Central Asian Journal of Medicine

HYGIENIC ANALYSIS OF THE DEPENDENCE OF THE QUALITY OF LIFE IN PATIENTS WITH PSORIASIS ON MORBIDITY INDICATORS

N.Zh. Ermatov¹, U.A. Tashkenbayeva², D.B. Khazhiev³, E.Kh. Turakulov⁴

Tashkent Medical Academy, Tashkent, Uzbekistan

ABSTRACT

The purpose of the study. Assessment of risk factors for the development of the disease in patients with psoriasis. Materials and methods of research. To determine and compare risk factors in the study, a ratio of 1:1 (69:69) of the case (patients) and control (healthy) groups was taken and the gradation of risk factors affecting health indicators was analyzed.

Risk factors were divided into external and internal, as well as depending on groups of vitamins and foods. According to the results obtained, among the external factors, the greatest value of the odds ratio was revealed with mechanical exposure–OSH (9.3), when using tobacco products, OR was equal to (5.7), when drinking alcohol, OSH was (5.4), when taking certain medications, OR was (4.9). Among the internal risk factors for the development of the disease, the greatest value of the odds ratio was revealed in the presence of obesity - OR 6,7, with an increase in blood pressure - OR 6,6, and with mental experiences - OR 4,2.

The third group of risk factors consisted of various vitamin deficiencies, while the OR with cyanocabolamine deficiency as a risk factor was 6.4, with insufficient retinol OSH was equal to 5.7, with thiamine deficiency, OR was 4.7.

Among the foods that are a risk factor for psoriasis, the OSH with excessive consumption of red pepper was 4.9, fried and fatty foods - OR - 4.5, tomatoes and eggplants, sweets and confectionery - OSH - 4.4.

Key words: hygiene, psoriasis, risk factors, odds ratio.

INTRODUCTION

The problem of psoriasis is very common among the population and is one of the urgent problems of modern medicine that needs to be solved.

Psoriasis is a multifactorial disease, in its development genetic predisposition, dysfunction of immune, endocrine and nervous systems, adverse effects of environmental factors, etc. are important [2,3].

According to the WHO, people use their position in life as a perception in accordance with the culture and value system of the society in which they live, their goals, expectations, standards and interests [2,3,4].

The main way to assess and determine the quality of life of patients and patients in any disease is the use of questionnaires, which should include simple and understandable questions. These annexes should include risk factors affecting the development of the disease in all lifestyles of patients. Questionnaires specific to the assessment of the quality of life in the development of various diseases have been developed, and they have been adapted and modified depending on the characteristics of the regions.

A somatic approach to the treatment of psoriasis patients with comorbid mental pathology was chosen and in 2015 Ch.D. Spielbergera and Yu.L. Based on the technique developed by Khanina (SF-36) to assess the quality of life, an optimally modified questionnaire was developed that should be carried out with the patient and their relatives [2,3].

Quality of life criteria recommended by WHO are defined by objective and subjective parameters: a person can feel good physically and mentally and at the same time experience psychological discomfort [2, 3,7].

Pathological changes seen in the skin of patients with psoriasis reduce selfesteem, disrupt social adaptation, and often severe clinical symptoms lead to disability and reduced quality of life. Quality of life assessment (QOL) is a reliable way to assess a person's health and general well-being [8,9,10].

Assessment of HS allows assessment of a person's physical, psychological and social well-being, and the assessment of these components is carried out by the individual himself.

Research conducted by some scientists shows that the quality of life of patients with psoriasis depends to a large extent on the severity and degree of damage to the skin process, the prevalence of rashes, the presence of subjective symptoms, the level of severity, the level of social activity, and partially depends on the gender, age of the patients.

In the conducted studies, personal characteristics such as intolerance to stress and inability to cope with life's difficulties were noted. This has a negative effect on their psychological adjustment and contributes to the formation of anxiety and depression[11,12,13].

Taking into account the above, the analysis and finding a solution of the relationship between the incidence rate of patients with psoriasis, the development of the disease, the influence of the environmental situation, the diet, and the change

in living conditions are among the urgent problems facing the workers of the field today.

Purpose of the research

Assessment of risk factors in the development of the disease in patients with psoriasis.

Materials and Methods

In order to determine and compare the risk factors for the development of psoriasis, we took patients and healthy patients in a ratio of 1:1 (69:69). In the analysis of the results, on the basis of the "Case-control" group, the influencing risk factors leading to a sharp increase in the origin, development and complications of psoriasis were examined and analyzed according to the gradation of risk factors.

