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**FEATURES OF THE TRANSITION OF MENINGOCOCCAL INFECTION IN
EARLY CHILDREN (CLINICAL CASE FROM PRACTICE)**

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Relevance. According to WHO, meningococcal infection is still a global problem in Europe and Central Asia.

Research objective: Analysis of the course of disseminated forms of meningococcal infection in young children

Research materials and methods: Analysis of the course of disseminated forms of meningococcal infection in early childhood on the example of one patient from practice

Results and its discussion: The child was 3 months old, and on 20.02.2025, he presented with an acute onset of the disease. He was worried about the temperature rising to 38.5C, malaise, and nasal discharge. Antipyretic drugs were administered. Against this background, the temperature decreased to subfebrile numbers, but after an hour it rose again to 39.1C. On 21.02.2025 at 13:00, a rash appeared on the child's hands, which quickly spread to his body and face. The child was taken to the Samarkand Regional Infectious Diseases Clinical Hospital by the ambulance team. On 21.02.2025 at 15:40, the diagnosis was made: Meningococcal infection, meningococcemia? ITSh-2-3 level. The ambulance team assessed the child as critically ill due to general intoxication syndrome, progressive neurological symptoms, and cardiopulmonary insufficiency. Due to the increase in hemorrhagic rash elements on the patient's body and limbs, the patient was admitted to the intensive care unit. On the same day, at 9:00 PM, the patient was transferred to artificial ventilation of the lungs. From the anamnesis: the child was born to healthy parents. 2 children from the 2nd pregnancy. The pregnancy was normal. Body weight at birth was 2930 g. Height 52 cm, the response from the maternity hospital was given on the 4th day after birth. Vaccinated against BCG-M and hepatitis B, breastfed for up to 1 month. He was not registered with the dispensary for diseases, he did not suffer from other diseases. There is an older child in the family.

On objective examination: Confusion, no reaction to external influences. Skin is grayish, face, body, lower and upper parts of the body have irregularly shaped hemorrhagic rashes on the limbs, there are foci of necrosis. Visible mucous membranes are dry, rough breathing is heard in the lungs. NS 46-50 in 1 min, heart tones are muffled, tachycardia, Pulse 160 min, meningeal signs are suspicious. The abdomen was soft and painless, the liver and spleen were not enlarged, the stools were mushy the day before, diuresis was reduced, and he had not urinated for six hours. Considering that the patient had symptoms of brain edema and the worsening of the brain edema, a decision was made to intubate the patient on 20.02.2025, and he was extubated on 20.02.2025. A complete blood count was immediately performed in the ORIT (20.03.2025), and neutrophilic leukocytosis, anemia,



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and thrombocytopenia were detected. A lumbar puncture is contraindicated in a child with grade 3 IBS. The patient received antibacterial therapy (levomycin succinate - 80 mg/kg per day, ceftriaxone - 100 mg/kg per day on 02/29/2025), disinfection therapy, hormone therapy, and immunoglobulin was administered through indwelling central catheters. 03/21/2025 The patient underwent the following additional examinations: Neurosonography - dilation of the lateral ventricles, diffuse changes in the transventricular and subependymal zones; ECG - sinus tachycardia of the heart rate 175 beats/min. Normal position of the lead. Complete blockade of the right bundle branch block with a right ventricular predominance. Full manifestation of repolarization processes; URT examination of the kidneys and bladder: - signs of diffuse changes in the parenchyma of both kidneys. The child was examined by a neurologist, an ophthalmologist (angiospasm of the retinal vessels of a mixed type is noted). On the X-ray of 22.02.2025. left-sided polysegmental pneumonia. Blood tests: 128.5 hyponatremia, 2.9 μ mol/l hypoglycemia are noted, which indicates the manifestation of acute adrenal insufficiency against the background of septic shock, therefore, the doses of hormonal therapy were increased (prednisolone was 4 mg/kg per day, dexamethasone 0.15-0.2 mg/kg, hydrocortisone 2 mg/kg, subsequent dose titration until the effect is achieved). Given the growing clinical picture, he was connected to treatment from 24.02.2025. vancomycin - 60 mg/kg/day for 4 injections, 140 mg/day for 3 injections). On February 29, 2025, against the background of stabilization of the condition, a spinal puncture was performed, examined by the PCR method, and *Neisseria meningitidis* was detected by the CSF bacteriological culture method. In the re-control analyzes on March 1, 2025: cytosis decreased to 22 kl with 1 mm³, protein - 1.28 g/l; in the OMS on November 7, 2018, cytosis was 1 mm³, n-42.9%, l-57.1%, o.q - 0.15 g/l, glucose 2.6 mmol/l, chlorides 117.8 mmol/l, which indicates that the CSF has been sanitized. The X-ray of 06.03.2025 revealed complete resolution of pneumonia. On 06.03.2025, the regional surgeon and orthopedist recommended surgical necrotectomy of 2% of the total body surface area (left wrist, right wrist, fifth finger of the left hand, first finger of the left foot). As a result of the treatment, the child's condition stabilized, artificial ventilation of the lungs was discontinued, small elements of the hemorrhagic rash regressed, and aseptic necrosis (2% of the total body surface area) remained in the left elbow joint and right knee joint, which required necrotectomy.

Conclusion: Thus, the presented clinical case demonstrates the severe course of meningococcal infection in children of the first year of life, the formation of complications requiring long-term rehabilitation in the future. In this regard, it is important to include vaccination against meningococcal infection in the National Vaccination Calendar for the prevention of meningococcal infection using vaccines with the largest number of serogroups of the pathogen, which allows ensuring maximum effectiveness of immunization and reducing the level of generalized forms of meningococcal infection in childhood.

Registration card

Name of the speaker/participant (in full)	Djumayeva Nasiba Sobirovna
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**METHODS OF APPLYING INNOVATIVE AND DIGITAL TECHNOLOGIES IN THE
EDUCATIONAL SYSTEM.
International online conference.**

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Place of work/educational institution	Samarkand State Medical University
Position	Assistant Lecturer
Academic degree and title	-
Scientific supervisor's F.I.Sh, degree and academic title (for doctoral candidates, students)	Features of Meningococcal Infection in Early Childhood
Lecture title	(Clinical Case from Practice)
Form of participation (underline the selected form)	Online
Form of participation (underline the selected form)	Thesis Publication
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