



**THE CASE OF THE PRACTICE OF ACUTE LEUKEMIA IN YOUNG CHILDREN IN THE
BOD MMC**

Amonov R. A.

Department of Pediatrics, Bukhara State Medical Institute

Raxmatova N.N

Department of Pediatrics, Bukhara State Medical Institute

Abstract

Leukemia in children during the first months of life is an extremely rare pathology. Hostile leukemia is detected, as a rule, soon after birth, is acute, according to literature data, children die in the first 3-4, less often 6 weeks. We watched a child who was growing up to 3.5 months, developing normally and not suffering from anything, the fatal outcome came at 5.5 months from leukemia. The child is 3.5 months old, was admitted to the Shofirkan regional hospital, the children's department with a diagnosis of Acute respiratory viral infection. Sop. Umbilical and inguinal herd.

Keywords. Leukemia, diagnosis, lymph nodes, Liver protrudes, Diuresis.

On admission, there were complaints of fever, dry cough, restlessness, distended abdomen, refusal of the chest, edema and swelling in the navel and groin area.

From the anamnesis of life it was known that the child from the second pregnancy and childbirth, proceeding without pathology, weight at birth 3150.0 g. He shouted at once, attached to his chest in the delivery room. Breastfeeding until now. Everyone in the family is healthy. The child had not been ill with anything before. He was not registered at the dispensary.

The state on admission is of moderate severity, clear consciousness, temperature 38.6 C. The child is restless, the skin is of a normal color, subcutaneous fatty tissue is poorly developed, turgor and tissue elasticity is reduced, peripheral lymph nodes of the submandibular and axillary region are soft, subcutaneous up to 0.2 cm. The pharynx is hyperemic. Tongue moist, breathing freely through the nose, breathing hard in the lungs, no wheezing. The borders of the heart are not expanded. Heart sounds are clear, rhythmic. The abdomen is distended, there is an umbilical hernia, painful inaccessible to deep palpation. The liver protrudes from under the edge of the costal arch by 6 cm, the spleen by 8 cm. Stool up to 3-4, a day, bright yellow, with mucus and greens, poorly digested. Diuresis is sufficient.

Within 10 days, the child retained a high fever, despite the ongoing antibiotic therapy.

Laboratory examination revealed in the peripheral blood a mild decrease in hemoglobin (100 g / l) and ESR (17 mm), an increase in the number of leukocytes (62.5-10¹²), erythrocytes 2.7-10, color index 1.0, hematocrit-0.35, segmented-11%, stab-neutrophils-12%, eosinophils-6%, lymphocytes-71%.

In the next 10 days, a subfebrile temperature, pallor and an increase in the volume of the abdomen remained.

The child was consulted by a hematologist, transferred to the Regional Children's Multidisciplinary Medical Center, a hematology department for further examination



The child underwent infusion and antibacterial therapy, the patient's condition was ulcerated, the temperature returned to normal.

After 3 days, repeated general blood analysis revealed a sharp decrease in hemoglobin -80 g / l and erythrocytes - 2.1.10, c.p-1.1. Leukocytes 24.5, ESR - 17 mm / h, platelets-46000, myelocytes-5%, metamyelocytes-3%, segmented-15%, stab-15, eosinophils-6%, lymphocytes-42%, non-deferential blasts-10% , monocytes - 4%, anisopoikilocytosis is pronounced, normachromia.

Data of additional examination methods: Blood group: B (II), Rh factor positive (Rh +).

Total bilirubin 9.4 μmol / l, direct -avs, indirect - 9.4 μmol / l, ALT-62 u / l, AST-57-u / l. Calcium in blood serum is 1.9 mm / l.

Total protein 59 g / l, albumin 26.8 g / l, urea 5.0 mmol / l, creatinine 80.4 μmol / l.

Coagulogram: blood coagulation time according to Lee-White 2 min 35 s, prothrombin index 70.3%, fibrinogen A 1.75 g / l, recalcification time 2 min 35 s.

The child was transfused with red blood cells - 50 ml, infusion and antibacterial therapy was carried out.

Repeated blood analysis revealed an increase in hemoglobin up to 105 g / l, after which the child was returned to the department to continue treatment.

Complaints about fever up to 38.8-39.50C, regurgitation, cough, shortness of breath, anxiety. The purpose of the diagnosis was a chest x-ray. There was a decrease in transparency in the lower sections, expansion of the roots of the lungs. Conclusion: Focal community-acquired pneumonia, acute course.

An ultrasound of the abdominal organs was performed: liver + 8 cm, contour, parenchyma is common, unilateral. The gallbladder is oval in shape, reduced, the wall is unconsolidated, undeformed, the contents are homogeneous. The pancreas is 11x6x12 mm, the contours are clear, the echo structure is homogeneous, the echo density is not changed, the spleen is + 10 mm.

In the future, the patient's condition remained serious due to intoxication syndrome, hyperthermia, diarrheal syndrome and a growing anemia (as seen from Table 1).

