Academicia Globe:
Inderscience Research

ISSN: 2776-1010 Volume 3, Issue 10, Oct., 2022

DETECTION OF VITAMIN D DEFICIENCY IN CHILDREN AGAINST THE BACKGROUND OF PARASITIC DISEASES

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Resume

The prevalence of social deficiency and vitamin D deficiency in various parasitic diseases today is one of the most important theoretical and practical problems of medicine due to the level of morbidity among patients of different ages around the world, the complications that it causes, the medical, social, economic damage that it brings. The widespread prevalence of vitamin D and calcium deficiency worldwide, in terms of increasing the pathogenesis of the disease, damage to many organs and systems, indicates a revision of this problem, scientific interest in conducting research in this area. Vitamin D and calcium deficiency has been found to have a negative effect on the immune system of bales. Vitamin D and calcium deficiency has been found to have a negative effect on the immune system of bales. According to Australian scientists, 94% of children in countries located in northern latitudes suffer from hypocalcemia, 86% of them suffer from rickets.

Keywords: Helminthiasis, calcium, vitamin D, enterobiosis, hymenolepidosis, giardiasis, ascariasis**.**

ВЫЯВЛЕНИЕ ДЕФИЦИТА ВИТАМИНА D У ДЕТЕЙ НА ФОНЕ ПАРАЗИТАРНЫХ ЗАБОЛЕВАНИЙ

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Резюме

Распространенность социального дефицита и дефицита витамина D при различных паразитарных заболеваниях сегодня является одной из наиболее важных теоретических и практических проблем медицины из-за уровня заболеваемости среди пациентов разного возраста во всем мире, осложнений, которые это вызывает, медицинского, социального, экономического ущерба, который это приносит. Широкая распространенность дефицита витамина D и кальци во всем мире, с точки зрения увеличения патогенеза заболевания, поражения многих органов и систем, указывает на пересмотр этой проблемы, научный интерес к проведению исследований в этой области. Было обнаружено, что дефицит витамина D и кальци оказывает негативное влияние на иммунную систему тюков. По данным ученых из Австралии, 94% детей в странах, расположенных в северных широтах, страдают гипокальциемией ида, 86% из них страдают рахитом.

Ключевые слова: Гельминтоз, кальций, витамин D, энтеробиоз, гименолепидоз, лямблиоз, аскаридоз.

Academicia Globe:
Inderscience Research

ISSN: 2776-1010 Volume 3, Issue 10, Oct., 2022

Relevance

It is known that helminths are a common infectious disease among children, which poses a serious threat to the health of children. According to the World Health Organization (who), parasitic diseases are the third most common infectious disease after cardiovascular diseases (after diarrhea and tuberculosis) [3,7]. Helminthoses, among other regions, are among the most common diseases in Uzbekistan, they account for more than 90% of Parasitic Diseases and have been steadily increasing in the population for many years [6]. Every year more than 200 thousand pests are registered in the country [22]. According to the data, in 7580703 people (263167%) examined for helminthoses, infusions were detected [8,9,11].

The growing popularity of livestock development and its use in agriculture as a biofuel from the feces of people causes an increase in the incidence of geogelminthoses (ascariasis, trichosephalyosis), infectious diseases (trichinellosis, tenindoses) with the consumption of meat products of domestic animals [13,15,16].

Kaltsiy and vitamin D deficiency in parasitic diseases of different appearance today are among the most important theoretical and practical medicine on account of the degree of occurrence, complications, medical, social, economic damage caused among patients of different ages on a global scale. The diseases of adults and children associated with social insufficiency on a global scale have been studied in depth and their modern diagnostic and therapeutic criteria have been developed [19,20]. But in the case of helminthosis among children, the problems of kaltsium and vitamin D deficiency remain relevant. The widespread prevalence of vitamin D and kaltsi deficiency all over the world, the complexity of the pathogenesis of the disease, the revision of this problem in terms of the lesions of many organs and systems, requires research in this area. [1,5,21]. Absorbed from the small intestine, kaltsium flows into the blood through a protein that binds calcium and is transported and travels to skeletons and bones and settles. Kalt when necessary for the body, it decomposes from the bones into blood and, having fulfilled its functions, then enters the intestines, decomposes with feces. In oragenism, a constant exchange of minerals occurs in the fluid outside the bones and cells, thereby providing mineral homeostasis. [14,17,18]. There are three types of bone cells: osteoblasts (the production of bone matrix), osteocytes and osteoclasts. In Russia, it has been found that a violation of human metabolism in older people leads to "osteoporosis", "osteomalacia", "osteoporosis"[4]. Osteopenia is a decrease in bone mass; osteomalacia is an osteopenic condition associated with a violation of bone mineralization; osteoporosis is a systemic disease, which is characterized by a decrease in bone mass and the restructuring of bone tissue, and all this increases the risk of bone fracture [12].

