International Journal of Education, Social Science & Humanities.
Finland Academic Research Science Publishers
ISSN: 2945-4492 (online) | (SJIF) = 7.502
Volume-11| Issue-4| 2023 Published: |22-04-2023|

CLINICAL AND FUNCTIONAL ASSESSMENT OF DRY EYE SYNDROME IN WOMEN DURING MENOPAUSE

https://doi.org/10.5281/zenodo.7809441

Khasanova Dildora Akhmatovna
is the 3rd year Master of Ophthalmology
Department of Samarkand State Medical University,
Kadirov Feruz Norboboevich
is the head of Yingli creation department
of Samarkand branch of RIMHIATM.

Abstract

Dry eye syndrome is a multifactorial disease characterized by visual discomfort, instability of the tear film with potential damage to the ocular surface, which significantly affects the quality of life of patients. More common in women in the menopausal and postmenopausal period. This is due to a change in the balance of sex hormones. Sex hormones affect the production of components of the tear film.

Keywords.

Dry eye syndrome, climacteric period, menopause, postmenopause, Schirmer test, Norn test.

AYOLLARDA KLIMAKTERIK DAVRDA RIVOJLANGAN “QURUQ KO‘Z” SINDROMINI KLINIK-FUNKSIONAL BAXOLASH

Annotatsiya.

Quruq ko‘z sindromi – bu ko‘z yoshi qavati turg’unligining buzilishi natijasida, ko‘zlarning oldingi qismi yuzasining shikastlanishiga sabab bo‘ladigan, hamda ko‘rishimizga noqulaylik tug’dirishi bilan tavsiflanadigan multifaktorial kasallik bo‘lib, bemorlarning hayot sifatiga sezilarli ta'sir qiladi. Ko‘pincha klimakterik davrdagi ayollarda uchraydi. Bu jinsiy gormonlar muvozanatining o‘zgarishi bilan bog'liq.

Kalit so‘zlar.

Quruq ko‘z sindromi, klimakterik sindrom, menopauza, postmenopauza, Shirmer sinamasi, Norn sinamasi.

КЛИНИКО-ФУНКЦИОНАЛЬНАЯ ОЦЕНКА СИНДРОМА “СУХОГО ГЛАЗА” У ЖЕНЩИН В ПЕРИОД МЕНОПАУЗЫ

International Journal of Education, Social Science & Humanities.
Finland Academic Research Science Publishers
ISSN: 2945-4492 (online) | (SJIF) = 7.502
Volume-11| Issue-4| 2023 Published: |22-04-2023|

Аннотация

Синдром "сухого глаза" – это многофакторное заболевание, характеризующееся зрительным дискомфортом, нестабильностью слезной пленки с потенциальным повреждением глазной поверхности, которое существенно влияет на качество жизни пациентов. Наиболее распространено у женщин в климактерическом периоде. Это связано с изменением баланса половых гормонов.

Ключевые слова.

Синдром "сухого глаза", климактерический период, менопауза, постменопауза, проба Ширмера, проба Норна.

Introduction.

Dry eye syndrome (DSS) refers to the long-term stagnation of the tear film, the appearance of complex signs of xerosis in the surface epithelium of the eye [1]. It has been proven that changes in hormonal control of the eye surface are directly related to age-related and sex-related problems [1,3,10]. Age-related decrease in androgen concentration in the blood is an indicator of various pathogenetic types of CKD, occurs in the same proportion in women and men [14,16]. In the climacteric period (KD), systemic changes occur in the female body due to estrogen deficiency. Currently, the diagnosis, treatment and treatment of climacteric diseases in women is a challenge for many areas of treatment. "Dry eye" syndrome was detected in 67% of menopausal women over 50 years of age in the annual ophthalmology practice. In KD, the hormone plays a role in the pathogenesis of CKD, the restoration of sex hormones - estrogen, androgen and progesterone, affects the functional state of the glands of the young glands, meibomian glands and conjunctiva.

