GEORGIAN MEDICAL NEWS

ISSN 1512-0112

NO 1 (358) Январь 2025

ТБИЛИСИ - NEW YORK

ЕЖЕМЕСЯЧНЫЙ НАУЧНЫЙ ЖУРНАЛ

Медицинские новости Грузии

საქართველოს სამედიცინო სიახლენი

GEORGIAN MEDICAL NEWS

Monthly Georgia-US joint scientific journal published both in electronic and paper formats of the Agency of Medical Information of the Georgian Association of Business Press. Published since 1994. Distributed in NIS, EU and USA.

GMN: Georgian Medical News is peer-reviewed, published monthly journal committed to promoting the science and art of medicine and the betterment of public health, published by the GMN Editorial Board since 1994. GMN carries original scientific articles on medicine, biology and pharmacy, which are of experimental, theoretical and practical character; publishes original research, reviews, commentaries, editorials, essays, medical news, and correspondence in English and Russian.

GMN is indexed in MEDLINE, SCOPUS, PubMed and VINITI Russian Academy of Sciences. The full text content is available through EBSCO databases.

GMN: Медицинские новости Грузии - ежемесячный рецензируемый научный журнал, издаётся Редакционной коллегией с 1994 года на русском и английском языках в целях поддержки медицинской науки и улучшения здравоохранения. В журнале публикуются оригинальные научные статьи в области медицины, биологии и фармации, статьи обзорного характера, научные сообщения, новости медицины и здравоохранения. Журнал индексируется в MEDLINE, отражён в базе данных SCOPUS, PubMed и ВИНИТИ РАН. Полнотекстовые статьи журнала доступны через БД EBSCO.

GMN: Georgian Medical News – საქართველოს სამედიცინო სიახლენი – არის ყოველთვიური სამეცნიერო სამედიცინო რეცენზირებადი ჟურნალი, გამოიცემა 1994 წლიდან, წარმოადგენს სარედაქციო კოლეგიისა და აშშ-ის მეცნიერების, განათლების, ინდუსტრიის, ხელოვნებისა და ბუნებისმეტყველების საერთაშორისო აკადემიის ერთობლივ გამოცემას. GMN-ში რუსულ და ინგლისურ ენებზე ქვეყნდება ექსპერიმენტული, თეორიული და პრაქტიკული ხასიათის ორიგინალური სამეცნიერო სტატიები მედიცინის, ბიოლოგიისა და ფარმაციის სფეროში, მიმოხილვითი ხასიათის სტატიები.

ჟურნალი ინდექსირებულია MEDLINE-ის საერთაშორისო სისტემაში, ასახულია SCOPUS-ის, PubMed-ის და ВИНИТИ РАН-ის მონაცემთა ბაზებში. სტატიების სრული ტექსტი ხელმისაწვდომია EBSCO-ს მონაცემთა ბაზებიდან.

WEBSITE

www.geomednews.com

К СВЕДЕНИЮ АВТОРОВ!

При направлении статьи в редакцию необходимо соблюдать следующие правила:

1. Статья должна быть представлена в двух экземплярах, на русском или английском языках, напечатанная через **полтора интервала на одной стороне стандартного листа с шириной левого поля в три сантиметра**. Используемый компьютерный шрифт для текста на русском и английском языках - **Times New Roman** (**Кириллица**), для текста на грузинском языке следует использовать **AcadNusx.** Размер шрифта - **12**. К рукописи, напечатанной на компьютере, должен быть приложен CD со статьей.

2. Размер статьи должен быть не менее десяти и не более двадцати страниц машинописи, включая указатель литературы и резюме на английском, русском и грузинском языках.

3. В статье должны быть освещены актуальность данного материала, методы и результаты исследования и их обсуждение.

При представлении в печать научных экспериментальных работ авторы должны указывать вид и количество экспериментальных животных, применявшиеся методы обезболивания и усыпления (в ходе острых опытов).

