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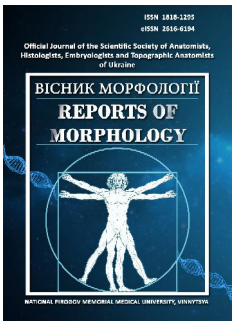

Correlations of the dermatoscopic index with anthropometric and somatotypological parameters of men with benign nevi

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Malignant transformation of benign nevi is one of the factors that leads to increased scientific interest in the study of the pathogenesis of their occurrence, the influence of external factors on them, etc. One of the still unsolved issues is the study of the relationship between the features of nevi indicators and the anthropometric parameters of the human body. The purpose of the work is to investigate the peculiarities of correlations of the dermatoscopic index with anthropometric and somatotypological indicators of Ukrainian men with benign nevi. A clinical, laboratory and pathogistological examination of 34 Ukrainian men of first adulthood with melanocytic benign simple nevi, 27 with melanocytic benign dysplastic nevi, 14 with melanocytic benign congenital nevi, and 17 with non-melanocytic benign nevi was carried out. The dermatoscopic index was calculated according to the "ABCD rule of dermatoscopy". Anthropometric examination was carried out according to Bunak's scheme. The Heath-Carter mathematical scheme was used to assess the somatotype. Matiegka formulas were used to calculate fat, bone and muscle components of body mass. In addition, the muscle component of body weight was estimated according to the method of the American Institute of Nutrition. The assessment of correlations between the dermatoscopic index and body parameters was carried out in the license package "Statistica 6.0" using the non-parametric method of Spearman. An analysis of multiple reliable and average strength of unreliable correlations between the value of the dermatoscopic index and anthropo-somatotypological indicators in men with benign nevi was performed. In men with simple melanocytic nevi, only moderately strong direct (r = from 0.30 to 0.34), mostly unreliable, correlations with all sizes of the pelvis were established. In men with melanocytic dysplastic nevi, inverse correlations of medium strength, mostly reliable (r = from -0.38 to -0.52) were established with all dimensions of the pelvis and almost all transverse dimensions of the trunk, as well as with almost half of the indicators of the skinfold thickness. In men with melanocytic congenital nevi, direct, mostly unreliable (r = from 0.30 to 0.47) correlations were established with all dimensions of the pelvis, with almost all transverse dimensions of the trunk, with almost half of the girth of the body and indicators of the skinfold thickness and almost all indicators of the component composition of body weight. In men with non-melanocytic nevi, direct, mostly unreliable (r = from 0.30 to 0.47) correlations were established with all transverse dimensions of the trunk and pelvis, most of the total and girth dimensions of the body. Quantitative analysis of reliable and average strength of unreliable correlations between the value of the dermatoscopic index and anthropo-somatotypological indicators was also carried out. The established features of the correlations expand modern ideas about the risk of benign nevi.

Keywords: *skin diseases, benign nevi, dermatoscopic index, anthropometric and somatotypological body parameters, correlations, men.*

Introduction

Nevi are benign melanocytic tumors that can be both congenital and acquired [24]. According to scientists, the key element in the occurrence of mutations leading to the emergence or transformation of nevi is the genetic factor. Among the genetic factors associated with the occurrence of nevi, there are four single-nucleotide polymorphisms that

reliably show a connection with an increase or decrease in the number of nevi, namely IRF4 (increase in number) and PARP1, CDK6, and PLA2G6 (decrease in number) [17].

The exact source of nevi still remains unknown. However, the classic model, which is still considered the main one, states that the epidermal melanocyte is the source of both nevi and melanoma, which in the process of loss of differentiation can either develop into a benign tumor, which is a nevus, or a malignant tumor, which is melanoma [10]. The results of histological studies showed that in 30 % of cases melanoma is formed against the background of an already existing nevus. This condition is known as nevus-associated melanoma. In other 70 % of cases, melanoma is formed without previous damage to the skin [6].

