operation, the patient underwent fibrogastroduodenoscopy with taking a biopsy of the BDP. Intraoperatively: from the previously dissected BDP into the lumen of the duodenum, the head of a round, worm-shaped parasite of a whitish color sticks out. A biopsy was taken from the edges of the BDP and a smear-imprint for cytology. A Fogarty-type probe was inserted, 15.0 ml of Ultravist was introduced, ERCP was performed, where in the lumen of the enlarged choledochus there is a convoluted shadow 5-6 mm thick of the parasite, there are no calculi (Figure 1). With a Fogarty-type probe, the parasite was brought down into the lumen of the duodenum, captured by an endoscopic loop, and removed. The parasite is pale brown in color, up to 20-22 cm long, 5-6 mm in diameter (Figure 2). The parasite is immersed in neutral formalin for examination (Figure 3). The outflow of bile is restored. No complications were observed in the postoperative period. The patient was consulted by an infectious disease specialist based on the results of a laboratory study of the parasite, where a female Ascaris lumbricoides was identified. The final clinical diagnosis was made: Ascariasis complicated by obstructive jaundice. GSD: Chronic calculous cholecystitis. 6 days after the operation, the patient was discharged for outpatient observation with recommendations for deworming under the supervision of an infectious disease specialist at the place of residence.

**Conclusion.** Despite the typical localization in the intestinal lumen, Ascaris lumbricoides nematodes can migrate into the lumen of the bile ducts, causing obstructive jaundice that is difficult to diagnose, especially in combination with other pathologies of the biliary system.

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T.G. Dmitrieva, I.N. Kozlova, L.N. Moskvitina, E.I. Koryakina

# A CASE OF CONGENITAL MEASLES

Measles is a highly contagious acute viral infectious disease with an airborne and transplacental transmission mechanism caused by an RNA-containing measles virus (genus morbilliviruses, family paramyxoviruses). Vaccination against measles is included in the National Calendar of Preventive Vaccinations of the Russian Federation and is carried out at the age of 12 months, followed by revaccination at 6 years. Immunity after measles is usually lifelong. Post-vaccination immunity is less prolonged: after 10 years, protective antibody titers remain only in 36% of vaccinated. In this regard, in the conditions of an epidemiological outbreak, there is a shift in morbidity to older age groups. Several cases of measles in pregnant women have been described. However, congenital measles is an extremely rare diagnosis. Our article describes a case of congenital measles in a newborn from a 34-year-old woman. At 28 weeks gestation, the woman was diagnosed with pneumonia, then a typical rash appeared. The diagnosis was confirmed by serological method. Thus, the birth occurred in the acute period of the disease. The baby was born prematurely at 28 weeks gestation by Caesarean section. The child's condition at birth was extremely severe. Apgar score is 5/7. The condition of the newborn was extremely severe due to prematurity and multiple pathology. The child was diagnosed with Respiratory distress syndrome of a newborn with respiratory insufficiency of the III degree. On the ninth day of life, a rash appeared. The diagnosis of measles was confirmed by the determination of antibodies to Measilis virus IgM. The course of measles in the exanthemic period was atypical (spotty rash elements on the first day, not characteristic dynamics of rash appearance). However, the presence of perinatal contact, the appearance of rashes made it possible to suspect such a rare diagnosis as congenital measles, and serological diagnostics confirmed this diagnosis. Against the background of the therapy, the patient's condition stabilized on the 7th day of the exanthemic period, the rash regressed. At the age of 1 month and 23 days, the child was discharged home in a satisfactory condition.

**Keywords:** measles, newborn, pregnancy, congenital pathology, exanthemic infection, prematurity, congenital malformations.