4. К статье должны быть приложены краткое (на полстраницы) резюме на английском, русском и грузинском языках (включающее следующие разделы: цель исследования, материал и методы, результаты и заключение) и список ключевых слов (key words).

5. Таблицы необходимо представлять в печатной форме. Фотокопии не принимаются. **Все цифровые, итоговые и процентные данные в таблицах должны соответствовать таковым в тексте статьи**. Таблицы и графики должны быть озаглавлены.

6. Фотографии должны быть контрастными, фотокопии с рентгенограмм - в позитивном изображении. Рисунки, чертежи и диаграммы следует озаглавить, пронумеровать и вставить в соответствующее место текста **в tiff формате**.

В подписях к микрофотографиям следует указывать степень увеличения через окуляр или объектив и метод окраски или импрегнации срезов.

7. Фамилии отечественных авторов приводятся в оригинальной транскрипции.

8. При оформлении и направлении статей в журнал МНГ просим авторов соблюдать правила, изложенные в «Единых требованиях к рукописям, представляемым в биомедицинские журналы», принятых Международным комитетом редакторов медицинских журналов - http://www.spinesurgery.ru/files/publish.pdf и http://www.nlm.nih.gov/bsd/uniform_requirements.html
В конце каждой оригинальной статьи приводится библиографический список. В список литературы включаются все материалы, на которые имеются ссылки в тексте. Список составляется в алфавитном порядке и нумеруется. Литературный источник приводится на языке оригинала. В списке литературы сначала приводятся работы, написанные знаками грузинского алфавита, затем кириллицей и латиницей. Ссылки на цитируемые работы в тексте статьи даются в квадратных скобках в виде номера, соответствующего номеру данной работы в списке литературы. Большинство цитированных источников должны быть за последние 5-7 лет.

9. Для получения права на публикацию статья должна иметь от руководителя работы или учреждения визу и сопроводительное отношение, написанные или напечатанные на бланке и заверенные подписью и печатью.

10. В конце статьи должны быть подписи всех авторов, полностью приведены их фамилии, имена и отчества, указаны служебный и домашний номера телефонов и адреса или иные координаты. Количество авторов (соавторов) не должно превышать пяти человек.

11. Редакция оставляет за собой право сокращать и исправлять статьи. Корректура авторам не высылается, вся работа и сверка проводится по авторскому оригиналу.

12. Недопустимо направление в редакцию работ, представленных к печати в иных издательствах или опубликованных в других изданиях.

При нарушении указанных правил статьи не рассматриваются.

REQUIREMENTS

Please note, materials submitted to the Editorial Office Staff are supposed to meet the following requirements:

1. Articles must be provided with a double copy, in English or Russian languages and typed or compu-ter-printed on a single side of standard typing paper, with the left margin of **3** centimeters width, and **1.5** spacing between the lines, typeface - **Times New Roman** (**Cyrillic**), print size - **12** (referring to Georgian and Russian materials). With computer-printed texts please enclose a CD carrying the same file titled with Latin symbols.

2. Size of the article, including index and resume in English, Russian and Georgian languages must be at least 10 pages and not exceed the limit of 20 pages of typed or computer-printed text.

3. Submitted material must include a coverage of a topical subject, research methods, results, and review.

Authors of the scientific-research works must indicate the number of experimental biological species drawn in, list the employed methods of anesthetization and soporific means used during acute tests.

4. Articles must have a short (half page) abstract in English, Russian and Georgian (including the following sections: aim of study, material and methods, results and conclusions) and a list of key words.

5. Tables must be presented in an original typed or computer-printed form, instead of a photocopied version. **Numbers, totals, percentile data on the tables must coincide with those in the texts of the articles.** Tables and graphs must be headed.

6. Photographs are required to be contrasted and must be submitted with doubles. Please number each photograph with a pencil on its back, indicate author's name, title of the article (short version), and mark out its top and bottom parts. Drawings must be accurate, drafts and diagrams drawn in Indian ink (or black ink). Photocopies of the X-ray photographs must be presented in a positive image in **tiff format**.