Purpose of scientific Research

To determine the clinical and pathogenetic features of ocular insufficiency in parasitic diseases.

Materials and Research Methods

In the study, we analyzed 150 children's observations in 2018-2020 years in Buxoro Regional Hospital of responsible diseases, Parasitology Department. A total of 90 children were allocated for the research

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Inderscience Research

ISSN: 2776-1010 Volume 3, Issue 10, Oct., 2022

work. Of these, 60 were selected as the main group and 30 as the control group. The study was divided into 4 groups according to the age groups of the separated children. In this case, children aged 1-3 years consisted of 12 people (20%), children 3-7 years of age 16 people (27%), children 7-11 years of age 26 people (43%), children 11-18 years of age 6 people(10%). A total of 30 children were selected as the control group. In this case, children aged 1-3 years were 7 people (23.3%), children aged 3-7 years 16 people (30%), children 7-11 years 10 people (33.3%), children 11-18 years 6 people(13.3%). 57 (63,3%) of the children allocated for the study were boys, 33 (36,7%) were girls.

We put the diagnosis on the basis of the history of the disease, epidemiological Anamnesis, clinical and laboratory data.

Laboratory diagnosis: we used parasitological, immunological and allergic examinations.

Results and Discussion of them

It is based on the determination of vitamin D deficiency caused by parasitic diseases in children, as well as the assessment of their association with the risk factors that cause gels among children, the development of prophylactic programs for their early detection and Prevention. In connection with the above, the prevalence rate of parasitic diseases among children was studied. The analysis revealed pathological cases of parasitic diseases such as lyambliosis, entrobiosis, heminolipidosis and ascaridosis among children.

Determination of the frequency of occurrence of vitamin D deficiency as a result of Parasitic Diseases in children

Table 1

age	Normal indicator of vitamin D n=4	Avitaminoziss D n=56	Hypervitaminosis D n=0	Total n=60
1-3 age	0%(0)	100 %(12)	0% (0)	100% (12)
3-7 age	12,5% (2)	87,5% (14)	0% (0)	100% (16)
7-11 age	19,3% (5)	80,7% (21)	0% (0)	100% (26)
11-18 age	16.7% (1)	83,3% (5)	0% (0)	100% (6)
Total children	13,3% (8)	86,67% (52)	0% (0)	100%(60)

The frequency of occurrence of vitamin D deficiency as a result of Parasitic Diseases in children was studied. It was found that the normal indicator of vitamin D in 1-3-year-old 12 children examined in bun was 0%(0), avitaminosis d 87,5% (14), giipervitaminosis D 0%(0). It was found that the normal indicator of vitamin D in 3-7-year-old 16 children was 12,5% (2), avitaminosis d 87,5% (14), giipervitaminosis D 0%(0). in 7-11-year-old 26-year-old children, the normal indicator of vitamin D was 19,3% (5), avitaminosis D 80,7% (21), hypervitaminosis D 0%(0). It was found that the normal indicator of vitamin D in 11-18-year-old 6 children was 16.7% (1), avitaminosis D 83,3% (5), hypervitaminosis D 0% (0).