During dermatoscopy, congenital nevi have a different type of pattern. It can be either globular (most common) or reticular-globular, homogeneous, reticular-homogeneous, globular-homogeneous (least common), reticular-spotted or cobblestone pattern. Also, they may include the presence of dots, focal or perifollicular hypopigmentation and such rare signs as a bluish-whitish veil [5].

According to a review of 1164 people with nevi, in the first 20 years of life the distribution of the frequency of observation of melanocytic nevi is as follows: the largest number is complex nevi (62 %), followed by the less common dermal nevus (20 %), Spitz nevus (9 %), connective nevus (4 %), blue nevus (2 %) and the least common - spindle cell nevus (1 %), Halo nevus (1 %), atypical spitzoid tumor (1 %) and deep penetrating nevus (<1 %) [23].

One of the non-invasive methods that facilitates the differential diagnosis of benign and malignant melanocytic formations is the ABCD rule of dermoscopy, which calculates a special dermatoscopic index. This method has a sensitivity of 83 % and a specificity of 45 % [1].

Malignant transformation of nevi into melanoma is probably the most important problem facing patients, doctors and scientists. Long-term follow-up of 2355 patients with choroidal nevi showed that malignant transformation into melanoma occurred in 1.2 % of cases after 1 year, 5.8 % after 5 years, and 13.9 % after 10 years [21].

Thus, melanoma is the most common skin cancer among children. Spitzoid melanoma is the most common type and affects children under the age of 11. It is also worth considering the high risk of malignant transformation of congenital nevi, which are also one of the common types of nevi in childhood [16]. In Finland, the incidence of melanoma among children and adolescents has increased from 1.4 per 1 million people in 1990-1994 to 5.8 per 1 million people in 2010-2014. The most noticeable increase in the number of melanoma cases occurred due to the increase in the number of Spitzoid type [19].

Thus, there is a need to conduct research that would involve the study of the interrelationships of light from a technical and financial point of view for the study of indicators. In this context, it was most appropriate to study the relationship between dermatoscopic indicators and anthropometric and somatotypological indicators.

The purpose of the work is to investigate the peculiarities of correlations of the dermatoscopic index with anthropometric and somatotypological indicators of Ukrainian men with benign nevi.

Materials and methods

On the basis of the Military Medical Clinical Center of the Central Region and the Department of Skin and Venereal Diseases with a postgraduate course at the National Pirogov Memorial Medical University, Vinnytsya, a clinical-laboratory and pathogistological examination of Ukrainian men aged 22 to 35 years with benign nevi (34 with melanocytic benign simple nevi, 27 with melanocytic benign dysplastic nevi, 14 with melanocytic benign congenital nevi and 17 with non-melanocytic benign nevi) have been done.

Committee on Bioethics of National Pirogov Memorial Medical University, Vinnytsya (protocol № 10 From 26.11.2020) found that the studies do not contradict the basic bioethical standards of the Declaration of Helsinki, the Council of Europe Convention on Human Rights and Biomedicine (1977), the relevant WHO regulations and laws of Ukraine.

The diagnosis of nevi is established according to the two-stage algorithm for the classification of pigment neoplasms, which was adopted at the First World Congress on Dermatology (Rome, 2001) [18].

The dermatoscopic index was calculated according to the so-called "ABCD rule of dermatoscopy". "A" - Asymmetry. To determine this indicator, the studied neoplasm was visually divided along two asymmetrically favorable lines; in the presence of asymmetry along two axes, index 2 was assigned. "B" - Border sharpness. To evaluate this feature, the neoplasm was visually divided into eight equal parts, each part with a clear border was assigned an index of 1. "C" - Color. There are 6 dermatoscopic colors: light brown, dark brown, black, gray-blue, white, red. Each color present in the neoplasm was assigned an index of 1. "D" - Dermoscopic structures. The following structural elements were distinguished in the dermatoscopic picture: "pigment network", "stripes" ("radial radiance", "pseudopods"), "points", "granules", "structureless areas", "blue-white veil", "structures of regression", "vascular structures" (areas of a milky-red color, microvessels are visualized). Each element, if present in the neoplasm, was assigned an index of 1. The general dermatoscopic index (Iderm) is calculated according to the formula "A"+"B"+"C"+"D", where the constant coefficients A = 1.3; B = 0.1; C = 0.5; D = 0.5. With a total dermatoscopic index of 4.75 to 5.45, the neoplasm is considered a dysplastic nevus, and with values above 5.45, a preliminary diagnosis of skin melanoma is made.