Accurately numbered subtitles for each illustration must be listed on a separate sheet of paper. In the subtitles for the microphotographs please indicate the ocular and objective lens magnification power, method of coloring or impregnation of the microscopic sections (preparations).

7. Please indicate last names, first and middle initials of the native authors, present names and initials of the foreign authors in the transcription of the original language, enclose in parenthesis corresponding number under which the author is listed in the reference materials.

8. Please follow guidance offered to authors by The International Committee of Medical Journal Editors guidance in its Uniform Requirements for Manuscripts Submitted to Biomedical Journals publication available online at: http://www.nlm.nih.gov/bsd/uniform_requirements.html
http://www.icmje.org/urm_full.pdf
In GMN style for each work cited in the text, a bibliographic reference is given, and this is located at the end of the article under the title "References". All references cited in the text must be listed. The list of references should be arranged alphabetically and then numbered. References are numbered in the text [numbers in square brackets] and in the reference list and numbers are repeated throughout the text as needed. The bibliographic description is given in the language of publication (citations in Georgian script are followed by Cyrillic and Latin).

9. To obtain the rights of publication articles must be accompanied by a visa from the project instructor or the establishment, where the work has been performed, and a reference letter, both written or typed on a special signed form, certified by a stamp or a seal.

10. Articles must be signed by all of the authors at the end, and they must be provided with a list of full names, office and home phone numbers and addresses or other non-office locations where the authors could be reached. The number of the authors (co-authors) must not exceed the limit of 5 people.

11. Editorial Staff reserves the rights to cut down in size and correct the articles. Proof-sheets are not sent out to the authors. The entire editorial and collation work is performed according to the author's original text.

12. Sending in the works that have already been assigned to the press by other Editorial Staffs or have been printed by other publishers is not permissible.

Articles that Fail to Meet the Aforementioned Requirements are not Assigned to be Reviewed.

ავტორთა საყურადღებოდ!

რედაქციაში სტატიის წარმოდგენისას საჭიროა დავიცვათ შემდეგი წესები:

1. სტატია უნდა წარმოადგინოთ 2 ცალად, რუსულ ან ინგლისურ ენებზე,დაბეჭდილი სტანდარტული ფურცლის 1 გვერდზე, 3 სმ სიგანის მარცხენა ველისა და სტრიქონებს შორის 1,5 ინტერვალის დაცვით. გამოყენებული კომპიუტერული შრიფტი რუსულ და ინგლისურენოვან ტექსტებში - **Times New Roman (Кириллица)**, ხოლო ქართულენოვან ტექსტში საჭიროა გამოვიყენოთ **AcadNusx.** შრიფტის ზომა – 12. სტატიას თან უნდა ახლდეს CD სტატიით.

2. სტატიის მოცულობა არ უნდა შეადგენდეს 10 გვერდზე ნაკლებს და 20 გვერდზე მეტს ლიტერატურის სიის და რეზიუმეების (ინგლისურ, რუსულ და ქართულ ენებზე) ჩათვლით.

3. სტატიაში საჭიროა გაშუქდეს: საკითხის აქტუალობა; კვლევის მიზანი; საკვლევი მასალა და გამოყენებული მეთოდები; მიღებული შედეგები და მათი განსჯა. ექსპერიმენტული ხასიათის სტატიების წარმოდგენისას ავტორებმა უნდა მიუთითონ საექსპერიმენტო ცხოველების სახეობა და რაოდენობა; გაუტკივარებისა და დაძინების მეთოდები (მწვავე ცდების პირობებში).

4. სტატიას თან უნდა ახლდეს რეზიუმე ინგლისურ, რუსულ და ქართულ ენებზე არანაკლებ ნახევარი გვერდის მოცულობისა (სათაურის, ავტორების, დაწესებულების მითითებით და უნდა შეიცავდეს შემდეგ განყოფილებებს: მიზანი, მასალა და მეთოდები, შედეგები და დასკვნები; ტექსტუალური ნაწილი არ უნდა იყოს 15 სტრიქონზე ნაკლები) და საკვანძო სიტყვების ჩამონათვალი (key words).