"Case-control" research method is one of the analytical research methods, and the relationship between the cause and effect under study was studied in relation to the result.

In this case, 2 groups: case (disease) and control (healthy) group were taken, and they were retrospectively analyzed.

Results and Discussion

As a result, the number of risk factors affecting the health status was analyzed. A four-cell table is used for data analysis in the case-control research method (B.Mamatkulov, 2023).

We took the number of patients with psoriasis as the case group, and the control group with patients with allergic skin diseases.

We studied the risk factors in these groups by questionnaire method and calculated the odds ratio.

Table 1

| | The event | control |
|------------------------------|-----------------------|----------------------|
| Impact of risk factor (have) | a ¹ | b ² |
| Effect of risk factor (none) | c ³ | d ⁴ |
| | a+c ⁽⁵⁾ | b + d ⁽⁶⁾ |

A four-cell table for data analysis in a case-control study

1-there is an influence of a risk factor in the anamnesis of the studied event group; 2- there is an influence of a risk factor in the anamnesis of the studied control group; 3- there is no influence of a risk factor in the anamnesis of the studied event group; 4- there is no influence of a risk factor in the anamnesis of the

studied control group; 5- the total number of people in the event group; Total number of control group 6

In the "case-control" research method, the odds ratio-ShN indicator is considered.

If ShN is equal to 1.0, it indicates that there is no relationship between the disease (its consequence) and the risk factor under study, if ShN>1.0, it indicates that there is a correlation between the event and the risk factor [5].

Hygienic analysis of the main external factors that endanger the condition of patients with psoriasis is presented in Table 2.

As can be seen from these obtained results, mechanical exposures had the highest odds ratio in psoriasis. The odds ratio in this case was 9.3. This is the main risk factor.

Table 2

| Risk factor | Risk factor gradation | Event group R1 | Control group R2 | P=P1/P2 | ShN |
|---|--|----------------------|------------------------|---------|-----|
| Mechanical impact | have | 29,4 | 4,3 | 6,84 | 9,3 |
| | none | 70,6 | 95,7 | 0,74 |),5 |
| Level of air pollution | have | 15,1 | 3,9 | 3,87 | 4 4 |
| | none | 84,9 | 96,1 | 0,88 | 4,4 |
| Medicines | accepted | 17,5 | 3,9 | 4,5 | |
| (disease that occurred after taking a certain drug) | none | 87,5 | 95,7 | 0,9 | 4,9 |
| Medicines | after receiving | 23,5 | 9,9 | 2,4 | 2.0 |
| | not related | 77,5 | 90,1 | 0,9 | 2,8 |
| Course of maine | available | 19,5 | 9,1 | 2,1 | 2.4 |
| Cause of various infections | none | 80,5 | 90,9 | 0,9 | 2,4 |
| Smoking | a pack a day and more | 9,8 | 2,1 | 4,7 | 5,7 |
| | those who smoke 3-5 cigarettes a day | 23,5 | 16,1 | 1,5 | 1,8 |
| | non-smokers | 66,7 | 81,8 | 0,8 | 1 |
| | drinks a lot | 6,7 | 1,3 | 5,2 | 5,4 |

External factors affecting the incidence of psoriasis

Central Asian Journal of Medicine

| drinking alcohol | doesn't drink | 93,6 | 98,7 | 0,9 | 1,0 |
|------------------|---------------|------|------|-----|-----|
| | yes | 9,4 | 2,3 | 4,1 | 4,3 |
| | no | 92,6 | 97,7 | 0,9 | 1,0 |

Air pollution in various industrial cities is considered to be the main risk factor for disease. Changes in the air composition, increase in the amount of dust, and the increase in the amount of various harmful substances in the air are the reasons for the increase of the disease.

Smoking is the main risk factor for various diseases. A decrease in the immune system of smokers causes psoriasis to worsen.

Smoking tobacco products, together with diseases of the respiratory system, causes the development and exacerbation of diseases of the digestive system. As a result of this, due to a decrease in digestive activity in patients, the disease worsens and causes the development of dangerous complications. More than 85.3% of the patients in the main group of our control were proven to use tobacco products and made ShN-5.7.

One of the main risk factors for the exacerbation of the disease in patients with psoriasis is the level of alcohol consumption. During the treatment, if the ratio of consumption of alcohol and intoxicating products was partial, the further exacerbation of the disease was reversed and the ratio of ShN was 5.4.