Anthropometric examination was carried out according to the scheme of V. V. Bunak [3]. J. Carter and B. Heath mathematical scheme was used to assess somatotype [4]. The formulas of J. Matiegka [13] were used to calculate

the fat, bone, and muscle components of body weight. In addition, the muscle component of body weight was estimated according to the method of the American Institute of Nutrition [20].

Correlation analysis was carried out in the license package "Statistica 6.0" using the non-parametric method of Spearman.

Results

In Ukrainian men with a diagnosis of nevus, the following values of the dermatoscopic index were established: melanocytic simple nevus - 2.806±1.154; melanocytic dysplastic nevus - 4.522±0.884; melanocytic congenital nevus - 2.943±1.917; non-melanocytic nevus - 0.382±0.626. In all cases, with a melanocytic dysplastic nevus, the value of the dermatoscopic index is significantly ($p<0.05$-0.001) higher, and with a non-melanocytic nevus, it is significantly ($p<0.001$) lower than with other nevi. No reliable or tentative differences were established between melanocytic simple and melanocytic congenital nevi.

The results of correlations of the dermatoscopic index value with total (body weight - W; body length - H; body surface area - S), longitudinal (height of the upper thoracic point - ATND; height of the pubic point - ATL; height of the acromial point - ATPL; height of the digital point - ATP; height of the acetabular point - ATV), transverse (width of the distal epiphysis of the shoulder - EPPL; width of the distal epiphysis of the forearm - EPPR; width of the distal epiphysis of the thigh - EPB; width of the distal epiphysis of the tibia - EPG; transverse mid-thoracic size - PSG; transverse lower-thoracic size - PNG; anterior-posterior size of the chest - SGK; shoulder width - ACR; interspinous distance - SPIN; intercristal distance - CRIS; intertrochanteric distance - TROCH), girth (shoulder girth in a tense state - OBPL1; shoulder girth in a relaxed state - OBPL2; Upper Forearm girth - OBPR1 Lower Forearm girth - OBPR2, Hip girth - OBB, Upper Calf girth - OBG1, Lower Calf girth - OBG2, neck girth - OBSH; waist circumference - OBT; hip girth - OBBB; hand girth - OBK; foot girth - OBS; girth of the chest on inspiration - OBGK1; chest girth on exhalation - OBGK2; chest girth during calm breathing - OBGK3) body dimensions, skinfold thickness (on the back surface of the shoulder - GZPL; on the front surface of the shoulder - GPPL; on the forearm - GPR; under the lower angle of the scapula - GL; on the chest - GGR; on the stomach - GG; on the side - GB; on the thigh - GBD; on the lower leg - GGL), the size of the components of the somatotype (endomorphic component of the somatotype - FX; mesomorphic the somatotype component - MX; the ectomorphic component of the somatotype - LX), the type of somatotype (SOMAT) and the value of indicators of the component composition of body weight (muscle component of body weight according to Matiegka - MM; bone component of body weight according to Matiegka - OM; fat component of body weight according to Matiegka - DM; muscle component of body weight according to the method of the American Institute of Nutrition - MA) in Ukrainian men with benign nevi are listed in Table 1.

Table 1. Correlations of the dermatoscopic index with body size and structure indicators of Ukrainian men with benign nevi.