**DMITRIEVA Tatiana Gennadievna** – MD, Professor of the Department of Pediatrics and Pediatric Surgery, Medical Institute of Ammosov North-Eastern Federal University, e-mail: dtg63@mail.ru; **KORYAKINA Ekaterina Ivanovna** – student, Department of Pediatrics and Pediatric Surgery, Ammosov North-Eastern Federal University, e-mail: junee1505@gmail.com; **KOZLOVA Irina Nikolaevna** – Head of the Department of Anesthesiology and Neonatal Intensive Care, Yakut Republican Clinical Hospital, e-mail: kirina2579@mail.ru; **MOSKVITINA Lyubov Nikolaevna** – anesthesiologist-resuscitator of the Department of Anesthesiology and Resuscitation of Newborn.Yakut Republican Clinical Hospital, e-mail: trubani@inbox.ru

Methods and materials: the medical history of a newborn with a diagnosis of severe respiratory distress syndrome of a newborn has been analyzed. Respiratory failure of the II degree. Extreme immaturity. Prematurity is 28 weeks. Measles, the period of rashes. Congenital heart defect: aneurysm of the secondary part of the MPP with a defect. FAP. Perinatal CNS lesion of hypoxic-ischemic genesis.

**Introduction.** The introduction in 1967 of routine vaccination of children against measles with live measles vaccine led to a widespread decrease in the incidence in all age groups. This allowed the world community to set the task of eliminating measles on the planet. In 1998 The WHO Regional Committee for Europe has officially set the goal of eliminating local measles transmission by achieving and maintaining a very high level of coverage (≥95%) with two doses of measles vaccine [1]. Currently, in countries conducting total vaccination against measles, the disease occurs in the form of individual outbreaks and epidemics, involving sev-

eral tens or hundreds of people [2]. Currently, vaccination against measles is included in the National Calendar of Preventive Vaccinations of the Russian Federation and is carried out at the age of 12 months, followed by revaccination at 6 years. Measles is usually considered a benign viral disease of childhood, people can get sick regardless of age, and severe lesions of the respiratory and nervous systems occur more often before the age of 5 and after 20 years. Thus, women of childbearing age are at risk. In the situation of an epidemic outbreak, monitoring of pregnant women is necessary. Measles during pregnancy can be severe, mainly due to pneumonia. Measles in a pregnant woman is associated with the risk of miscarriage and prematurity [3,4]. Cases of congenital measles are extremely rare. Several cases are described in the literature, including subclinical forms, established only on the basis of serological diagnostic methods [5,6]. The case of manifest form of congenital measles is undoubtedly of interest.

**A clinical example.** We present a case of congenital measles. A boy born on 07.12.2019 at the gestation period of 28 weeks by caesarean section. The child's mother is a 34–year-old woman suffering from bronchial asthma, atopic variant, persistent course, moderate severity, in incomplete remission. At the age of 5, she was operated on for congenital heart disease (DMJP), currently her condition is stable, there is no circulatory insufficiency. It is known from the obstetric history that this pregnancy is the fourth, the first birth occurred naturally, the second birth by caesarean section, the third pregnancy was ectopic, for which a tubectomy was performed. The real pregnancy in the first half proceeded with moderate toxicosis and the threat of termination of pregnancy, the woman was observed by a gynecologist on an outpatient basis. In the 2nd half of pregnancy, at the age of 27 weeks, the woman sought medical help for a rise in temperature to 38.1 ° C and a paroxysmal cough. Treatment with berodual (1 ml) and symbicort (2 inhalations) was prescribed, treatment was carried out on an outpatient basis. After some improvement in the condition, on the seventh day of the illness, the patient's condition began to deteriorate – the body temperature rose again to 38.5 ° C, there was a sore throat, nasal congestion. The cough intensified, and after another 2 days shortness of breath appeared. With suspected bronchopneumonia, the woman was hospitalized in the pulmonology department of the city clinical hospital with a directional diagnosis: community-acquired pneumonia with respiratory insufficiency (DN) of the 1st degree. On the 2nd day of hospitalization, the patient had a spotty papular rash, on an unchanged skin background, with a tendency to merge. Based on clinical data, measles was suspected. The woman denied contact with the measles patient. According to her, she was fully vaccinated as a child, but there was no documentary confirmation of the vaccination. For diagnostic purposes, a serological examination by the ELISA method was prescribed. According to the results of the examination, IgM to Measilisvirus were detected in the woman, IgG to Measilisvirus were not detected. Based on clinical and laboratory data, the diagnosis was established: Measles, rash period, typical course, severe course. Complication: measles pneumonia. The patient was transferred to the infectious diseases department, where symptomatic treatment was initiated. After 2 days, due to premature discharge of amniotic fluid, it was decided to deliver by caesarean section in a perinatal center.

