

ANALYSIS OF CHANGES IN THE GENERAL BLOOD COUNT IN CHILDREN UNDER SIX YEARS OF AGE

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Annotation. Blood tests are probably the most frequently asked tests. This is an integral element of any examination, both at the stage of diagnosis and during treatment. All the links in this system are interconnected and interdependent. Blood consists of a liquid part – plasma and shaped elements – blood cells. Blood washes all cells and tissues of the body, participates in the transport of food and oxygen, the removal of end products of metabolism, etc. Plasma contains proteins, enzymes, hormones, minerals and others. Blood cells have unique characteristics and a certain life span.

Key words: general blood test, hemoglobin, erythrocyte, leukocyte, platelet.

АНАЛИЗ ИЗМЕНЕНИЙ ОБЩЕГО АНАЛИЗА КРОВИ У ДЕТЕЙ ДО ШЕСТИ ЛЕТ

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Аннотация. Анализы крови, пожалуй, самые часто сдаваемые анализы. Это неотъемлемый элемент любого обследования как на этапе постановки

диагноза, так и во время лечения. Все звенья в этой системе взаимосвязаны и взаимозависимы. Кровь состоит из жидкой части – плазмы и форменных элементов – клеток крови. Кровь омывает все клетки и ткани организма, участвует в транспорте продуктов питания и кислорода, удалении конечных продуктов обмена веществ и т.д. Плазма содержит белки, ферменты, гормоны, минеральные вещества и другие. Клетки крови обладают уникальными особенностями и определенной продолжительностью жизни.

Ключевые слова: общий анализ крови, гемоглобин, эритроцит, лейкоцит, тромбоцит.

Purpose of the study: to determine the clinical diagnostic features of common blood analysis seers in children.

Materials and methods: 40 were conducted in children from 3 to 6 years old, who came to the Laboratory Department of the Department with the clinical laboratory diagnostic and DKTF clinical laboratory diagnostic course "SamDTU Multidisciplinary Center" in Samarkand. Of these, sons made up 25 (58.3%) and daughters made up 15 (41.7%). General blood analysis was performed on the hematological analyzer URIT BC 3000. All patients underwent the following examination. General blood analysis, chest X-ray, sputum microscopic examination. We emphasized the following indications of the asosoan general blood analysis. Hemoglobin (Hb), erythrocytes (RBC), platelets (PLT), leukocytes, EChT, MCV, MCH, LLC, neutrophils (Rod, segment), lymphocytes, eosinophils, monocytes, basophils. The data obtained during the study was processed using Microsoft Word.

Results of the study: among the patients examined, there is a mild level of anemia, depending on the amount of hemoglobin boys 10 (40%) girls 8 (53.3) ; boys with middle-severe level anemia 10 (40), girls 5 (33.3) ; boys without anemia 5 (20%), girls 2(13.4%). Leukocytosis accounted for 18 children with deviations (72%) from 11.0 * 10 9 to 15.0 *10 9, and girls for 12 (80%). Leukocytosis is 7 for boys (28%) from 15.0 *10 9 to 20.0 * 10 9, and 3 for girls (20 %). In 72.5% (29) of children who were overall examined for changes in the leukoformula, the leukoformula shifted to the right, 17.5% (7) the leukoformula shifted to the left, and 10 % (4) of children showed lymphocytosis in the leukoformula. Platelet counts were kept in all examined children from 180 *10-9 to 400* 10-9. Indicators such as MCV, MCH, LLC decreased in 67.5 % (27) of total children. 7.5% (3) exceeded the norm in children. In the rest of the children, 25 % (10) are in the norm. EChT was found to be around 8-10 mm/h in 70 % (28) of all children under investigation, 10-15 mm/h in 25 % (10), and around 2-4 mm/h in 5 % (2) of the child. Table1

Jadval 1

| Nº | Parameters | boys 25 | 58.3% | girls 15 | 41,7% |
|-----------|--|----------------|--------------|-----------------|--------------|
| 1 | Hemoglobin in the norm (no anemia) | 5 ta | 20% | 2 ta | 13.4% |
| 2 | Mild anemia | 10 ta | 40% | 8 ta | 53.3 |
| 3 | Moderate to severe anemia | 5 ta | 20% | 2 ta | 13.4% |
| 4 | Leukocytosis 11.0 * 10 ⁹ to 15.0 *10 ⁹ | 18 ta | 72% | 12 ta | 80 % |
| 5 | Leukocytosis 15.0 *10 ⁹ to 20.0 *10 ⁹ | 7 ta | 28% | 3 ta | 20 % |
| 6 | leukoformula shifted to the right | 29 ta | | 72.5% | |
| 7 | lymphocytosis was observed in the leukoformula | | 4ta | | 10 % |
| 8 | MCV, MCH, MCHC kamaygan. | | 27 ta | | 67.5 % |
| 9 | MCV, MCH, MCHC oshgan. | | 3 ta | | 7.5 % |

A general blood test in children is an important indicator that is closely monitored by pediatricians. These clinical studies allow the doctor to assess the state of the baby's health and, immediately after diagnosing abnormalities, begin further examination and further treatment. Teaches to determine the appropriate parameters of biological materials in order to assess the functional state of the physiological systems of the organism. Solves issues related to early and differential diagnosis of the disease, confirmation of the effectiveness of therapeutic measures, forecasting the course and results of the disease. At the molecular level, it studies the pathogenesis of various human diseases, their complications and consequences. Clinical laboratory diagnostics appeared and was formed on the basis of Clinical Biochemistry and Biological Chemistry. Up to 75% of laboratory tests are performed using biochemical examination methods. The privileged use of clinical chemistry methods is explained by the fact that the pathogenesis of most diseases is based on a violation of the metabolism of primary and secondary substances.

