

## CLINICAL COURSE CHARACTERISTICS OF CHICKENPOX

**Keldiyorova Zilola Doniyorovna**

keldiyorova.zilola@bsmi.uz

ORCID: <https://orcid.org/0000-0002-0662-5787>

Bukhara State Medical I

nstitute named after Abu Ali Ibn Sina

**Abstract:**

This paper presents a comparative analysis of chickenpox incidence and clinical course in 290 patients hospitalized in the Bukhara Regional Infectious Diseases Hospital during 2023-2024. It was found that children aged 3 to 14 years were significantly more likely to be hospitalized, while adults aged 18 to 34 years were more frequently affected (1.3). Neurological signs of chickenpox showed no significant difference between children and adults. The rash in children was localized primarily on the trunk and extremities, while in adults, it was localized on the face and trunk (2). Children exhibited lower intensity of pruritus and less frequent enanthem in mucous membranes compared to adults. Lymphadenopathy in children was more generalized but less frequent in those over 18 years of age. The duration of intoxication syndrome and hospitalization did not significantly differ between children and adults (4). These findings can be used to predict the course and outcomes of chickenpox in both children and adults. Chickenpox is a viral disease characterized by red rashes and blisters across the body, which in rare cases, may recur. Typically, humans contract chickenpox only once in their lifetime. The infection enters the body approximately 7-21 days before the appearance of rashes and other symptoms. For up to 48 hours before the rashes appear, an individual is considered contagious.

**Keywords:** chickenpox, children, adults, clinical presentation, complications.

Among airborne infections (excluding influenza and acute respiratory viral infections), chickenpox accounts for 60-70%. The high incidence rate, widespread distribution, increasing share in the overall infectious pathology, significant economic damage, and the inefficacy of non-specific preventive measures highlight the importance of controlling the disease. Chickenpox (Varicella) is an acute infectious disease caused by the Varicella-Zoster virus from the Herpesviridae family, transmitted through airborne droplets. It is characterized by fever, moderate intoxication, and widespread vesicular rashes. The disease rarely recurs and usually only occurs once in a lifetime. With the discovery of a vaccine in the mid-1990s, the incidence of chickenpox has sharply decreased. The causative agent, Varicella Zoster virus, is large and visible under a light microscope. The virus can be detected in the fluid within the rashes starting from the 3rd-4th day of the disease. The virus is very sensitive to environmental factors, rapidly destroyed by sunlight, heating, and ultraviolet radiation. It remains viable outside the body for an average of 10 minutes. The virus belongs to the herpesvirus group, and the infection rate is about 70%. Patients can transmit the infection 24 hours before the rashes appear and until the blisters are covered with a crust. Most cases of infection occur through direct contact with an infected person. The most common routes of transmission include saliva, coughing, sneezing, and contact with the fluid in the blisters.

### **Symptoms:**

Rashes consist of red spots, 2-4 mm in size, which become papules and then vesicles within hours. After 1-3 days, the vesicles dry up, leaving superficial crusts. An enanthem—yellowish or bluish crusts—may also form on mucous membranes. The incubation period for chickenpox is 7-21 days. Symptoms, including fever, headache, and loss of appetite, usually appear a few days before the rash. The disease progresses in three stages:

1. Red and pink spots appear throughout the body.

2. These spots turn into fluid-filled blisters.
3. The blisters form crusts, which eventually fall off. The rashes do not disappear simultaneously. New vesicles can form while others dry up. The itching, especially before the crust forms, can be intense. It typically takes 7-14 days for the rashes to completely disappear.

**At-risk****Groups:**

Immunity due to previous infection or vaccination significantly reduces the risk of chickenpox. Immunity can be passed from mother to child, lasting up to three months after birth.

In pregnant women, chickenpox may lead to congenital defects in the child. The risk of complications depends on the gestational age, with the lowest risk occurring after 20 weeks of pregnancy. If infection occurs shortly before delivery, it can lead to severe complications for the newborn. Chickenpox does not require termination of pregnancy as an indication for artificial abortion, but the risk of infection decreases with increasing gestational age.

**Materials****and****Methods:**

This article presents the results of a two-year monitoring of 290 patients with chickenpox treated at the regional clinical center.

**Results****and****Discussion:**

In 2022-2023, 290 patients aged 8 months to 58 years were diagnosed with chickenpox and hospitalized for treatment. Among them, 69.4% (201 individuals) were children, and 30.6% (89 individuals) were adults aged 18 and above. Children aged 3-7 years were the most frequently hospitalized (106 children, 52.7%). The incidence was higher in boys (54.4%). Among adults, the majority were men aged 18-34.

**Conclusion:**

Among the hospitalized patients diagnosed with "chickenpox," children aged 3 to 14 years were significantly more affected. Anyone who has not previously contracted the

virus is susceptible to chickenpox. The risk of infection is increased under the following conditions:

- Contact with an infected individual.
- Spending time in schools or children's institutions.
- Children under 12 years old.
- Adults living with children who have not had chickenpox.
- Individuals with weakened immune systems due to illness or medications.

### References:

1. Guzovskaya T. S., Chistenko G. N. Chickenpox: Epidemiological Features // *Military Medicine*, 2014 – No. 1(30). – P. 115-118.
2. Baranov A. A. Control Strategies for Chickenpox in Russia. Proceedings of the International Meeting of the Expert Council on Chickenpox Prevention (W.A.V.E.) // *Modern Pediatrics*, 2022; 3: 5-12.
3. Infectious Morbidity in the Russian Federation in 2018-2019. Information Collection. Moscow: FCSEHN Ministry of Health of the Russian Federation, 2019.
4. Fisher R. G., Edwards K. M. Varicella Zoster. *Pediatrics in Review*, 2020; 19: 62-67.
5. Gabbasova, N.V. Chickenpox: Epidemiological Situation in the Voronezh Region, Problems and Solutions // *Scientific and Medical Bulletin of the Central Chernozem Region*, 2017. – No. 67. – Pp. 122-134.
6. Infectious Morbidity in Russia in 2019-2020 (Information Collection).
7. Clinical Variants of Complicated Chickenpox in Children / L. N. Mazankova, E. R. Samitova, S. G. Gorbunov et al. // *Pediatric Practice*, 2019, No. 3, P. 13-16.