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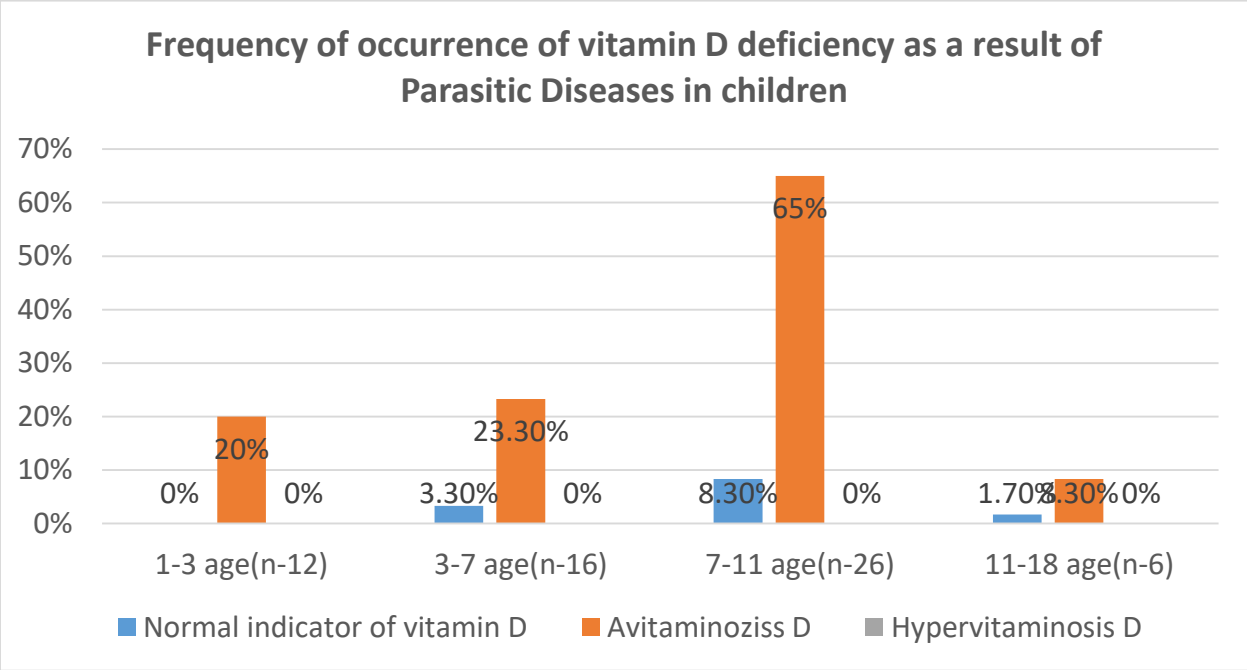
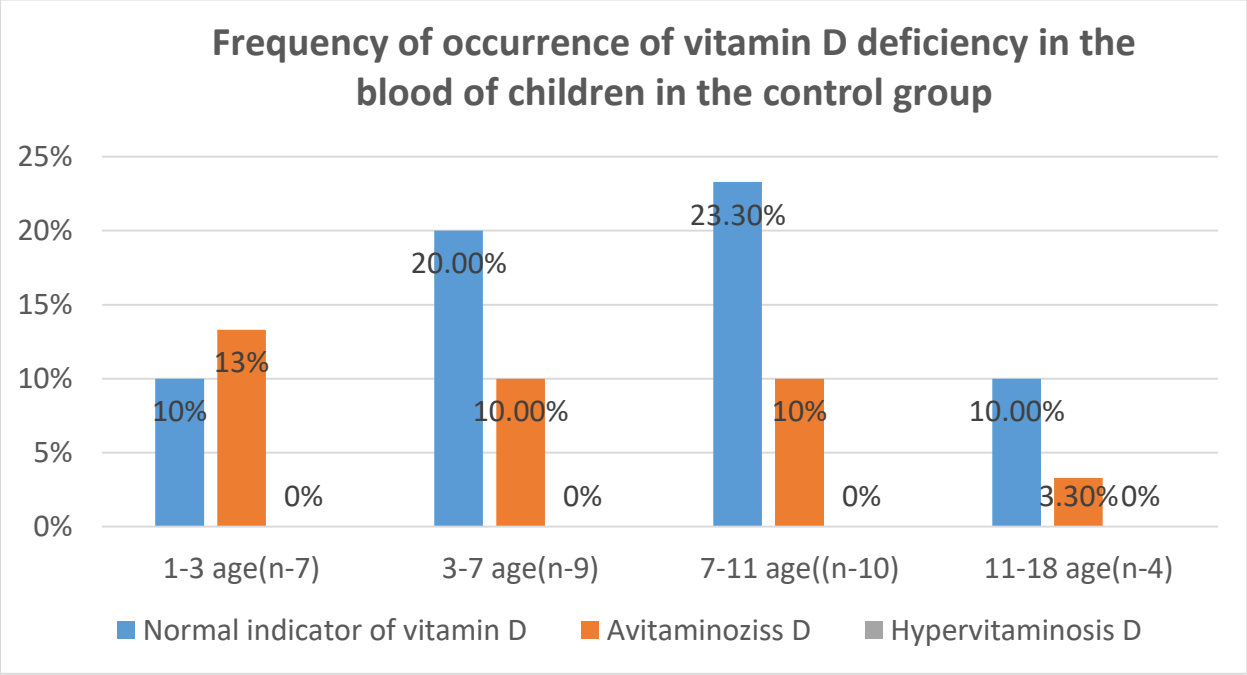
ISSN: 2776-1010 Volume 3, Issue 10, Oct., 2022