Anthropo-somatotypo-logical indicators	Nevi			
	melanocytic simple (n=34)	melanocytic dysplastic (n=27)	melanocytic congenital (n=14)	non-melanocytic (n=17)
W	0.22	***-0.32***	0.27	***0.38***
H	0.21	0.13	0.09	0.01
S	0.20	-0.25	***0.36***	***0.40***
ATND	0.22	0.12	0.03	0.02
ATL	0.16	***0.37***	***-0.38***	***0.42***
ATPL	0.25	0.21	-0.02	-0.14
ATP	**0.34**	-0.13	***0.37***	-0.20
ATV	0.26	***0.33***	***-0.43***	***0.30***
EPPL	-0.01	-0.12	0.02	0.03
EPPR	0.14	0.08	***-0.33***	***0.38***
EPB	0.22	-0.06	0.16	0.05
EPG	0.04	0.10	0.20	-0.11
PSG	0.13	***-0.33***	***0.42***	***0.34***
PNG	0.15	***-0.35***	***0.41***	***0.41***
SGK	0.19	***-0.41***	***0.33***	**0.57**
ACR	-0.22	0.17	-0.03	***0.40***
SPIN	***0.30***	**-0.52**	**0.60**	***0.43***
CRIS	***0.33***	**-0.38**	**0.65**	***0.32***
TROCH	**0.34**	**-0.39**	***0.38***	***0.31***
OBPL1	0.13	-0.18	***0.41***	0.25
OBPL2	0.09	-0.26	***0.47***	***0.34***
OBPR1	0.02	-0.20	***0.39***	***0.39***
OBPR2	0.02	-0.20	0.10	**0.72**
OBK	0.14	0.06	-0.02	***0.31***
OBB	0.22	-0.22	***0.42***	-0.07
OBBB	0.14	-0.28	0.27	***0.35***
OBG1	***0.31***	-0.13	0.20	***0.33***
OBG2	0.01	-0.10	***0.44***	0.20
OBS	0.00	0.04	0.16	0.10
OBSH	0.11	***-0.38***	0.04	***0.37***
OBT	0.12	***-0.36***	***0.34***	**0.52**
OBGK1	0.23	-0.26	0.23	***0.47***
OBGK2	0.21	-0.28	0.31	***0.44***
OBGK3	0.21	-0.25	0.24	***0.41***
GZPL	0.06	-0.06	0.17	0.10
GPPL	-0.06	0.27	***0.36***	0.02
GPR	0.01	0.07	***0.47***	0.26
GL	0.28	***-0.36***	0.24	***0.43***
GGR	-0.14	0.08	0.30	0.04
GG	0.16	***-0.32***	0.15	**0.56**
GB	0.29	**-0.48**	0.14	0.12

Continuation of table 1.

Anthropo-somatotypo-logical indicators	Nevi			
	melanocytic simple (n=34)	melanocytic dysplastic (n=27)	melanocytic congenital (n=14)	non-melanocytic (n=17)
GBD	0.28	-0.24	-0.01	0.12
GGL	0.06	**-0.44**	***0.38***	-0.03
FX	***0.30***	**-0.44**	0.27	0.28
MX	0.13	-0.22	0.29	0.20
LX	-0.13	***0.34***	-0.24	***-0.33***
SOMAT	0.15	0.08	-0.17	-0.25
MM	0.11	-0.17	***0.47***	***0.33***
MA	0.04	-0.18	***0.38***	0.26
OM	0.12	-0.03	0.17	0.08
DM	0.21	-0.29	***0.39***	***0.37***

Notes: reliable strong direct correlations are highlighted in red; reliable medium-strength direct correlations are highlighted in orange; unreliable direct correlations of average strength are highlighted in yellow; reliable feedback correlations of medium strength are highlighted in blue; unreliable average strength correlations are highlighted in green.