5. ცხრილები საჭიროა წარმოადგინოთ ნაბეჭდი სახით. ყველა ციფრული, შემაჯამებელი და პროცენტული მონაცემები უნდა შეესაბამებოდეს ტექსტში მოყვანილს.

6. ფოტოსურათები უნდა იყოს კონტრასტული; სურათები, ნახაზები, დიაგრამები - დასათაურებული, დანომრილი და სათანადო ადგილას ჩასმული. რენტგენოგრამების ფოტოასლები წარმოადგინეთ პოზიტიური გამოსახულებით **tiff** ფორმატში. მიკროფოტოსურათების წარწერებში საჭიროა მიუთითოთ ოკულარის ან ობიექტივის საშუალებით გადიდების ხარისხი, ანათალების შეღებვის ან იმპრეგნაციის მეთოდი და აღნიშნოთ სურათის ზედა და ქვედა ნაწილები.

7. სამამულო ავტორების გვარები სტატიაში აღინიშნება ინიციალების თანდართვით, უცხოურისა – უცხოური ტრანსკრიპციით.

8. სტატიას თან უნდა ახლდეს ავტორის მიერ გამოყენებული სამამულო და უცხოური შრომების ბიბლიოგრაფიული სია (ბოლო 5-8 წლის სიღრმით). ანბანური წყობით წარმოდგენილ ბიბლიოგრაფიულ სიაში მიუთითეთ ჯერ სამამულო, შემდეგ უცხოელი ავტორები (გვარი, ინიციალები, სტატიის სათაური, ჟურნალის დასახელება, გამოცემის ადგილი, წელი, ჟურნალის №, პირველი და ბოლო გვერდები). მონოგრაფიის შემთხვევაში მიუთითეთ გამოცემის წელი, ადგილი და გვერდების საერთო რაოდენობა. ტექსტში კვადრატულ ფჩხილებში უნდა მიუთითოთ ავტორის შესაბამისი N ლიტერატურის სიის მიხედვით. მიზანშეწონილია, რომ ციტირებული წყაროების უმეტესი ნაწილი იყოს 5-6 წლის სიღრმის.

9. სტატიას თან უნდა ახლდეს: ა) დაწესებულების ან სამეცნიერო ხელმძღვანელის წარდგინება, დამოწმებული ხელმოწერითა და ბეჭდით; ბ) დარგის სპეციალისტის დამოწმებული რეცენზია, რომელშიც მითითებული იქნება საკითხის აქტუალობა, მასალის საკმაობა, მეთოდის სანდოობა, შედეგების სამეცნიერო-პრაქტიკული მნიშვნელობა.

10. სტატიის ბოლოს საჭიროა ყველა ავტორის ხელმოწერა, რომელთა რაოდენობა არ უნდა აღემატებოდეს 5-ს.

11. რედაქცია იტოვებს უფლებას შეასწოროს სტატია. ტექსტზე მუშაობა და შეჯერება ხდება საავტორო ორიგინალის მიხედვით.

12. დაუშვებელია რედაქციაში ისეთი სტატიის წარდგენა, რომელიც დასაბეჭდად წარდგენილი იყო სხვა რედაქციაში ან გამოქვეყნებული იყო სხვა გამოცემებში.

აღნიშნული წესების დარღვევის შემთხვევაში სტატიები არ განიხილება.

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No 1 (359) 2025

Содержание:

GEORGIAN MEDICAL NEWS
No 1 (358) 2025

CONGENITAL HYPOTHYROIDISM: FROM THEORY TO PRACTICE- A CLINICAL CASE

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Abstract.

