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Study of the Microelemental Composition of the Hair of Patients with Diffuse Alopecia

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ABSTRACT

this article attempts to reveal the main reasons for the study of the microelement composition of the hair of patients with diffuse alopecia. To carry out scientific work, the author conducted a study and assessment of changes in the parameters of the microelement composition of hair in 50 patients with telogen hair loss, with voluntary informed consent, the method of spectral analysis was used to study the mineral composition of hair. The problem in question is still little studied, therefore, requires more thorough research.

Introduction: Alopecia (lit. "baldness" from other Greek ἀλωπεκία through Latin Alopecia "baldness, baldness") is a pathological hair loss, leading to their partial or complete disappearance in certain areas of the head or torso. The most common types of alopecia include androgenetic (androgenetic), diffuse or symptomatic (effluviums), focal or nested (areata), scarring (scarring).

Diffuse alopecia is characterized by severe uniform hair loss over the entire surface of the scalp in men and women as a result of a failure of hair development cycles. Since diffuse alopecia is a consequence of disturbances in the work of the whole organism, it is sometimes called symptomatic. Diffuse alopecia is the second most common after androgenetic alopecia. Women are more prone to it than men.

There are telogen and anagen forms of diffuse alopecia. In the more common 'telogen' form, after the cause that provoked alopecia, up to 80% of the hair follicles enter the telogen (rest) phase ahead of time, stopping producing hair.

Telogen effluvium can be caused by:

- ✓ stress;
- ✓ hormonal disorders, eg due to thyroid disease, pregnancy, use of inappropriate hormonal contraceptives;

- ✓ long-term use of antibiotics, neuroleptics, antidepressants and a number of other drugs;
- ✓ surgical operations, acute infectious and severe chronic diseases;
- ✓ diets with a lack of vital elements for the body;
- ✓ excessive consumption of beer.

The anagen form of diffuse alopecia occurs when the body, and the hair follicles in particular, is exposed to stronger and faster factors, as a result of which the hair follicles do not have time to "hide" in the rest phase, and the hair begins to fall out immediately from the growth phase (anagen). Such factors are usually radioactive radiation (including after radiotherapy), chemotherapy, poisoning with strong poisons.

In most cases, after the disappearance of the cause of diffuse alopecia, the lost hair is completely restored within 3-9 months, since here, unlike androgenetic alopecia, there is no death of hair follicles. Therefore, the treatment of diffuse alopecia is aimed, first of all, at finding and eliminating the cause that caused it. After the disappearance of the cause, for faster hair restoration, various growth stimulants (minoxidil) are used for androgenetic alopecia, therapeutic balms, hair masks, hair sprays, and physiotherapy.

Purpose: to study the microelement composition of the hair of patients with diffuse alopecia.

Materials and methods: in order to solve the problem of studying and evaluating changes in the parameters of the microelement composition of hair in 50 patients with telogen hair loss, with voluntary informed consent, the method of spectral analysis was used to study the mineral composition of hair. A similar study was conducted in healthy individuals with no complaints about the condition of the hair (control group). The group of patients with telogen hair loss consisted of 47 women (94%) and 3 men (6%), aged 20 to 44 years. The mean age was 32.0±3.7 years. Patients complained of hair loss, hair thinning for an average of 3 to 5 years. The trichogram revealed a high percentage of hair in the telogen stage. On the basis of specialized trichological research methods, a clinical diagnosis was made: Telogen hair loss (L65.0). The control group consisted of healthy individuals: 41 women (82%) and 9 men (18%), aged 20 to 44 years, who did not complain of hair loss. The mean age was 32.0±3.6. The measurements were carried out at the Institute of High-Temperature Electrochemistry, Ural Branch, Russian Academy of Sciences, in the laboratory of electrochemical devices. The measurement room complied with the standards SNiP PA-5-700, SN-245-71 and SNiP-74, GOST 12.1.004.