Discussion

When analyzing the correlations of the *dermatoscopic index with the anthropo-somatotypological* indicators of Ukrainian men with benign nevi, the following multiple reliable and medium-strength unreliable correlations were established:

in men with melanocytic simple nevi, there are only medium-strength direct (r = from 0.30 to 0.34), mostly unreliable, correlations with all dimensions of the pelvis;

in men with melanocytic dysplastic nevi, the inverse of average strength is reliable (r = from -0.38 to -0.52) and unreliable (r = -0.33 and -0.35) correlations with almost all transverse dimensions of the trunk and pelvis, as well as the inverse of average strength is reliable (r = from -0.44 to -0.48) and unreliable (r = -0.32 and -0.36) correlations with almost half the skinfold thickness and the endomorphic component of the somatotype;

in men with melanocytic congenital nevi, there are moderate-strength, unreliable (r = from 0.33 to 0.42) and strong reliable (r = 0.60 and 0.65) correlations with almost all transverse dimensions of the trunk and pelvis, as well as moderate-strength, imprecise (r = from 0.30 to 0.47) correlations with almost half of body girths, skinfold thickness, and almost all and indicators of the component composition of body mass (except bone). The average strength of the unreliable inverse (r = -0.38 and -0.43) correlations with the height of the acromial and trochanteric anthropometric points against the background of the average strength of the unreliable direct (r = 0.37) correlations with the height of the finger anthropometric point attracts attention;

in men with non-melanocytic nevi, straight of medium strength, mostly unreliable (r = from 0.31 to 0.47) correlations with all transverse dimensions of the trunk and pelvis, most girth dimensions of the body, weight, body surface area, muscle component of body weight according to the methods of Matiegka and the American Institute of Nutrition.

When conducting a quantitative analysis of reliable and average strength of unreliable correlations in Ukrainian men with benign nevi between the dermatoscopic index and anthropo-somatotypological indicators, it was established:

in men with melanocytic simple nevi - 6 correlations out of 51 possible (11.76 %), among which 3.92 % of the average strength of direct reliable and 7.84 % of the average strength of direct unreliable ones. The relative majority of correlations is established with the size of the pelvis (75.0 % of the average strength of direct unreliable and 25.0 % of the average strength of direct reliable);

in men with melanocytic dysplastic nevi, there were 17 correlations out of 51 possible (33.33 %), including 5.88 % of the average strength of direct unreliable, 13.73 % of the average strength of inverse reliable and 13.73 % of the average strength of inverse unreliable. The relative majority of connections are established with the transverse dimensions of the pelvis (100 % of the average power of the inverse reliable) and trunk (50.0 % of the average power of the inverse reliable and 25.0 % of the average power of the inverse reliable), skinfold thickness (22.22 % each of the average power of the inverse reliable and unreliable), somatotype components (33.33 % of the average power of the direct unreliable and with portal reliable), longitudinal dimensions of the body (40.0 % of the average strength of direct unreliable);

in men with melanocytic congenital nevi, there are 25 correlations out of 51 possible (49.02 %), among which 39.22 % of the average strength of direct unreliable, 3.92 % of strong direct reliable and 5.88 % of the average strength of reverse unreliable. The relative majority of correlations is established with the transverse dimensions of the pelvis (75.0 % strong direct reliable and 25.0 % average strong direct unreliable) and trunk (75.0 % average strong direct unreliable), somatotype components (75.0 % average strong direct unreliable), girth body dimensions (46.67 % average strong direct unreliable), skinfold thickness (44.44 % average strong direct unreliable), longitudinal dimensions of the body (20.0 % of the average strength of direct unreliable and 40.0 % of the average strength of reverse unreliable);

in men with non-melanocytic nevi, there were 28 correlations out of 51 possible (54.90 %), among which 45.10% of the average strength of direct non-reliable, 5.88 % of the average strength of direct reliable, 1.96 % of strong direct reliable and 1.96 % of the average strength of inverse non-reliable. The relative majority of correlations are established with the transverse dimensions of the pelvis (100 % of the average strength of direct imprecises) and trunk (75.0 % of the average strength of direct imprecises and 25.0 % of the average strength of direct imprecises), girth dimensions of the body (60.0 % of the average strength of direct imprecises, 6.67 % of the average strength of direct imprecises and 6.67% of strong direct reliables), total

dimensions of the body (75.0 % of the average strength of direct unreliable), indicators of the component composition of body mass (50.0 % of the average strength of direct unreliable), longitudinal dimensions of the body (40.0 % of the average strength of direct unreliable).

