



---

## **CHANGES IN THYROID TISSUE IN WOMEN OF CHILDBEARING AGE WHO HAVE HAD SARS-COV-2 INFECTION**

Karimova Mukimaxon Muxammadsadikovna

Fergana Medical Institute of Public Health

### **Abstract**

Fergana region is an area with severe iodine deficiency and has one of the highest rates of thyroid diseases in the country. Various complications affecting the thyroid gland have been observed following SARS-CoV-2 infection. This study aims to examine changes in the thyroid tissue of women of childbearing age residing in the Fergana region after recovering from COVID-19.

### **Materials and Methods**

The study involved 100 women of childbearing age who were under medical supervision at the Fergana Regional Endocrinology Dispensary. Clinical, laboratory, hormonal, ultrasound, and histological examinations were conducted, and the results were analyzed.

### **Results and Discussion**

Ultrasound examinations of the thyroid gland in women who had COVID-19 revealed the following changes: 20% had diffuse thyroid enlargement (Grade I-II), 33% had autoimmune thyroiditis (AIT), 15% had nodular goiter, 17% had diffuse toxic goiter, and 9% had multinodular goiter. Among 48 women with nodules detected by ultrasound, 52% were classified as TIRADS 2, 25% as TIRADS 3, 18% as TIRADS 4, and 2 cases were classified as TIRADS 5. Fine-needle aspiration biopsy (FNAB) was performed on all 23 patients with nodules classified as TIRADS 3 or higher. FNAB results showed that 12 patients (52%) fell under Bethesda category 3, 10 patients (43%) under Bethesda category 4, and 2 patients (8%) under Bethesda category 5.

### **Conclusion**

In women of childbearing age residing in the Fergana region who had COVID-19, ultrasound examinations revealed an increase in the prevalence of nodular and



## **International Conference on Modern Science and Scientific Studies**

Hosted online from Madrid, Spain

Website: econfseries.com

20<sup>th</sup> February, 2025

multinodular goiter. Histological analysis of the nodules showed that two patients (Bethesda category 5) were diagnosed with thyroid cancer following COVID-19 infection. These findings suggest that COVID-19 may contribute to the progression of thyroid nodules and the development of thyroid cancer.

### **References:**

1. Каландарова, М. Х. (2024). ФИЗИОЛОГИЧЕСКИЕ ОСНОВЫ РАЦИОНАЛЬНОГО ПИТАНИЯ. Eurasian Journal of Medical and Natural Sciences, 4(1-1), 235-240.
2. Khodzhiakbarovna, K. M. (2023). IMPORTANCE OF FOLK MEDICINE IN THE TREATMENT OF DISEASES. JOURNAL OF MEDICINE AND PHARMACY, 7(1), 1-5.
3. Rapikov, I. (2023). Formation of savings and entrepreneurship on the basis of labor education according to age characteristics in primary school students. Procedia of Engineering and Medical Sciences, 8(12), 80-83.
4. Tohirbek To'liqinjon o'g, S. (2024). Successful testicular sperm extraction in an infertile man with non-obstructive azoospermia and hypergonadotropic hypogonadism presenting with bilateral atrophic testis: a case report. Miasto Przyszłości, 48, 186-188.
5. Uzbekistan, O. F. To verify Questionnaire of the "Uzbek Index of Premature Ejaculation".
6. Pattoyevich, G. A. (2025, February). PRIMARY INSTRUMENTAL EXAMINATION IN THE ANOMALY OF PULMONARY ATRESIA WITH INTACT VENTRICULAR SEPTUM. In International Educators Conference (pp. 148-154).
7. Pattoyevich, G. A., & Nilufar, M. (2025, January). CHILDREN'S ECZEMA AND RECOMMENDATIONS FOR ITS TREATMENT. In International Conference on Multidisciplinary Sciences and Educational Practices (pp. 56-62).
8. Umarovich, B. M., & Bahodir o'g'li, U. B. (2025, February). CLINICAL AND LABORATORY CHARACTERISTICS OF CHRONIC VIRAL HEPATITIS "B" AND "C" IN HIV-INFECTED INDIVIDUALS. In International Educators Conference (pp. 144-147).