It is appropriate to include psoriasis among the diseases caused by the change of microbiocinosis of intestinal activity among patients who take various medicines irregularly. It was ShN-4.9 for taking some medicines. Violations of healthy eating patterns among different layers of the population, among them not only the development of nutrition-related diseases, but also the fact that excess body weight creates conditions for the development of blood pressure, allergic diseases, diabetes and various other somatic diseases are cited by several authors [1,14,15]. ShN 4.3 in cases of disordered eating habits.

The incidence of various infectious diseases and the reception of drugs were the lowest.

Internal factors are one of the main risk factors in the development of the disease.

The internal factors of psoriasis include metabolic disorders that develop as a result of excess body weight and disordered eating, i.e. obesity, followed by increased blood pressure and mental stress caused by changes in the skin. The role of internal risk factors and the obtained results are presented in Table 2.

Table 2

| Risk factor | Risk factor gradation | event group R1 | control group R2 | P=P1/P2 | ShN |
|----------------------|--------------------------|----------------------|------------------------|---------|-----|
| Obesity | have | 18,7 | 3,3 | 5,7 | 6,7 |
| | none | 81,3 | 96,7 | 0,8 | 0,7 |
| High arterial blood | high | 23,1 | 3,9 | 5,9 | 6,6 |
| pressure | in moderation | 86,8 | 96,1 | 0,9 | 0,0 |
| Diabetes | have | 12,5 | 3,9 | 3,2 | 3,5 |
| | none | 87,5 | 95,7 | 0,9 | 5,5 |
| Dyslipidemia | have | 21,5 | 7,8 | 2,8 | 2.0 |
| | no | 78,5 | 90,1 | 0,9 | 3,2 |
| Psychological stress | have | 43 | 15,1 | 2,8 | 4,2 |
| | none | 57 | 84,9 | 0,7 | .,2 |

Internal factors affecting psoriasis

These include overweight and obesity, changes in arterial blood pressure, depression, diabetes and dyslipidemia.

The odds ratio of obesity in the control patients was 6.7.

An increase in arterial blood pressure is also one of the main factors of the disease. The ShN was 6.6.

Depression is also a risk factor for the disease, with an odds ratio of 4.2. One of the main factors is internal factors. Their influence will be related to external influences.

The third group of exposure-related factors in the development of the disease include cases that occur as a result of a lack of vitamins in the daily diet. The lack of vitamins in the daily diet is presented in Table 3.

Table 3

| Factors | Risk factor gradation | event group R1 | control group R2 | P=P1/P2 | ShN |
|--------------------|--------------------------|----------------------|------------------------|---------|-----|
| Thiamine | have | 16,8 | 4,1 | 4,10 | 4,7 |
| deficiency | none | 83,2 | 95,9 | 0,87 | 4,7 |
| retinol µg, ret.eq | have | 19,1 | 3,7 | 5,16 | 5,7 |
| | none | 86,8 | 96,1 | 0,90 | 5,1 |

Effects of certain vitamins and substances on psoriasis

Central Asian Journal of Medicine

| Cynocobalamin | have | 24,5 | 4,2 | 5,83 | |
|----------------------------|---------------|------|------|------|-----|
| deficiency | none | 87,5 | 95,7 | 0,91 | 6,4 |
| calciferol | have | 22,5 | 5,8 | 3,88 | 4.5 |
| deficiency | none | 77,5 | 90,1 | 0,86 | 4,5 |
| gluten food consumption | Available | 34,1 | 20,2 | 1,69 | 2.0 |
| | Not available | 65,9 | 79,8 | 0,83 | 2,0 |

Any organism has its own properties of vitamins, they act as catalysts in the body, take an active part in the absorption of all basic nutrients, proteins, fats and carbohydrates.

Cyanocabolamine (B_{12}) has unique properties in the body, prevents the absorption of iron and the development of iron deficiency.

Among the risk factors of patients with psoriasis, the lack of B_{12} is the main factor in the development of anemia in combination with diseases of the gastrointestinal system. As a risk factor for cyanocobalamin (B_{12}) deficiency, it was ShN-6.4.

The main function of retinol in the body is to improve vision during childhood, and it ensures the normal development of skin and hair. Controls the activity of hormones in the body. Vitamin A protects the body from external radicals. Retinol deficiency takes the main place as a risk factor in psoriasis and it was ShN-5.7.