As a result, disruption of the stability of the tear layer covering the surface of the conjunctiva and cornea is the cause of the origin of CKD [1-4]. CKD is a disease of the anterior part of the eyes, which occurs as a result of the influence of many factors, and the incidence rate increases with age [1,2]. The percentage of CSC varies significantly depending on the geographic region, living conditions, race (often in Asian nations), and the diagnostic methods used. Regardless of how the prevalence of CKD is estimated, it is more common in women than in men [3,4]. The precorneal tear layer and its components are controlled by the effects of hormones (for example, sex hormones, glucocorticoids, pituitary hormones, insulin

International Journal of Education, Social Science & Humanities.
Finland Academic Research Science Publishers
ISSN: 2945-4492 (online) | (SJIF) = 7.502
Volume-11| Issue-4| 2023 Published: |22-04-2023|

and thyroid hormones) produced by the endocrine system [13]. Tear layer consists of 3 layers: water, oil and mucin layer. Sex hormones play a certain role in the pathogenesis of KKS by affecting the state of the cornea, the state of the epithelial cells of the cornea, tear production and tear layers. Androgens and estrogens affect the synthesis and components of the tear film. Sex steroid receptors are present in the meibomian glands, responsible for the production of the tear component, which prevents the evaporation of the tear film. Androgens and estrogens cause a decrease in lipid production.

Therefore, an increase in the level of hormones is a risk factor for the development of CKD [15]. At the same time, the relationship between the level of sex hormones in the blood serum and the clinical symptoms of KKS remains unclear and controversial. Estrogen and testosterone levels were found to be elevated in the group of women with SCD compared to the group without SCD. Low levels of estradiol and testosterone have been found in postmenopausal women with severe CKD[16].

Discussion and results.

Hyperosmolarity of tears is of great importance in the modern concept of the pathogenesis of CKD, which occurs as a result of two main mechanisms: a decrease in tear production or an increase in evaporation. It often develops in a mixed mechanism [1,8]. Age-related changes in the lacrimal glands after 40 years, even if there are no symptoms of CKD syndrome, due to inflammatory infiltration in the cells, tear glands break up in the acinus and ducts [1,9]. The increase in tear evaporation is primarily related to the insufficient production of the lipid layer of tears and is often related to the structure and function of the Meibomian glands [1-5]. Based on meibography and OCT examinations of the meibomian glands, after the age of 50, the number of acinus decreases and their diameter decreases.

This leads to increased reflex secretion in tear glands [10,11]. Androgen control of lacrimal gland and Meibomian gland function has been fully studied [13]. The following are the "Golden standard" for the diagnosis of CKD: 1. Determination of tear film stagnation - Norn's test; 2. Evaluation of tear fluid production - Schirmer's test; 3. Age layer osmometry [1,17]. According to statistical data, in our region, the clinical and functional state of CKD developed in women in KD has not been studied, which motivated us to conduct our scientific research on this topic. As a result of the syndrome, after the age of 50, estrogen deficiency in women is considered one of the important reasons for the development of KKS.

International Journal of Education, Social Science & Humanities.
Finland Academic Research Science Publishers
ISSN: 2945-4492 (online) | (SJIF) = 7.502
Volume-11| Issue-4| 2023 Published: |22-04-2023|

REFERENCES:

1. KARIMJONOVA GULSHANOY SHERALI QIZI. (2023). Tasks of Family Sociology and Its Role in the Development of Society. Novateur Publications, (3), 1–91. Retrieved from http://novateurpublication.org/index.php/np/article/view/35

2. Muqimjanovna, Mohira Muydinova, и Karimjonova Gulshanoy Sherali qizi. 2023. «JAMIYATDA BO'LAYOTGAN O'ZGARISHLARNING OILAGA TASIRI». Новости образования: исследование в XXI веке 1 (6):1068-72. http://nauchniyimpuls.ru/index.php/noiv/article/view/3826.

