Peculiarities of the course of seborrheic keratosis of extragenital localization among the female population

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Seborrheic keratosis (SK) remains the leader among benign skin pathologies. In the classical sense, extragenital foci of this dermatosis look like light or dark brown papules with dense hyperkeratotic or verrucous layers. Such a clinical picture is characteristic of the typical form of foci of skin lesions.

The etiopathogenetic mechanisms of SK appearance are not sufficiently studied, because a large number of trigger factors are reported. Given the benign profile of these lesions, practitional doctors very often do not pay much attention to these foci. While for patients, their appearance and increase in size can cause the emergence of obsessive or anxiety states both due to the development of cancer-phobic states due to significant aesthetic discomfort.

The objective: to determine the peculiarities of the course of seborrheic keratosis in women, taking into account anamnestic data on the effect of insolation on the skin and phenotypic criteria represented by the skin phototype, as well as to analyze the dermatological quality of life indicator in patients with keratosis depending on the location of neoplasms.

Materials and methods. Based on the Educational and Scientific Medical Center «University Clinic» of Zaporizhzhia State Medical and Pharmaceutical University, 50 patients with foci of seborrheic keratosis, whose ages ranged from 27 to 80 years old, were examined. To verify the diagnosis, the following parameters were carried out: a clinical examination of neoplasms with an assessment of the phenotypic criterion – skin phototype according to Fitzpatrick, dermatoscopic and pathomorphological examination. The assessment of the impact of keratosis on the quality of life of patients was based on the calculation of the results of the DLQI (Dermatology Life Quality Index) questionnaire.

Results. The studied sample is represented by the majority of representatives of the II phototype – 44 persons and a small number of the III phototype – 6 patients, which amounted to 88% and 12%, respectively. The most frequent localization of keratosis was the head – 18 (36%), torso – 11 (22%), extremities – 13 (26%), and neck – 8 (16%). This location on open areas of the body can be an additional confirmation of the effect of ultraviolet radiation on the occurrence of keratosis.

According to the results of the questionnaire with the study of anamnestic data, more than half of the examined patients (58%) had skin burns after a long stay in the open sun. In addition, an insufficient level of use of photoprotective agents was determined. All these factors can be as triggers for the appearance of keratosis foci and negatively affect the self-esteem and aesthetic appeal of patients. Indeed, when efflorescences are located in visual areas of the body, the dominant factor is a decrease in the quality of life.

Conclusions. Predominance of patients with II skin phototype (88%) and lack of photoprotection skills (48% never use sunscreen, 32% sometimes) are the most influential factors in determining insolation as one of the leading triggers of seborrheic keratosis.

Localization of keratosis foci on open areas of the body to a greater extent negatively affects the quality of life of women, as for patients their appearance and increase in size may cause the emergence of obsessive or anxiety states both due to the development of cancer-phobic states due to significant aesthetic discomfort.

Keywords: women, age-related changes, skin, seborrheic keratosis, ultraviolet radiation, quality of life.

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Висновки. За результатами анкетування з дослідження анамнестичних даних, більше половини обстежених пацієнток (58 %) мали III фототипу – 6 пацієнток, що становило 88% та 12% відповідно. Найбільш часто локалізацією кератозу стали ділянки го- 
мікроскопії шкіри після тривалого перебування на відкритому сонці. Окрім того, зафіксовано недостатній рівень використання фотозв'язкових засобів. Усе це може слугувати тригерами виникнення вогнищ кератозу та негативно впливати на само- 
піка інсоляції як однозначний критерій майбутньої кількості вогнищ кератозу та їх локалізації.

Ключові слова: жінки, вікові зміни, шкіра, себорейний кератоз, ультрафіолетове опромінення, якість життя.
with burns and redness even at the slightest exposure to ultraviolet light) to VI (dark color of eyes and hair, skin capable of uniform tanning with a high level of tolerance to the formation of burns during prolonged exposure to the open air). The objectification of determining belonging to one or another phototype is the total number of points according to the classic questionnaire: I – 0–6; II – 7–13, III – 14–20, IV – 21–27, V – 8–34, VI – more than 35.

2. Dermatoscopic examination in the polarized light mode using the DermLite DLA dermatoscopy and the FotoFinder dermatoscopic device (Germany) with the determination of classic SK patterns: cerebriform structures, comedone-like openings, milium-like cysts, «fingerprints»-type structures, moth-eaten edges, vessels by «hairpin» type.

3. Pathomorphological examination using sections stained with hematoxylin and eosin.

Particular attention was paid to the collection of anamnesis with emphasis on the peculiarities of being in conditions of active solar or artificial insolation, as well as the frequency of burns after ultraviolet insolation and the mode of use of sunscreens. The assessment of the impact of SK on the quality of life of patients was based on the calculation of the results of the DLQI (Dermatology Life Quality Index) questionnaire. The interpretation of the results after answering the questions is presented as follows:

0–1 – no influence;
2–5 – minor impact;
6–10 – moderate impact;
11–20 – significant impact;
21–30 – extremely high influence.