The main function of thiamine (V1) is to prevent nervous and mental stress. Foods containing thiamine mainly include nuts, rice and greens, along with various cereals.

It's no secret that patients with psoriasis do not eat enough cereals, as a result of which changes in the skin and mental changes occur as a result. Deficiency of thiamine increases the mental stress of patients and made ShN-4.7.

Calceferol (D) has a high role in the body. This vitamin controls the activity of the immune system. Strengthens the activity of the skeletal muscle system. Among the risk factors of patients with psoriasis, lack of vitamin D is one of the main risk factors, which was 4.5.

At the same time, conditions resulting from biotin deficiency also increase the risk factor of psoriasis. Symptoms of biotin include skin changes, hair loss, growth retardation, anemia, loss of appetite, pale tongue, and low blood sugar, which are characteristic of psoriasis.

Ascorbic acid also increases metabolism. Ascorbic acid-preserving products also play an important role in disease prevention.

Among the normative indicators, there is a sharp excess of carbohydrates in the daily diet of patients, flour, bread products, pasta, sugar, table salt, confectionery products in the diet during the day, metabolic changes in the population in combination with metabolic diseases, an increase in blood pressure, a decrease in the immune system, and psoriasis disease. along with its development, it shows that conditions are created for the development of various viral diseases and their complications.

The subsequent lifestyle of patients with psoriasis is only related to nutrition and its disorders. Even during the treatment of these patients, the consumption of prohibited products leads to derailment of the course of treatment and recurrence of the disease.

We took the types of foods consumed in the daily diet as the fourth risk factor for the disease, and their sequence is presented in Table 4.

We mainly took into account the seasonality of consumption of these products, their place in the daily diet.

Table 4

| Factors | Risk factor gradation | event group R1 | control group R2 | P=P1/P2 | ShN |
|---------------------------------|--------------------------|----------------------|------------------------|---------|----------|
| tomato | eats a lot | 39,4 | 14,3 | 2,8 | |
| | consumes less | 60,6 | 95,7 | 0,6 | 4,4 |
| eggplant | eats a lot | 15,1 | 3,9 | 3,9 | 4,4 |
| | consumes less | 84,9 | 96,1 | 0,9 | .,. |
| red bell pepper | eats a lot | 17,5 | 3,9 | 4,5 | 4,9 |
| | consumes less | 87,5 | 95,7 | 0,9 | т,у |
| potatoes | eats a lot | 29,5 | 9,9 | 3,0 | 25 |
| | consumes less | 77,5 | 90,1 | 0,9 | 3,5 |
| bakery products made from white | eats a lot | 29,7 | 9,1 | 3,3 | 27 |
| flour | consumes less | 80,5 | 90,9 | 0,9 | 3,7 |
| sourdough products | eats a lot | 33,6 | 11,1 | 3,0 | <u> </u> |
| Products | consumes less | 66,4 | 88,9 | 0,7 | 4,1 |

Results of an evaluation of food as a risk factor for the incidence of psoriasis

Central Asian Journal of Medicine

| smoked products (fish, sausage) | eats a lot | 16,7 | 8,3 | 2,0 | 2,1 |
|------------------------------------|---------------|------|------|-----|-----|
| | consumes less | 93,6 | 98,7 | 0,9 | -,- |
| fatty and fried | eats a lot | 29,7 | 6,3 | 4,4 | 4.5 |
| products | consumes less | 70,3 | 93,7 | 0,9 | 4,5 |
| sweets (cakes, | eats a lot | 30,5 | 9,1 | 3,4 | |
| candies) | consumes less | 69,5 | 90,9 | 0,8 | 4,4 |
| coffee and | eats a lot | 19,7 | 9,3 | 2,1 | |
| chocolate | consumes less | 93,6 | 98,7 | 0,9 | 2,2 |

For example, smoked products and sausages have very little place in the daily ration. These products are not considered traditional products. Their risk ratio is very low.

However, it should be noted that white fish is included in the group of recommended products.

Today, vegetables dangerous for psoriasis include red bell pepper, and together with fried and fatty products, the risk factors for this disease are ShN 4.5.

The hazard ratio of tomato and eggplant to the group of products with the highest level of danger was 4.4.

Tomatoes and vegetables were the products recognized as the next risk factor.

Sweets mainly caused the development and complications of a number of diseases. The consumption of sweet and confectionery products in psoriasis was 4.4.

The foods that pose the lowest risk for psoriasis are smoked products, coffee, and chocolate, showing a low level of consumption.