Results: analysis of the results of the atomic absorption study of the mineral composition of the hair showed that in patients with diffuse alopecia, deviations in the composition of micro- and macroelements are significantly more common. Thus, a significant increase in the content of some toxic trace elements was detected in 61.8% of patients (increased beryllium), in 41.9% of patients, aluminum was increased, and in 43.3% of patients - barium, potentially toxic (tin in every fourth patient 26.6%) . In the comparison group, a significant increase in the content of toxic and conditionally toxic trace elements was much less common: beryllium only in 18% of people, aluminum in 15%.

Conclusions: the results obtained, indicating a significant imbalance of macro- and microelements, including those vital in patients with diffuse alopecia (telogen hair loss), which is the basis for recommending an additional examination to patients with diffuse alopecia to determine the microelement composition of hair.

Literature:

1. Uktamovich T. S., Vakhobiddinovich A. D. Complex Therapy of Patients with Atopic Dermatitis //Central Asian Journal of Medical and Natural Science. – 2022. – Т. 3. – №. 5. – С. 653-655.

2. Uktamovich T. S., Umedovich S. U. Effectiveness of Treatment of Testicular Torsion //Central Asian Journal of Medical and Natural Science. – 2022. – Т. 3. – №. 5. – С. 647-649.
3. Uktamovich T. S., Fakhriddinovich F. K. Effectiveness of the Treatment of Limited Scleroderma //Central Asian Journal of Medical and Natural Science. – 2022. – Т. 3. – №. 5. – С. 650-652.
4. Toshev S. U. APPLICATIONS OF ELACON FOR LICHEN PLANE //Asian journal of pharmaceutical and biological research. – 2022. – Т. 11. – №. 2.
5. Toshev S. U. THE USE OF ADVANTAN IN THE LOCAL TREATMENT OF GENITAL HERPES //Asian journal of pharmaceutical and biological research. – 2022. – Т. 11. – №. 2.
6. Ахмедова М. М., Абдуллаев Д. М., Тошев С. У. ИСПОЛЬЗОВАНИЯ МАЗЬИКУРАЛИМУС ПРИ ЛЕЧЕНИИ КРАСНОГО ПЛОСКОГО ЛИШАЯ //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI. – 2022. – Т. 2. – №. 3. – С. 191-193.
7. Нарзикулов Р. и др. Принципы терапии у женщин больных гонореей ассоциированные иппп //Журнал вестник врача. – 2019. – Т. 1. – №. 1. – С. 99-102.
8. Абдуллаев Д. М., Тошев С. У., Толибов М. М. КОМПЛЕКСНЫЙ МЕТОД ЛЕЧЕНИЯ ВУЛЬГАРНЫХ УГРЕЙ //Актуальные аспекты медицинской деятельности. – 2021. – С. 254-256.
9. Нарзикулов Р. М. и др. Новый подход в лечении витилиго //НАУЧНЫЕ ИССЛЕДОВАНИЯ. – 2019. – С. 60.
10. Rizaev J. A. et al. Medical and organizational measures to improve the provision of medical care in the dermatovenerology profile //International Journal of Current Research and Review. – 2020. – Т. 12. – №. 24. – С. 120-122.
11. Тошев С. У., Сулаймонов А. Л., Тиллакобилов И. Б. ТЕРАПИЯ ВИТИЛИГО С ПРИМЕНЕНИЕМ ПОЛИОКСИДОНИЯ В СОЧЕТАНИИ С ЛЮКОДЕРМИНОМ //Высшая школа: научные исследования. – 2019. – С. 55-59.
12. Тошев С. У., Аширов З. Ф., Абдуллаев Х. Д. ЛЕЧЕНИЕ ВИТИЛИГО 308-нм ЭКСИМЕРНЫМ ЛАЗЕРОМ //Актуальные аспекты медицинской деятельности. – 2021. – С. 240-243.
13. Нарзикулов Р. и др. Принципы терапии у женщин больных гонореей ассоциированные иппп //Журнал вестник врача. – 2019. – Т. 1. – №. 1. – С. 99-102.
14. Нуруллаева А. А., Рахматова А. Х., Абдуллаев Х. Д. ЗНАЧЕНИЕ МИКРОБНОГО ОБСЕМЕНЕНИЯ КОЖИ ПРИ НЕКОТОРЫХ ЗУДЯЩИХ ДЕРМАТОЗАХ //Молодежь и медицинская наука в XXI веке. – 2019. – С. 125-125.
15. Abdullaev X. D. et al. EXPERIENCE OF USING THE DRUG GEPON IN THE TREATMENT OF PATIENTS FOCAL SCLERODERMA //ResearchJet Journal of Analysis and Inventions. – 2021. – Т. 2. – №. 03. – С. 60-63.
16. Абдуллаев Х. Д., Собиров М. С., Жумаева Д. Х. НЕРВНО-ПСИХИЧЕСКИЙ СТАТУС У БОЛЬНЫХ СЕБОРЕЕЙ //Молодежь и медицинская наука в XXI веке. – 2018. – С. 115-116.
17. Ахмедов Ш. К. и др. ЭФФЕКТИВНОСТЬ ЛЕЧЕНИЯ ИЗОТРЕТИНОИНА ПРИ ЛЕЧЕНИИ УГРЕВОЙ БОЛЕЗНИ //Академический журнал Западной Сибири. – 2015. – Т. 11. – №. 1. – С. 56-56.