The connections of such a numerous nature revealed by us in the study are consistent with the generally accepted theory regarding the nature of the occurrence of melanocytic formations, which states that the key mechanism in the initiation and further triggering of the development of this pathology is an excessive amount of adipose tissue, which affects various links of processes in the human body. These are inflammatory processes and processes of vitamin D metabolism, occurrence of tissue hypoxia, etc. Equally important is the proven role of leptin in the pathogenetic chain of melanoma [11].

When examining French women, it was found that there was a positive correlation (RR = 1.27, 95 % CI = 1.05-1.55 for $\geq$164 cm vs.<160 cm; p for trend = 0.02) between height and the risk of melanoma (when models were adjusted for age). At the same time, the relationship with such indicators as body mass index, leg length, waist circumference, and others was not revealed [12].

Growth in childhood can be a prognostic factor for the occurrence of various forms of melanoma. In a study that included more than 2,200 cases of melanoma, data analysis revealed a positive significant relationship between growth in childhood and the occurrence of such forms of melanoma as superficial, nodular, and unspecified [15].

In general, the analysis of literary sources indicates that such an anthropometric indicator as height has a sufficiently strong and proven connection with the risk of melanoma [22]. For example, a meta-analysis that included more than 12,000 cases of melanoma and 23,000 healthy individuals of the control group revealed the existence of a positive relationship between genetically predicted human height and the risk of melanoma (OR 1.08, 95 % CI: 1.02-1.13, per 1 SD (9.27 cm) increase in height) [7]. Another review of the literature, which included almost 5 million controls and 20.000 people with melanoma, found a positive correlation between a 10-cm increase in height and an increased risk of melanoma (RR = 1.46, 95 % CI 1.24 to 1.73; p<0.001) [25].

A review of 44 literature sources revealed that 85 correlations of nevi risk factors with non-genetic factors have been identified so far. Thirteen of them had a sufficiently high level of reliability. Among them, the following deserve special attention: hair color in old age, vitamin D level, presence of actinic keratosis, sunburn, density of freckles, hair color, eye color, skin type, presence of precancerous skin lesions, history of melanoma [2].

C. Fortes [8] and co-authors created a multivariate logistic model to identify differences in external and individual factors affecting the occurrence of melanoma and Spitz nevus. Patients with Spitz tumor compared to melanoma patients were found to have fewer freckles (p = 0.020), fewer common nevi (p = 0.002), lower body mass index (p = 0.001) and fewer episodes of sunburn (p = 0.008).

A team of researchers led by T. C. Grazziotin [9] established a relationship between histological and clinical phenotypes of various types of melanocytic tumors. Thus, the dendritic cell form was more associated with an older age of manifestation and phototype 2, 3, while round cell melanoma was more often observed in individuals with phototype 1.

Analysis of anthropometric data and the number of melanocytic nevi in 573 people established that there is a weak relationship between the body surface area index and the number of melanocytic nevi. No relationships were found for other indicators [14].

Thus, the correlations between the value of the dermatoscopic index and the anthropo-somatotypological indicators established by us in patients with benign nevi of Ukrainian men expand the modern ideas regarding the risk of the occurrence of this disease.

Conclusion

1. During the analysis of multiple reliable and medium-strength unreliable correlations of the dermatoscopic index with anthropo-somatotypological indicators of Ukrainian men with benign nevi, it was established: in patients with melanocytic simple nevi, only with all dimensions of the pelvis (straight of medium strength); in patients with melanocytic dysplastic nevi - reverse of medium strength with almost all the transverse dimensions of the trunk and pelvis and with almost half of the indicators of the skinfold thickness; in patients with melanocytic congenital nevi - straight, mostly of medium strength, with almost all transverse dimensions of the trunk and pelvis and indicators of the component composition of body weight, with almost half of the girth dimensions of the body and indicators of the skinfold thickness; in patients with non-melanocytic nevi - straight, mostly of medium strength, with all transverse dimensions of the trunk and pelvis, most of the total, girth dimensions of the body and the muscle component of body weight according to the methods of Matiegka and the American Institute of Nutrition.