Based on the results, it can be seen that the main factors of the disease are mechanical damage, obesity, high consumption level of cyanocobalamin and red bell pepper and high risk factor.

Conclusion

In conclusion, it should be noted that psoriasis is included in the group of dangerous diseases, the factors influencing its development were divided into four groups, and their level of danger and its ratio were evaluated. We present the following conclusions in the order in which these factors are taken into account.

First, it is one of the most important factors in the analysis of external factors, and it can be seen from the results obtained that mechanical influences on external factors in the development of psoriasis (ShN-9,3), smoking of tobacco products

(ShN-5,7), consumption of spirits (ShN-5) ,4), irregular intake of various drugs (ShN-4,9) and cases of eating disorders (ShN 4,3).

Secondly, the odds ratio of developing due to obesity was 6.7, the change of arterial blood pressure was 6.6, and the odds ratio of depression was 4.2.

Thirdly, if cyanocobalamin deficiency in the daily diet of patients makes ShN-6.4, retinol is one of the main risk factors in psoriasis, and if it is ShN-5.7, it is ShN-4.7 as a result of thiamine deficiency.

In the fourth, the products diagnosed as a risk factor for the development of the disease are red bell pepper, eggplant, tomatoes, fried fatty products and sweets.

REFERENCES

1. Барило А.А., Смирнова С.В. Роль алиментарных факторов и пищевой аллергии в развитии псориаза // Вопросы питания. 2020. Т. 89, № 1. С. 19–27. DOI: https://doi.org/10.24411/0042-8833-2020-10002.

2. Кабисова, Э. Н. Влияние псориаза и псориатического артрита на качество жизни пациентов // Молодой ученый. - 2021. - № 27 (369). - С. 88-89.

3. Качество жизни пациентов, страдающих псориазом /А.И. Якубович, Н. Н. Новицкая, И. Г. Сергеева, Л. С. Салдамаева // Актуальные вопросы дерматовенерологии: материалы научно-практической конференции. -Иркутск, 2006. -С. 78–84.

4. Клиническая дерматология, Акнеподобные и апулосквамазные дерматозы.-2014. –С.224.

5. Маматкулов Б.М. Жамоат саломатлиги. Тошкент.-2023 - 517 бет

6. Новик А.А., Ионова Т.И. Руководство по исследованию качества жизни в медицине. - М.: ЗАО ОЛМА «Медиа групп», 2007. - 320 С.

7. Псориаз /Под ред. А.А. Кубановой. - М.: ДЭКС-Пресс, 2008.-56 С.

8. Lilian Linsva Fernando Martins KarvalyuSF-36 total score as a single measure of health-related quality of life: Scoping review SAGE Open Medicine, Volume 4: 1–12; 2016

9. Lukyanova EM. Assessment of quality of life in pediatrics. Good clinical practice. 2002; 4: 34 42. Russian (Лукьянова Е.М. Оценка качества жизни в педиатрии //Качественная клиническая практика. 2002. № 4. С. 34 42.)

10. Ermatov N. J., Bobomuratov T. A., Sagdullaeva M. A. Prolonged newborns and prolong pregnancy: A modern view on the problem //International Journal of Health and Medical Sciences. $-2022. - T. 5. - N_{\odot}. 1. - C. 26-30.$

11. Ermatov N. J., Bobomuratov T. A., Sagdullaeva M. A. Prolonged newborns and prolong pregnancy: A modern view on the problem //International Journal of Health and Medical Sciences. $-2022. - T. 5. - N_{\odot}. 1. - C. 26-30.$

12. Ermatov N. J., Bobomurodov T. A., Sagdullaeva M. A. Hygiene analysis of risk factors affecting the growth and development of pre-term children //Art of Medicine. International Medical Scientific Journal. $-2022. - T. 2. - N_{\odot}. 3$.

13. Ermatov N. J., Khamraev N. R. Results of life quality assessment in rehabilitation treatment of children with traumatic brain injury //Современная наука: актуальные вопросы, достижения и инновации. – 2022. – С. 212-214.

14. Ermatov N. J., Rustamov B. B. Studying of nutrition value of red palm oil of "Premium Caratino"(Republic of Uzbekistan) //International Scientific Review of the Problems and Prospects of Modern Science and Education. – 2017. – C.70-80.

15. Ermatov, N. J., & Abdulkhakov, I. U. (2021). Influence of diet and other risk factors on endocrine system diseases. Asian Journal of Multidimensional Research, 10(8), 182-189.