Hypothyroidism (HT) is one of the common diseases in endocrinology, caused by a long-term, persistent deficiency of thyroid hormones or a deficiency of their effect on tissues. The deficiency of these hormones leads not only to a slowdown in the biochemical processes of growth and development of the child's body, disruption of metabolic processes, including lipid peroxidation and the blood clotting mechanism, but also to a delay in intellectual development and inhibition of the formation of personality structure and thinking. In this regard, early diagnosis, as well as timely and adequate therapy are very important.

Key words. Hypothyroidism, congenital hypothyroidism, acquired hypothyroidism, thyroid gland, thyroxine, hypothyroxinemia, central nervous system, dementia, neonatal screening, endocrinology.

Introduction.

Congenital hypothyroidism (CHT) is found in 1 in 4000 newborns [1,2]. It is one of the most common diseases in pediatric endocrinology, as well as one of the most common cases of brain damage and mental retardation in industrialized countries. This delay is due to the fact that thyroid hormones take an active part in the development of the brain, the formation of which occurs in utero and in the early postnatal period up to the 3rd year of life [3,4].

According to the classification, primary, secondary and peripheral hypothyroidism (HT) are distinguished.

Primary HT is caused by congenital or acquired disorders of the structure or secretory function of the thyroid gland.

The causes of secondary HT are diseases of the adenohypophysis or hypothalamus.

Peripheral GT is a condition caused by resistance of target tissues to T_4 and T_3, caused by genetic defects of the corresponding receptors.

It is known that the functional activity of the thyroid gland is under the control of thyroid stimulating hormone (TSH), which is a complex glycoprotein by chemical nature, containing two α- and β-subunits, which individually do not have biological activity, the α-subunit contains 96 amino acid residues, the β-subunit - 112. The main role of this hormone is to control the development and functioning of the thyroid gland, as well as to regulate the biosynthesis and secretion of thyroid hormones into the blood [5].

Hypotyroxinemia leads to the development of metabolic disorders, a decrease in the rate of oxidative processes and the activity of enzyme systems, an increase in transmembrane cellular permeability and the accumulation of underoxidized metabolic products in tissues. Deficiency of thyroid hormones grossly disrupts the processes of growth and differentiation of all tissues of the body.

Irreversibility of damage to the central nervous system (CNS) in CHT, in the absence of treatment, is associated with the peculiarities of growth and maturation of the child's brain. During the period of maximum growth and active neurogenesis, which occurs in the first 6 months of life, the brain is especially sensitive to adverse effects, including a lack of thyroxine. Therefore, thyroid insufficiency in the critical period of the most rapid development of the CNS delays its maturation, often leading to irreversible mental retardation [4-6].

In this regard, diagnostic issues, especially in the neonatal period – screening of newborns for CHT – are a pressing issue.

Objective. To conduct a retrospective analysis of the medical history of a patient suffering from congenital hypothyroidism for a long time and not receiving adequate drug therapy.

Materials and Methods.

Information from the medical history of a patient suffering from congenital hypothyroidism and who had been without hormone replacement therapy for a long time was analyzed and systematized.

Results.

Before proceeding to the description of the clinical case, it is worth highlighting the issues of diagnosing CHT. Neonatal screening, including for the presence of CHT, has been carried out in the Russian Federation for a long time.

The algorithm for neonatal screening for congenital hypothyroidism (full-term infants) is presented in Table 1.

As can be seen from Table 1, diagnostics of CHT can be performed in a maternity hospital, in a hospital or in a polyclinic. All full-term newborns should give blood from the heel on the 3-4th day. In a dry blood spot, a laboratory technician determines the TSH level. Normally, this indicator at the age of 4-14 days of life should not exceed 9 IU/ml.

If the indicator exceeds this threshold, but is less than 40 IU/ml, it is recommended to perform a retest (repeat blood sampling) at the hospital or clinic level.

If the TSH level is higher than 40 IU/ml during the first blood draw, then a diagnosis of hepatitis B is made, and lifelong drug therapy is prescribed under the supervision of an endocrinologist.