A boy was born with a weight of 1540 grams, 45 cm long. The condition at birth is extremely severe, due to respiratory insufficiency, physiological immaturity, prematurity (gestation period of 28 weeks). Apgar score 5/7: in the first minute, the heartbeat was estimated at 2 points, breathing -0, skin color – 1, muscle tone – 1 reflexes -1; in the fifth minute, the heartbeat was estimated at 2 points, breathing - 1, skin color – 2, muscle tone - 1 reflexes -1. Resuscitation measures were carried out in the operating room: sanitation of the upper respiratory tract, tracheal intubation, endotracheal administration of surfactant 240 mg, the newborn was connected to an artificial lung ventilation (ventilator). A diagnosis was made at birth: Respiratory distress syndrome of the newborn (RDSN). DN of the III degree. Prematurity is 28 weeks.

a

b

Small-spotted rash on the 9th (a) and 10th (b) days of life

There is a high risk of intrauterine infection (perinatal contact with measles). The newborn was transferred to the box of the Department of Anesthesiology, Intensive Care and Neonatal Intensive care (OARITN), placed in an incubator in the department. During the examination in the OARITN, depression of consciousness was noted, he reacted to the examination with weak motor activity and a pained grimace. The body temperature was 36.5 °C. The sutures of the skull are closed, a large fontanel 1x1 cm, calm. The pose is weakly flexor, muscle tone is reduced. The skin is pink, clean. There was a general pasty of soft tissues. Visible mucous membranes are clean, moist. Microcirculation is satisfactory, the symptom of a pale spot is up to 2 seconds. Oxygenation –$SatO_2$ 97%. For the purpose of infusion therapy and sampling of assays in aseptic conditions, catheterization of the umbilical vein was performed. Considering the severity of the RDSN, the ventilator was continued by the Hamilton C2 device in PSIMV mode with the parameters: Frequencies 50 per minute, FiO2 40%, PIP 16 cm $H_2O$, PEEP 5 cm $H_2O$. Breathing is synchronized with the ventilator, there is a moderate retraction of pliable places, auscultative breathing is carried out evenly across all fields, weakened, scattered crepitating wheezes are noted. The heart tones are clear, rhythmic. The pulse in the peripheral arteries is satisfactory. The heart rate is 140 beats per minute, blood pressure is 52/40/27 mmHg. The abdomen is soft, podzdut. The liver protrudes from under the costal arch by 1.5 cm, the edge is smooth and elastic. Intestinal peristalsis is sluggish. According to laboratory studies, leukopenia was noted in the newborn in the general blood test (UAC), the number of leukocytes was 7 × $10^9$, with a norm from 10×$10^9$ to 30×$10^9$. No antibodies to Measilisvirus were detected at birth. The newborn was prescribed empirical antibacterial therapy with Ampicillin sulbactam 75 mg / kg / day in two doses. Based on the clinical protocol for antibacterial therapy for newborns on mechanical ventilation" On the second day of life, the condition remained severe, he did not assimilate enteral nutrition. At the same time, normalization of the number of leukocytes was noted in the UAC (15.31 *$10^9$), the lecocyte formula was not changed, the number of erythrocytes was 4.12* $10^{12}$, hemoglobin – 154 g/ l, the number of platelets - 163*$10^9$. Ultrasound revealed the presence of free fluid in the abdominal cavity in a small amount. Taking into account the changes in the hemogram, the drug Gentamicin 5 mg / kg / day was connected in two doses. On the fourth day of life, normalization of the number of leukocytes was noted in the UAC (9.02*10^9). For the purpose of passive immunization, human normal immunoglobulin was injected at a dose of 1.5 ml. On the fifth day of the disease, the newborn's condition is regarded as severe, but stable. The child was extubated and transferred to NCPAP auxiliary ventilation (nasa lconstant positive airpressue)flow 6-6.5 l/min. According to neurosonography, the child had hyperechogenicity of the periventricular zone. Ultrasound of the abdominal organs – left calicopyelectasia. EchoCG – Atrial septal aneurysm (MPP) with a defect (0.21 cm). the functioning arterial duct (FAP) is 0.18 cm.