18. Абдуллаев Х., Толибов М. Allergodermatozlar bilan bog'liq bo'lgan vulgar acneni kompleks davolash Samaraligini o'rganish //Журнал гепато-гастроэнтерологических исследований. – 2021. – Т. 2. – №. 3.2. – С. 73-74.
19. Davlatovich A. X., O'gli A. B. X., O'gli I. A. S. BOLALARDA GENITAL GERPESNI DAVOLASH SAMARADORLIGINI BAHOLASH //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI. – 2022. – С. 367-369.
20. Абдуллаев Х. Д. и др. ЛАЗЕР В ЛЕЧЕНИИ ВИТИЛИГО //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI. – 2022. – С. 495-500.
21. Xolmurodovich D. J., Umidovich N. T., Davlatovich A. X. CLINIC COURSE OF NONSPECIFIC PNEUMONIA //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI. – 2022. – С. 510-513.
22. Davlatovich A. X. et al. USING IMMUNOMAX AND 0.1% TACROLIMUS OINTMENT IN THE TREATMENT OF VITILIGO //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI. – 2022. – С. 559-562.
23. Davlatovich A. X. et al. EVALUATION OF THE GENERAL SOMATIC STATUS OF PATIENTS WITH VITILIGO BASED ON THE DETERMINATION OF THE CONTENT OF NATURAL ANTIBODIES TO VARIOUS ORGANIS AND TISSUES OF THE BODY //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI. – 2022. – С. 472-476.
24. Davlatovich A. X. DETERMINATION OF GENE ACTIVITY IN VITILIGO PATIENTS //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI. – 2022. – С. 451-454.
25. Xolmurodovich D. J., Orifovich R. S., Davlatovich A. X. FEATURES OF THE MICROELEMENT STATUS FOR THE DEVELOPMENT OF ATOPIC DERMATITIS IN CHILDREN //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI. – 2022. – С. 447-450.
26. Hikmatovich I. N. et al. The use of Fungite in the Local Treatment of Genital Herpes //International Journal of Innovative Analyses and Emerging Technology. – 2021. – Т. 1. – №. 5. – С. 231-232.
27. Davlatovich A. X., Orifovich S. D., Baxtiyorovich A. S. Studying the Relationship of Local Immune Status and the Course of Burn Disease //Central Asian Journal of Medical and Natural Science. – 2022. – Т. 3. – №. 5. – С. 679-682.
28. Davlatovich A. X. VAGINAL TRIXOMONADLAR SHTAMMASINI TRIXOPOLGA VA XIMOTRIPSIN BILAN BILAN SEZGICHLIGINI ANIQLASH //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI. – 2022. – С. 645-647.
29. Salamova L. A. et al. Evaluation of the effectiveness of the drug gepon in the treatment of genital candylomas. – 2021.