If, during a retest, the patient is over 14 days old and the TSH level is higher than 5 IU/ml, then the tactics are similar. If the child is over 14 days old and the TSH level is up to 5 IU/ml, then this is considered normal.

If neonatal screening for CHT is not performed, the TSH level should be determined when seeking medical care with the

Table 1. *Algorithms of physician actions. Algorithm of neonatal screening for congenital hypothyroidism (full-term infants) [7].*

Health care institution:	**Maternity hospital**	**Stationary**	**Polyclinic**
Target:	Collection of blood samples and delivery to the regional neonatal (mass) screening laboratory		
Result:	TSH level up to 9 IU/ml (4-14 days of life). **Norm**	TSH level is more than 9 IU/ml (4-14 days of life). **Retest (repeat blood sampling)**	TSH level is more than 40 IU/ml (4-14 days of life). **Endocrinologist consultation**
		A. TSH level up to 5 IU/ml (over 14 days). **Norm** B. TSH level is more than 5 IU/ml (older than 14 days). **Consultation with an endocrinologist**	

interpretation of the data obtained taking into account the age norms of this indicator.

The clinical picture of HT varies depending on the duration and severity of the thyroid hormone deficiency. The presence of concomitant diseases may influence the manifestation of symptoms. If screening for HT was not performed in the neonatal period, then the diagnosis of this disease becomes more difficult with age, since there may be no obvious clinical manifestations.

The prognosis for neuropsychic development in CHT depends on many factors. Researchers agree that the timing of the start of replacement therapy with sodium levothyroxine certainly plays a decisive role, while it is noted that even with early treatment, some intellectual disabilities still persist in a small proportion of children. An extremely important factor is the adequacy of treatment in the first year of life.

Patients with CHT are recommended to undergo continuous comprehensive in-depth monitoring by specialists of various profiles, endocrinologist, neurologist, audiologist, speech therapist, medical psychologist. It is necessary to evaluate intellectual development using the Wechsler test (children's version), in the presence of cognitive impairment, mental disorders, developmental defects - consultation with a psychiatrist, cardiologist, etc.

Below is a description of a clinical case of a patient with CHT, who was diagnosed in adolescence.

A 13-year-old patient was admitted to the pediatric department of a hospital in Tyumen on a planned basis with complaints of growth retardation and mental retardation. The referring institution's diagnosis was "Hypothyroidism." He had been receiving hormone replacement therapy for the past year, i.e. since the age of 12 he has been taking sodium levothyroxine 75 mcg x 1 time per day 30 minutes before meals.

History: The child is from the third pregnancy, third birth, term at 38-39 weeks, spontaneous. Birth weight 3370 g, height - 47 cm. Received breast milk until 6 months. From 12 months relatives noticed a lag in the rate of physical and neuropsychic development (did not roll over, did not respond to his name, held a toy in his hands weakly). Teeth erupted late, the first appeared at 1.5 years. Muscle hypotonia and lack of speech persisted for a long time. He was observed by a neurologist, received symptomatic therapy with slightly positive dynamics. In 2015, he was issued a disability due to delayed speech and mental development. He was not examined by an endocrinologist.

According to medical records, it is known that after birth, the Perinatal Center staff sent information to the outpatient clinic at the patient's place of residence about an elevated TSH level based on the results of neonatal screening. A repeat blood draw was recommended to determine this indicator. The results of the repeated immunochemical analysis are not in the medical record. According to the child's mother, the studies were not repeated.

The first TSH level was determined in January 2022, it was 21.3 μIU/ml (normal 0.4-4.2 μIU/ml), free T4 – 3.3 nmol/l (normal 9.0-22.2 nmol/l), the data were not interpreted.

The next examination was carried out in May 2023, the TSH value was 19 μIU/ml, free T4 – 3.3 nmol/l, thyroid peroxidase antibodies were negative.

