% with an erythematous-bullous form , and 29.6% with an erythematous-hemorrhagic form. According to our data, bullous and hemorrhagic erysipelas account for 77.2% of the total number of patients with erysipelas. Erythematous bullous and erythematous hemorrhagic forms in most cases were identified in elderly people with underlying pathologies such as diabetes mellitus, mycotic diseases, obesity, and varicose veins.



Figure No. 2. Distribution of patients by severity level



Patients with rarely recurrent erysipelas received immunocorrective therapy, bicillin therapy, and physical therapy for a year after the disease. This probably contributed to reducing relapses.

When analyzing the medical history, we were interested in the fact that frequently recurrent erysipelas occurred. Many researchers have proven that in erysipelas, especially in the chronic form with its often recurrent course, infection with L-forms of streptococcus occurs. L-transformation of streptococcus is enhanced by antibiotic therapy when its cellular forms are suppressed. This explains the fact that patients do not turn to specialists on time and self-medicate. **In terms of severity, among** the examined patients, moderate and severe forms prevailed (90.4%). Severe forms were mainly observed in patients with concomitant pathologies.

**According to the frequency of the course,** among the examined patients, the primary course of erysipelas was observed in 56.7% of patients, recurrent in 43.3% of patients. If there are at least three relapses of erysipelas per year, the definition of “frequently recurrent erysipelas” is appropriate. For recurrent erysipelas, from the anamnesis of patients, the attending physicians found that 45.6% had a frequently recurrent form, while 54.4% of patients rarely had a recurrent form. The ratio of recurrent erysipelas to the total number of patients is almost 1:1. In patients with frequently recurrent erysipelas, the appearance of the next relapse was preceded by exacerbation of chronic skin diseases, exacerbation of chronic tonsillitis, sinusitis, hypothermia and stress.

**According to the prevalence of local manifestations,** a localized form was identified in 87.3% of patients, and migratory erysipelas in 13.7% of patients. According to literature data, most often the inflammatory process is localized on the lower extremities (60-70%), less often on the face (20-30%) and upper extremities (4-7%), very rarely only on the torso, in the mammary gland area, perineum, external genitalia. In our studies, in the majority of patients, the local focus of erysipelas was localized on the face - in 47.6%, on the lower extremities - 47.6%, in 2 - 4.8% - erysipelas of the upper extremities. As can be seen, our data coincide with the literature data. The onset of the disease in all examined patients (100%) was acute, with severe symptoms of intoxication, fever, sleep disturbance, and regional lymphadenitis. And also, in all patients, the appearance of local changes on the skin was revealed (Table 2).

**Table No. 2. Main clinical and laboratory manifestations of erysipelas**

No.	Clinical symptoms	%
1.	Chills	92.8
2.	Weakness, malaise	95.2
3.	Sleep disturbance	26.2
4.	Subfebrile temperature 37 – 38 °C	11.4
5.	Body temperature from 38.1 – 39 °	38.4
6.	Body temperature from 39.1° and above	50.2
7.	Headache	83.3
8.	Pain, burning, itching in the area of inflammation	100
9.	Regional lymphadenitis	95.2

Symptoms of intoxication were manifested by malaise, weakness - in 95.2%, with chills - in 92.8%, headache - in 88.1%, sleep disturbance - in 26.2% of patients. Regional lymphadenitis was diagnosed in 95.2% of patients. On the affected areas of the skin of the majority of patients, the



attending physicians described the patients' complaints of paresthesia, a feeling of fullness or burning, and mild pain.

An increase in temperature was observed in all patients. An increase in temperature up to 38°C in 11.4% of patients, up to 39°C in 38.4% of patients, from 39.1°C to 40°C in 39.4% of patients, 40°C and above in 10.8% of patients. The average duration of fever is 4.3 days.