3. Mahamadaminovich S. M. Monitoring the issues of human capital research in ethnosocial processes and social trends //Social Policy and Social Partnership. – 2021. – №. 6. – С. 2021.

4. Sodirjonov M. M. Some Thoughts On The Evolution Of Approaches To The Concept Of Human Capital //The American Journal of Social Science and Education Innovations. – 2020. – Т. 2. – №. 08. – С. 144-150.

5. Мухриддин Содирджонов Значение национальных и этносоциальных процессов в социологическом исследовании человеческого капитала // ОИИ. 2021. №5/S. URL: https://cyberleninka.ru/article/n/znachenie-natsionalnyh-i-etnosotsialnyh-protsessov-v-sotsiologicheskom-issledovanii-chelovecheskogo-kapitala (дата обращения: 06.04.2023).

6. Содиржонов М.М. РОЛЬ ТРУДОВОГО ВОСПИТАНИЯ В РАЗВИТИИ ЧЕЛОВЕЧЕСКОГО КАПИТАЛА // Ученый XXI века. 2020. №1 (60). URL: https://cyberleninka.ru/article/n/rol-trudovogo-vospitaniya-v-razvitii-chelovecheskogo-kapitala (дата обращения: 06.04.2023).

7. Mukhriddin Sodirjonov. (2023). SOME FACTORS OF DEVELOPMENT OF SOCIAL CAPITAL. European Journal of Research Development and Sustainability, 4(1), 91-93.

8. Содиржонов М. М. БОЗОР ИҚТИСОДИЁТИНИНГ ЭТНИК МУҲИТГА ТАЪСИРИ ХУСУСИДА АЙРИМ МУЛОҲАЗАЛАР //Журнал Социальных Исследований. – 2020. – Т. 3. – №. 6.

9. Makhamadaminovich S. M. Ethnic Factors And Attitudes Towards Human Capital Development //The American Journal of Interdisciplinary Innovations and Research. – 2021. – Т. 3. – №. 01. – С. 118-130.

10. Sodirjonov Mukhriddin Makhamadaminovich , . (2021). Ethnic Factors And Attitudes Towards Human Capital Development. The American Journal of Interdisciplinary Innovations and Research, 3(01), 118–130. https://doi.org/10.37547/tajiir/Volume03Issue01-19

11. Содиржонов М. Инсон капитали ривожи шахснинг онги, билими, ахлок-одоби, дунёкарашига боглик." //Янги Ўзбекистон" газетаси. – 2022. – Т. 10.

12. Бржеский В.В., Егорова Г.Б., Егоров Е.А. Синдром «сухого глаза» и заболевания глазной поверхности: клиника, диагностика, лечение. М.:ГЭОТАР – Медиа; 2016. [Brzheskii V.V., Egorova G.B. Egorova E.A. Dry eye syndrome and ocular surface diseases. M.:Geotar -Media; 2016 (in Russ)].

13. Craig J.P., Nichols K.K., Akpek E.K. TFOS DEWS II Definition and Classification Report. The Ocular Surface. 2017;15:276-283.

14. Sullivan D.A., Rocha E.M., Aragona P.et al.TFOS DEWS II Sex, Gender, and Hormones Report. The Ocular Surface 2017; 15:284-333. DOI: 10.1016/j.jtos.2017.04.001.

15. Moss S.E., Klein R., Klein B.E. Long-term incidence of dry eye in an older population.Optom VisSci. 2008; 85(8): 668-674.DOI:10.1097/OPX.0b013e318181a947.

16. Muydinova Mohira Mukumzhanovna. (2022). THE ROLE OF ARCHIVAL ACTIVITIES IN THE SYSTEM OF SOCIAL MANAGEMENT IN UZBEKISTAN AT THE PRESENT STAGE. E Conference Zone, 13–17. Retrieved from http://econferencezone.org/index.php/ecz/article/view/156