An ultrasound scan of the thyroid gland showed hypoplasia, the total volume was 1.2 cm^3 (with a norm of 9-10 cm^3), an MRI scan of the brain (October 2023) showed no pathological changes, Rg of the hands including the wrist joints - the bone age corresponds to 5 years.

Registered with an endocrinologist in 2023 with a diagnosis of hypothyroidism. Has been receiving sodium levothyroxine 75 mcg since October of the same year. During therapy, TSH is more than 28 mcIU/ml, free T_4 is 4.4 nmol/l. This hospitalization is planned for the purpose of additional examination and correction of therapy.

On admission: General condition of moderate severity. The patient is in an active position. Mucous membranes are clean, moderately moist. Skin of physiological color, severe dryness and puffiness of the face, periorbital edema. Peripheral edema is absent, the thyroid gland is not palpable. Body weight: 27 kg. Height: 123 cm. Physical development corresponds to the age of 7 years, SDS of height = (– 5), SDS of BMI – 0.38, neuropsychic development corresponds to 8-9 years. Speech is viscous, answers questions with a delay. Bronchopulmonary system is normal. Heart rate is 76 beats per minute. Pulse is rhythmic. Blood pressure is 90/60 mm Hg. Heart sounds are muffled, rhythm is regular. Soft systolic murmur is heard at the apex. Stool, according to the mother, is once a week, dense, formed. Urinary system is normal. Sexual development: male type. Tanner 1.

Research conducted:

Psychiatric examination (dated 23.05.2023). Conclusion: "Oligophrenia in the degree of moderately expressed debility, caused by hereditary factors. Hyperdynamic syndrome with attention deficit. Insufficient development of all means of language."

Examination by a neurologist (from 08.08.2024): "Residual cerebral insufficiency. Decrease in cognitive functions. Severe pseudobulbar dysarthria."

Laboratory indicators from (08.08.2024):

Blood immunochemistry: TSH - 74 μIU/ml (normal 0.4-4.2 μIU/ml); free T4 - 15.2 pmol/l - within the reference value (normal 9.0-22.2 nmol / l); IGF-1 - 57.7 ng/ml - significantly below the norm (the norm for 13 years is 183-850 ng/ml). Sex hormones - prepubertal values: LH - 0.53 mIU/ml (normal not less than 3.6 mIU/ml); FSH - 2.1 mIU/ml (normal 0.3-4.6 mIU/ml); testosterone - less than 0.1 ng/ml (normal 0.1-2.37 ng/ml); STH – 0.32 ng/ml (normal 0-3 ng/ml).

Vitamin D – 41 nmol/l (normal 75-150 nmol/l).

Ultrasound examination of the thyroid gland (from 06.08.2024): Echo signs of thyroid agenesis? Thyroid ectopia? Echo signs of a lateral neck cyst.

Computed tomography of the neck (from 06.08.2024): the thyroid gland is not visualized in a typical location; anterior to the epiglottis in the C_2-C_3 region, a 9 × 11 mm formation is determined that is slightly hyperdense in the native phase; it accumulates contrast agent to the maximum in the arterial phase, heterotopia of the thyroid gland.

Taking into account the above, the patient was prescribed:

Main clinical diagnosis: Congenital hypothyroidism without goiter, decompensation. Heterotopia of the thyroid gland.

Complications: Growth retardation. Moderate mental retardation. Residual cerebral insufficiency. Decrease in cognitive functions. Severe pseudobulbar dysarthria. Vitamin D deficiency.

The patient was discharged with recommendations for further observation and treatment by an endocrinologist at the local clinic.

Conclusion.

Thus, this case demonstrates that a long absence of replacement therapy can lead to irreversible consequences in various organs and tissues of the body. First of all, the brain suffers. As a result, this patient developed severe mental retardation, delayed physical development, and delayed sexual development.

When working with patients with CHT, it is worth remembering that early diagnosis and the prescription of timely and adequate drug therapy are the key to success.

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