According to the results obtained, the normal indicator of vitamin D in a total of 60 children was 13,3% (8), avitaminosis D 86,67% (52), hypervitaminosis D status 0%(0).



When vitamin D was examined in children in the control group, it was found that normovitaminosis D10% in children aged 1-3 years, hypovitaminosis D13%, normovitaminosis D20% in children 3-7 years, hypovitaminosis D10%, normovitaminosis D23,3% in children aged 7-11 years, hypovitaminosis D10%, normovitaminosis D10% in children aged 11-18 years, hypovitaminosis D10%.

ISSN: 2776-1010 Volume 3, Issue 10, Oct., 2022

In general, it was noted that 63,3% of children in the control group had ida normovitaminosis, 36,7% had ida hypovitaminosis status.

Conclusion

During our research work, we studied the lack of vitamin D in children as a result of Parasitic Diseases, and obtained results in tone. It was found that the normal indicator of vitamin D in 1-3-year-old 12 children examined in bun was 0%(0), avitaminosis d 87,5% (14), hypervitaminosis D 0%(0). It was found that the normal indicator of vitamin D in 3-7-year-old 16 children was 12,5% (2), avitaminosis d 87,5% (14), hypervitaminosis D 0%(0). in 7-11-year-old 26-year-old children, the normal indicator of vitamin D was 19,3% (5), avitaminosis D 80,7% (21), hypervitaminosis D 0%(0). It was found that the normal indicator of vitamin D in 11-18-year-old 6 children was 16.7% (1), avitaminosis D 83,3% (5), giipervitaminosis D 0% (0). According to the results obtained, the normal indicator of vitamin D in a total of 60 children was 13,3% (8), avitaminosis D 86,67% (52), giipervitaminosis D status 0%(0).

Used Literature

1. Obloqulov A R., Aslonova M R. (2022). To indentify the calciological deficiency that occurs against the background of helminthiasis in children// Central Asian journal of medical and natural sciences.–2022.–C. 91-95.
2. Облокулов А.Р., Ниязов Г.Э., Облокулов А.А., Нарзиев Б.И. (1999) Особенности течения лямблиоза у взрослых // Инфекция, иммунитет и фармакология.–С. 151-156.
3. Ibrakhimova H.R., Oblokulov A.R. (2020). Pathogenetic Bases And Prevalens Of Parasitic Infections In Children: Literature Review. The American Journal Of Medical Science And Pharmaceutical Research, 2(10), 87-95.
4. Ибрахимова Х.Р., Облокулов А.Р. (2019). Современный взгляд на распространенность и патогенетические аспекты паразитарных заболеваний у детей. Новый день в медицине. №1(25). –С.30–34.
5. Aslonova.M.R. (2022). CASES OF HYPOVITAMINOSIS ON THE BACKGROUND OF HELMINTHIASIS // Iternational scientific research journal. - 2022. – P. 305-312.
6. Аслонова.М.Р. (2022). Болаларда паразитар касалликлар фонида кальций тишмовчилигини аниқлаш // ТИББИЁТДА ЯНГИ КУН.-2022-С.147-152.
7. Esteban-Pretel G., Marin M.P., Renau-Piqueras J., Barber T., Timoneda J. Vitamin A deficiency alters rat lung alveolar basement membrane: Reversibility by retinoic acid. J. Nutr. Biochem. 2010. vol. 21. P. 227-236.14.
8. ИД Кароматов, МР Аслонова. (2018). Малина как лечебное средство //Биология и интегративная медицина.- 2018.-С. 221-216.
9. Bogomaz T. A. Some features of vitamin C balance in helminth infestations and giardiasis in children / T. A. Bogomaz // Problems of Parasitology. Kiev, 1960, Pp. 87-88.5.