## International Conference on Modern Science and Scientific Studies

Hosted online from Madrid, Spain

Website: [econfseries.com](http://econfseries.com)

20<sup>th</sup> February, 2025

9. Шухратжон у'гли, СЭ (2025, январь). РАСПРОСТРАНЕННОСТЬ И ЭТИОЛОГИЯ ГИПОСПАДИИ. На Международной конференции по междисциплинарным наукам и образовательной практике (стр. 99-104).
10. Qodirova, G. A., & Ibrohimova, M. (2025, February). TREATMENT METHODS AND COMPLICATIONS OF SCARLET FEVER. In International Educators Conference (pp. 175-181).
11. Каримова, М. М. (2019). ЙОД БИЛАН ТАЪМИНЛАНГАНЛИК ВА ЙОД ТАНҚИСЛИГИ ШАРОИТИДА ТУГУНЛИ БУҚОҚНИНГ ШАКЛЛАРИ КЎРИНИШЛАРИ БЎЙИЧА БАЖАРИЛГАН ЖАРРОҲЛИК ОПЕРАЦИЯЛАР СОНИ ВА ҲАЖМИНИНГ ДИНАМИК ЎЗГАРИШЛАРИ. Журнал. Доктор Ахборотномаси. Самарканд, (1), 57-61.
12. Каримова, М. М. (2020). ИССЛЕДОВАНИЕ ВЛИЯНИЯ БИОКОМПЛЕКСОВ НА ПЕРЕКИСНОЕ ОКИСЛЕНИЕ ЛИПИДОВ ИЗОЛИРОВАННЫХ ГЕПАТОЦИТОВ. Новый день в медицине, (1), 498-500.
13. Каримова, М. М. (2020). ВЛИЯНИЕ ПАНДЕМИИ НОВОЙ КОРОНАВИРУСНОЙ ИНФЕКЦИИ НА ДЕЯТЕЛЬНОСТЬ ТАМОЖЕННЫХ ОРГАНОВ. In Взаимодействие таможенных органов с иными участниками таможенных отношений: особенности и перспективы развития (pp. 136-140).
14. Шамансурова, З. М., & Каримова, М. М. ИЗУЧЕНИЕ ВЛИЯНИЯ ИНФЕКЦИИ COVID-19 НА СОСТОЯНИЕ ТКАНИ ЩИТОВИДНОЙ ЖЕЛЕЗЫ.
15. Каримова, М. М., Мухамадсодиқов, М. М., & Абдулазихожиева, Р. Б. (2022). Қалқонсимон Без Саратонини Замонавий Ташхислаш, Даволаш Ва Текширув Усулларини Баҳолаш. AMALIY VA TIBBIYOT FANLARI ILMIY JURNALI, 1(6), 84-95.
16. Husanboy, U. (2025, January). ACUTE HEMORRHAGIC CYSTITIS DISEASE IN CHILDREN AND ITS DEVELOPMENT IN THE CHILD'S BODY. In International Conference on Multidisciplinary Sciences and Educational Practices (pp. 88-94).



## **International Conference on Modern Science and Scientific Studies**

Hosted online from Madrid, Spain

Website: [econfseries.com](http://econfseries.com)

20<sup>th</sup> February, 2025

- 
17. Masrurjon o'g'li, M. M. (2024, May). HUMAN GROWTH HORMONE. In Proceedings of Scientific Conference on Multidisciplinary Studies (Vol. 3, No. 5, pp. 117-125).
  18. Masrurjon o'g'li, M. M. (2024). COMMON THYROID DISEASES, CAUSES AND ITS TREATMENT METHODS. Miasto Przyszłości, 48, 223-232.
  19. Шамансурова, З. М., & Каримова, М. М. ИЗУЧЕНИЕ ВЛИЯНИЯ ИНФЕКЦИИ COVID-19 НА СОСТОЯНИЕ ТКАНИ ЩИТОВИДНОЙ ЖЕЛЕЗЫ.