Conclusion: General blood analysis in children of all ages provides many diagnostic results. The results of such an analysis carried out in patients will help

doctors to choose the right path in the diagnosis, differential diagnosis, treatment of diseases.

Foydalanilgan adabiyotlar:

1. Shomansurova E.A. "Poliklinik pediatriya va reabilitologiya" OOO «GEO FAN POLIGRAF 2010. 132-149 betlar.
2. Jalilov A.X., Achilova F.A. "Pediatriya propedevtikasi asoslari. Bolalarni ovqatlantirish tamoyillari" SamDu nashri 2021 100-140 betlar.
3. Husinova Sh.A., Yusupova N.A., «Klinik laborator diagnostika» 2022. 13-59 betlar.
4. Kudratova Z. E. et al. The Role of Cytokine Regulation in Obstructive Syndrome of Atypical Genesis in Children //Annals of the Romanian Society for Cell Biology. – 2021. – С. 6279–6291-6279–6291.
5. Даминов Ф. А. и др. Синдром кишечной недостаточности и его коррекция у тяжелообожженных //Журнал Неотложная хирургия им. ИИ Джанелидзе. – 2021-№. S1. – С. 20-21.
6. IN Sabirovna, KL Alikhanovna The significance of clinical-laboratory and instrumental research methods in the diagnosis of echinococcosis // Web of Scientist: International Scientific Research Journal 3 (10), 240-244, 2022
7. Бердиярова Ш.Ш., Юсупова Н.А., Ширинов Х.И. Клинико-лабораторная диагностика внебольничных пневмоний у детей, Вестник науки и образования, 80-83
8. Набиева Ф.С., Ибрагимова Н. С. Бобокулов О. О. Использование *Saccharomyces cerevisiae* для получения конъюгатов для ИФА (литературный обзор) //Журнал Биомедицины и практики. – 2022. – Т. 7. – №. 3.
9. Berdiyarova Sh.Sh., Ahadova M.M., Ochilov S.A. COMPLICATIONS OF TREATMENT OF ACUTE HEMATOGENOUS OSTEOMYELITIS, LITERATURE REVIEW, Galaxy International Interdisciplinary Research Journal 293-298
10. Nabieva F.S. et al. Prospects for Developing Modifications of Methods for Producing Conjugates for Elisa //Annals of the Romanian Society for Cell Biology. – 2021. – С. 4120-4125.
11. Erkinovna K. Z., Berdirasulovich K. G., Andreevna Y. I. THE IMPORTANCE OF SOME LABORATORY INDICATORS IN LUNG DISEASES //Вестник науки и образования. – 2020. – №. 22-2 (100). – С. 70-72.
12. IN Sabirovna, T Asomiddin, E Umidjon, E Rukhshona, Dysfunctions of the Immune System and Their Role in the Development of Diseases, The Peerian Journal 23, 49-52

- 13.Nabieva F.S., Umarova S.S., Ruzmetova. S.U. Use of *Saccharomyces cerevisiae* for obtaining conjugates for ELISA //Thematics Journal of Microbiology. – 2022. -T. 6.- №. 1.
- 14.IN Sabirovna, BF Shekhrozovna, DIAGNOSTIC CRITERIA AND TREATMENT OF TYPE 2 DIABETES MELLITUS, Galaxy International Interdisciplinary Research Journal 11 (10), 237-240
- 15.Бердиярова Ш.Ш., Юсупова Н.А. Особенности иммунометаболических нарушений иммунологической реактивности при гематогенных остеомиелитах, Вестник науки и образования, 29-32
- 16.Burkhanova D. S., Tursunov F. O., Musayeva F. THYMOMEGALY AND THE STATE OF HEALTH OF CHILDREN IN THE FIRST YEAR OF LIFE //Galaxy International Interdisciplinary Research Journal. – 2023. – Т. 11. – №. 10. – С. 62-64.
- 17.Feruz O'ktam o'gli T., Mengdobilovich M. N. ANALYSIS OF GLYCEMIA AND GLUCOSURIA IN PATIENTS WITH DIABETES AND COVID-19 //Open Access Repository. – 2023. – Т. 4. – №. 2. – С. 177-181.
- 18.ВЛИЯНИЕ ПАНДЕМИИ COVID-19 НА БОРЬБУ С ТУБЕРКУЛЕЗОМ
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