According to many authors, background concomitant diseases are detected in 70-75% of patients with erysipelas. In patients with recurrent erysipelas, the frequency of their detection is over 90%, in patients with recurrent erysipelas - about 50%, and only in 30-32% of patients with the primary form of the disease. In our studies, among the examined patients, we identified the following concomitant diseases in 80.9% of patients: anemia I - II - degrees 12.5% of patients, hypertension - 13.4% of patients, chronic tonsillitis - 8.4%; chronic colitis - 3.9%; polyarthritis - 11.3%; obesity - 9.7%; varicose veins - 8.3%; ischemic disease - 18.4%; diabetes mellitus - 8.7%; mycosis of the foot 3.4%; liver cirrhosis - 7.8%; uterine fibroids - 4.2%.

Laboratory studies and blood tests revealed leukocytosis with a shift to the left in 42.8% of patients, accelerated ESR in 42.8%, and decreased hemoglobin in 100% of patients.

Bacteriological blood culture gave a positive result in only 25.6% of patients. It is currently practically impossible to isolate streptococcus from the focus of skin inflammation in patients with erysipelas due to the widespread introduction of antibiotic therapy into clinical practice. However, the low incidence of streptococcus can be explained, in addition to high sensitivity to chemotherapy, by the imperfection of generally accepted methods of collecting material and culture media. All patients received antibacterial, detoxification, desensitizing and symptomatic therapy. All patients were discharged with clinical recovery after treatment. In 11.3% of patients, residual effects remained such as pastosity and pigmentation of the skin (35.8%), congestive hyperemia at the site of faded erythema (29.8%), dense dry crusts at the site of bullae (19.7%), edema syndrome (14.7%). These residual effects were mainly detected in patients with frequently recurrent erysipelas (75.6%).

**Thus**, our analysis of the medical histories of patients with erysipelas allowed us to draw the following conclusions:

1. Despite the low contagiousness of erysipelas, the incidence is still quite common.
2. The incidence of erysipelas in recent years has often been observed in men (66.6%) of working age (72.5%). This fact is related to their profession.
3. In recent years, according to our data, bullous and hemorrhagic erysipelas account for 77.2% of the total number of patients with erysipelas.
4. Cases of the disease with a relapsing course have become more frequent (43.3%).
5. Contacts with patients with chronic tonsillitis are equally often characteristic of patients with both primary and recurrent erysipelas. Communication between patients plays a key role in recurrent erysipelas.
6. Proper organization of clinical examination of patients after hospital treatment prevents relapse of the disease.

## References

1. Orzikulov A. O., Juraev Sh. A., Mustaeva G. B., Pardaeva U. J. Clinical- laboratory diagnostic aspects of tuberculosis // Problems of biology and medicine. - 2022. No. 5. Volume. 139. - pp. 78-82.



2. Shodieva D.A., Orzikulov A.O., Bakhrieva Z. D. Clinical characteristics of botulis disease in Samarkand region // Problems of biology and medicine. - 2022. No. 1. Volume. 136. - pp. 138-140.
3. Orzikulov A. O., Rustamova Sh.A., Karamatullaeva Z.E. Neurological changes in mumps meningitis in adults (of the Samarkand region) // Uzbek journal of case reports. - 2023. No. 3. ISSN 2181-3388.. - pp. 86-89.
4. Ne'matov H.A., Tirkashev O.S. Specific clinical and epidemiological features of scarlet fever // Web of Scientist: International Scientific Research Journal. – 2023. – No. 1 (4). pp. 578–584
5. Orzikulov A. O., Juraev Sh. A., Mustaeva G. B., Pardaeva U. J. Optimization of diagnosis and treatment of purulent meningitis // Infection, immunity and pharmacology. – 2022 – No. 5 . ISSN 2181-5534 pp. 211-217
6. Orzikulov A. O., Rustamova Sh.A., Karamatullaeva Z.E. Clinical characteristics of brucellosis disease in Samarkand region // Infection, immunity and pharmacology. – 2022 – No. 2 . ISSN 2181-5534 pp. 180-184
7. Earhart K. et al. Risk factors for brucellosis in Samarqand Oblast, Uzbekistan //International journal of infectious diseases. – 2009. – T. 13. – No. 6. – pp. 749-753.
8. Soliman A. et al. P1532 Serological evidence of hantavirus and arbovirus infections among acute febrile patients in Uzbekistan //International Journal of Antimicrobial Agents. – 2007. – No. 29. – P. S429.