All women involved in the study were informed about the purpose and methodology of the scientific work and gave voluntary consent to the examination. Statistical processing of the obtained results was carried out on a personal computer in the program «Statistica® for Windows 13.0» (StatSoft Inc., license No JP Z80413821350ARCN10-J).

RESULTS AND DISCUSSION

Taking into account the clinical picture, in most patients, keratomas corresponded to the typical form, which accounted for 76% of the studied sample. The next distribution tendency is represented by 11 flat (22%) and single (2%) cases of stucco keratosis. The predominance of typical efflorescences corresponds to general world observations. The most frequent localization of keratosis was the head – 18 (36%), torso – 11 (22%), extremities – 13 (26%), and neck – 8 (16%).

The concept of «extremity» corresponded to the location of SK within the back surface of the hands and lower legs. When registering these neoplasms on the trunk, almost half of the cases are foci in the submammary zones, which can be hypothetically associated with the -type hupapillomavirus. As can be seen from the diagram (Fig. 1), most neoplasms are located precisely on open areas of the body, which are potentially the most vulnerable to ultraviolet radiation.

According to the results of the questionnaire with the study of anamnestic data, more than half of the examined patients (58%) received skin burns after a long stay in the open sun. This, in turn, confirms the thesis regarding the cumulative effect of solar radiation on the occurrence of neoplasia. After all, numerous studies indicate an increased risk of various skin neoplasms associated with sunburns [21–24]. At the same time, only 1 patient lived in a country with increased insolation for six months, the rest spent most of the time in Ukraine.

A non-modifying factor that indicates innate sensitivity to exposure to ultraviolet radiation is skin phototype. Summarizing the data of the visual assessment of the phenotype of the patients, as well as the level of tolerance to natural/artificial insolation, the studied sample is represented by the dominant majority of the II phototype – 44 individuals and a small number of representatives of the III phototype – 6 patients, which amounted to 88% and 12%, respectively.

The use of sunscreens remains an extremely important preventive measure in reducing the risk of any skin neoplasms [25–28]. Unfortunately, this work shows a tendency to underestimate the photoprotection of the skin, both for the prevention of neoplasms on the skin and for photoaging. Thus, it was established that 24 (48%) patients never used sunscreens, 16 (32%) sometimes used them, and only 20% (10 women) always. The obtained results may indicate that the habit of using photoprotection has not been formed among the population, which is explained by the insufficient level of awareness and education regarding the influence of insolation on the risk of skin neoplasms and photoaging in general. Thus, once again, the role of ultraviolet radiation as a trigger for the occurrence of SK is determined, corresponding to the global trends regarding factors provoking this disorder.

When collecting anamnesis, attention was focused on the following questions, which are an adaptation to the standardized questionnaire of the Euromelanoma organization:

1) is your work or hobby related to being outdoors? (Yes; No; Don’t know);
2) how does your skin react to the sun? (I always burn, I never tan; I always burn, I tan very badly; First I burn, then I tan; I rarely burn, I tan easily; I rarely burn, I have dark skin);
3) when you are outdoors for more than 1 hour? (Never; Sometimes; Always)
4) how many weeks per year do you spend in solar activity (after 18 years)? (0; 2 weeks and less; More than 2 weeks). The results of the analysis of anamnestic data the questions presented above are shown in Fig. 2.

![Fig. 1. Localization of SK among women of the studied sample](image-url)
2. Localization of keratosis lesions on open areas of the body to a greater extent negatively affects the quality of life of women, demonstrating higher indicators of the DLQI – 7 points against 5 in the comparison group.

3. Persisting recommendations of doctors of all branches regarding regular preventive skin examinations and the use of sunscreens (topical creams, sprays, fluids), clothing, and hats will contribute to increasing the level of awareness and prevention of the population regarding the threatening influence of insolation on the development of neoplasms and photoaging.

CONCLUSIONS

1. Predominance of patients with II skin phototype (88%) and lack of photoprotection skills (48% never use sunscreen, 32% sometimes) are the most influential factors in determining insolation as one of the leading triggers of seborrheic keratosis formation.

2. Localization of keratosis lesions on open areas of the body to a greater extent negatively affects the quality of life of women, demonstrating higher indicators of the DLQI – 7 points against 5 in the comparison group.

3. Persisting recommendations of doctors of all branches regarding regular preventive skin examinations and the use of sunscreens (topical creams, sprays, fluids), clothing, and hats will contribute to increasing the level of awareness and prevention of the population regarding the threatening influence of insolation on the development of neoplasms and photoaging.
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