Table 1. Studies of peripheral blood

Date	Hb, g / l	Eryth	Lake	Pal	Segm	Lymph	Mon	ESR	Throm
12.10	108	2,9	11,0	3	40	47	2	5	174,0
20.10	80	2,1	4,0	2	41	53	2	18	140,0
	Plasma cells 2, Anisocytosis +, hypochromia +								
26.10	76	1,8	17,0	2	-	58		24	58,0
	Nedif. Blasts 5%								

The child was consulted by a hematologist. Due to the inability to clarify the diagnosis without the results of bone marrow examination, bone marrow puncture from the ilium was performed. The analysis of bone marrow puncture is presented in Table 2.



Table 2. Bone marrow studies

26.1 o	blas ts	Promyeloc ytes	myeloc ytes	metamyeloc ytes	P /I	s /I	Eo z	li mf	Plasmac ytes	erythrobl asts	pronormoc ytes	polychromato phile	oxoph ile	LE I
	35,8	4,0	3,8	2,6	4, 2	6, 4	5, 6	14, 0	0,2	0,2	0,4	15,8	1,4	4: 1

Testing for TORCH infection revealed antibodies in the form of IgG to cytomegalovirus, herpes simplex virus and toxoplasma.

After the treatment, the child's temperature returned to normal, within 4 days its values were within normal limits, but unstable stool remained.

In the general blood test: hemoglobin 70 g / l, erythrocytes 2.75 .10¹², leukocytes 3.7 .10⁹., stab 8%, segmented 16%, lymphocytes 68%, monocytes 9, ESR 15 mm / h, osmotic resistance of erythrocytes : min 0.42, max 0.26, platelets 225 thousand, reticulocytes 23%, anisocytosis ++, hypochromia ++.

Pathological changes persisted in the coprogram: green color, k / o consistency, mucus-cords, leukocytes 10-12 in p / sp, up to 20 in sisi, small amount of fat, starch, fatty acids, soap-moderate amount

-After 2 days at home, while bathing the child, the mother found multiple soft swellings with a size of 0.6-0.7 cm on the parietal region of the scalp, which forced her to consult a hematologist.

The child was again admitted to the hospital after 5 days in the direction of a hematologist with a diagnosis of Leukomoid reaction of the lymphocytic type. Anemia of the 3rd degree.

Complaints upon admission to a temperature increase of up to 39.80C, unstable stool, regurgitation, and restlessness. Within 3 days, the child had a high fever - up to 39-39.7 ° C for no reason. Shortness of breath and physical findings in the lungs were absent, but for the purpose of diagnosis, a chest x-ray was taken.

An ultrasound scan of the abdominal organs was performed: liver + 12 cm, contour, parenchyma ordinary, unilateral. The gallbladder is oval in shape, reduced, the wall is unconsolidated, undeformed, the contents are homogeneous. The pancreas is 11x6x12 mm, the contours are clear, the echo structure is homogeneous, the echo density is not changed, the spleen is + 10 mm.

Chest X-ray - Bilateral lower lobe pneumonia. The conclusion of the hematologist at the moment of osmostra: Acute leukemia, myeloblastic variant with complication - hepatosplenomegaly. Concomitant diagnosis: Community-acquired bronchopneumonia, acute course. Bilateral inguinal hernia.

The child continues to have febrile fever, his condition worsens, signs of respiratory failure have appeared, and hemoglobin has sharply decreased again. The child is admitted to the Department of Hematology in an extremely serious condition with drowning breathing, shortness of breath, signs of respiratory failure, 2-3 degrees.

A general blood test in dynamics is presented in table 3. Biochemical research: total calcium 1.96 mmol / l, total protein 53 g / l, albumin 38, g / l, urea 5.0 mmol / l, creatinine 86.6 mmol / l, coagulogram: coagulation time 4: 15-4: 30 s, prothrombin index 68%, fibrinogen A 1.66 g / l, fibrin-6 mg.



Table 3. Studies of peripheral blood

Date	Hb, g / l	Eryth	Lake	Pal	Segm	Lymph	Mon	ESR	Throm
12.11	84	2,1	4,0	3	37	55	5	16	134,0
22.11	78	2,1	16,0	2	34	44	2	18	160,0
Nedif. blasts-18%, Anisocytosis +, hypochromia +									

Clinical diagnosis:

Main: 1. Bilateral community-acquired lower lobe bronchopneumonia 2. Acute leukemia, myeloblastic variant with complication - hepatosplenomegaly. Concomitant diagnosis: Bilateral inguinal hernia.

Complication: Multiple organ failure, cerebral edema, cardiovascular failure.

Pathological diagnosis: Acute myeloid leukemia. Complications of the underlying disease Bilateral focal bronchopneumonia, disseminated intravascular coagulation syndrome, hemorrhages of parenchymal organs. Swelling and swelling of the brain substance.

Conclusions:

1. Acute leukemia in young children is a rare pathology, little known to pediatricians and general practitioners.
2. If anemia and leukemoid reaction of the lymphocytic type are detected in a young self-induced patient, it should be consulted by a hematologist as soon as possible.
3. Intoxication and diarrheal syndrome can be an early manifestation of congenital leukemia.
4. Late diagnosis of congenital leukemia is also associated with the complexity of the differential diagnosis with pneumonia due to the similarity of the clinical picture and multiple organ lesions.
5. In doubtful cases, bone marrow examination is mandatory, it should be carried out as early as possible.

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