On the ninth day of life, a small-spotted rash appeared in the newborn's groin area and on his hands (pic. 1). The child's condition was regarded as very serious, but relatively stable. Enteral nutrition through the probe, the infant absorbed the Alfare milk mixture of 16-18 ml. He reacted to the examination with moderate motor activity, crying is weak. The large fontanel is not tense. Weak flexor posture, muscle hypotension, hyporeflexia. The skin is subicteric on a pink background. The oral mucosa is clean. Visible mucous membranes are clean, moistened. Microcirculation is not disturbed. Breath with auxiliary ventilation, the chest excursion is uniform with slight retraction of compliant places. Auscultation breathing is carried out evenly across all fields, the noise of oxygen-air flow was listened to. The heart tones are clear, rhythmic. The hemogram showed leukocytosis 28*$10^9$ (norm 9-12*$10^{9)}$, the leukocyte formula showed a shift to myelocytes (2%), lymphopenia (18%), monocytosis (15%), the number of erythrocytes was 3.91*$10^{12}$, the hemoglobin index was 143g/l, the number of platelets was 254*$10^9$. The procalcitonin index was 10 ng/ml. Taking into account perinatal contact with measles, the material for ELISA for antibodies to Measilis virus was taken. According to the results of the study: IgM - 2.626 IU/ml were detected, IgG - not detected. Diagnosis: Severe respiratory distress syndrome of a newborn. DN II degree. Extreme immaturity. Prematurity is 28 weeks. Measles, a period of rashes. Congenital heart defect: aneurysm of the secondary part of the MPP with a defect. FAP. Perinatal CNS lesion of hypoxic-ischemic genesis, acute period. The antifungal drug Fluconazole 3 mg / kg / 48h intravenous break was added to the treatment in order to prevent fungal infection against the background of prolonged antibacterial therapy. In order to stimulate the respiratory center of the central nervous system, caffeine benzoate 20% is prescribed in a maintenance dose of 5 mg / kg / 24h / 1 r / day.

The next day, the general condition of the child remained unchanged, a rash appeared on the hips, rash elements in the form of small spots (pic. 2). On the third day, the rash on the hands and in the groin folds became less bright. There are new rashes on the skin of the face, neck, trunk and thighs of a spotty-papular nature. At the same time, the mucous membranes of the oral cavity are clean, moistened. The conjunctiva is clean, there is no discharge. The tongue is clean, moist. The lips are bright, drying out a little. There is no discharge from the nose. In the lungs, breathing is harsh, isolated dry crepitating wheezes were heard from both sides. On the 4th day of the exanthemic period, no new rashes were noted. Previously appeared elements of the rash faded away. On the 7th day after the appearance of the rash (day 16 of life), the exanthema regressed. IgM - 1,904 IU/ml and IgG - 0.059 IU/ml were detected by the ELISA method. Against the background of a stable condition, normal procalcitonin levels and normalization of hemogram indicators, antibacterial therapy was canceled. NCPAP auxiliary ventilation has been continued.

On the 28th day of life, against the background of stabilization of the condition, independent breathing, the newborn was transferred to the second stage of nursing. At the time of the transfer (on the 19th day after the rash appeared), there were no rash elements on the skin, there was a slight bran-like peeling. At the age of 1 month and 23 days, the child was discharged home in a satisfactory condition. At the time of discharge , IgM – 0.774 IU/ml and IgG - 1.226 IU/ml were detected by the ELISA method.

**Conclusion.**Thus, when analyzing this clinical case, it can be assumed that the infection occurred in utero, and not intranatally, since the first rashes appeared already on the ninth day of life. It is not possible to estimate the timing of the development of the prodromal period, since the condition of the newborn was extremely severe due to prematurity and multiple pathology. Taking into account the respiratory distress syndrome with DN III in a newborn, it is impossible to unequivocally assert the measles etiology of lung damage. The course of measles in the exanthemic period was atypical (spotty rash elements on the first day, not characteristic dynamics of rash appearance). However, the presence of perinatal contact, the appearance of rashes and

typical changes in the general analysis of covi made it possible to suspect such a rare diagnosis as congenital measles, and serological diagnosis confirmed this diagnosis.

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