ISSN: 2776-1010 Volume 3, Issue 10, Oct., 2022

10. Bebravicius V. Yu. The content of vitamin A in the blood serum of rabbits during experimental trichocephalesis and the introduction of interferon / V. Yu. Bebravicius. A. K. Medzevicius / / Helminthology today: problems and prospects. - M .. 1989. - Part 1. - P. 43-44.
11. Bekish. V. Ya. State of the host genome in helminthiasis /B. Ya. Bekish. O. - Ya. L. Bekish. - Vitebsk: publishing house. VSMU. 2004. - 217 p.2.
12. Desai T.J., Chen F., Lu J., Qian J., Niederreither K., Dolle P., Chambon P., Cardoso W.V. Distinct roles for retinoic acid receptors alpha and beta in early lung morphogenesis. Dev. Biol. 2006. vol. 291. P. 12-24.15.
13. Brown C.H., Noelle R.J. Seeing Through the Dark: New Insights in to the Immune Regulatory Functions of Vitamin A. Eur. J. Immunol. 2015. vol. 45. P. 1287-1295.17.
14. Livrea M.A., Tesoriere L. Antioxidant activity of vitamin A within lipid environments. Subcell. Biochem. 1998. vol. 30. P. 113-143.9.
15. Rhinn M., Dolle P. Retinoic acid signaling during development. Development. 2012. vol. 139. P. 843-858.11.
16. Desai T.J., Chen F., Lu J., Qian J., Niederreither K., Dolle P., Chambon P., Cardoso W.V. Distinct roles for retinoic acid receptors alpha and beta in early lung morphogenesis. Dev. Biol. 2006. vol. 291. P. 12-24.15.
17. Ross A.C. Vitamin A and retinoic acid in T cell-related immunity. Am. J. Clin. Nutr. 2012. vol. 96. P. 1166S-1172S.12.
18. Schmitz H.H., Poor C. L., Wellman R. B., Erdman J. W., Jr. Concentrations of selected carotenoids and vitamin A in human liver, kidney and lung tissue. J. Nutr. 1991. vol. 121. P. 16131621.18.
19. Bogomaz T. A. Some features of vitamin C balance in helminth infestations and giardiasis in children / T. A. Bogomaz // Problems of Parasitology. Kiev, 1960, Pp. 87-88.5
20. Аслонова.М.Р. (2021). Возникновение Случаев Гиповитаминоза Из-за Гельминтозов// CENTRAL ASIAN JOURNAL OF MEDICAL AND NATURAL SCIENCES. – 2021.- P. 46-50.
21. Aslonova.M.R. (2022). Determination of suicidality against the background of Parasitic Diseases in children // INTERNATIONAL JOURNAL OF PHILOSOPHICAL STUDIES AND SOCIAL SCIENCES. – 2022.- P. 9-12.
22. Khamidova N.K. (2021). Clinical and Immunological Study of the Effect of Different types of Therapy on the Course of Allergic Rhinitis in Children with Hymenolepiasis. Annals of the Romanian Society for Cell Biology, 1900–1908. Retrieved from https://www.annalsofrscb.ro/index.php/ journal/article/view/2713.