2. As a result of the quantitative analysis of reliable and average strength of unreliable correlations in Ukrainian men with benign nevi, it was established: in patients with melanocytic simple nevi - 11.76 % of correlations (3.92 % of the average strength of direct reliable and 7.84 % of the average strength of direct unreliable); in patients with melanocytic dysplastic nevi - 33.33 % of correlations (5.88 % average strength of direct unreliable, 13.73 % average strength of inverse reliable and 13.73 % average strength of inverse unreliable); in patients with melanocytic congenital nevi - 49.02 % of correlations (39.22 % average strength of direct unreliable, 3.92 % strong direct reliable and 5.88 % average strength of reverse unreliable); in patients with non-melanocytic nevi - 54.90 % of correlations (45.10 % average strength of direct unreliable, 5.88 % average strength of direct reliable, 1.96 % strong direct reliable and 1.96 % average strength of reverse unreliable).

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КОРЕЛЯЦІЇ ДЕРМАТОСКОПІЧНОГО ІНДЕКСУ З АНТРОПОМЕТРИЧНИМИ ТА СОМАТОТИПОЛОГІЧНИМИ ПАРАМЕТРАМИ ЧОЛОВІКІВ ІЗ ДОБРОЯКІСНИМИ НЕВУСАМИ

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Злоякісна трансформація доброякісних невусів є одним із тих факторів, що зумовлює підвищений науковий інтерес до вивчення патогенезу їх виникнення, впливу на них зовнішніх факторів тощо. Одним з нерозкритих досі питань, є питання вивчення зв'язку між особливостями показників невусів та антропометричними параметрами тіла людини. Мета роботи - дослідити особливості кореляцій дерматоскопічного індексу з антропетричними та соматотипологічними показниками українських чоловіків, хворих на доброякісні невуси. Проведено клініко-лабораторне та патогістологічне обстеження 34

українських чоловіків першого зрілого віку з меланоцитарними доброякісними простими невусами, 27 - з меланоцитарними доброякісними диспластичними невусами, 14 - з меланоцитарними доброякісними вродженими невусами, 17 - з немеланоцитарними доброякісними невусами. Дерматоскопічний індекс розраховували згідно "ABCD правилу дерматоскопії". Антропометричне обстеження проведено відповідно до схеми Бунака. Для оцінки соматотипа використовували математичну схему Heath-Carter. Для обрахування жирового, кісткового та м'язового компонентів маси тіла використовували формули Matiegka. М'язовий компонент маси тіла оцінювали за методом Американського інституту харчування. Оцінку кореляцій між дерматоскопічним індеском і параметрами тіла проведено в ліцензійному пакеті "Statistica 6.0" з використанням непараметричного методу Спірмена. Проведений аналіз множинних достовірних та середньої сили недостовірних кореляцій між величиною дерматоскопічного індексу та антропо-соматотипологічними показниками у чоловіків, хворих на доброякісні невуси. У чоловіків з меланоцитарними простими невусами встановлені лише середньої сили прямі (r = від 0,30 до 0,34), переважно недостовірні, зв'язки з усіма розмірами таза. У чоловіків з меланоцитарними диспластичними невусами встановлені зворотні середньої сили, переважно достовірні (r = від -0,38 до -0,52) зв'язки з усіма розмірами таза та практично усіма поперечними розмірами тулуба, а також майже з половиною показників товщини шкірно-жирових складок. У чоловіків з меланоцитарними вродженими невусами встановлені прямі, переважно середньої сили недостовірні (r = від 0,30 до 0,47) зв'язки з усіма розмірами таза, практично усіма поперечними розмірами тулуба, майже з половиною обхватних розмірів тіла та показників товщини шкірно-жирових складок і практично з усіма показниками компонентного складу маси тіла. У чоловіків з немеланоцитарними невусами встановлені прямі, переважно середньої сили недостовірні (r = від 0,30 до 0,47) зв'язки з усіма поперечними розмірами тулуба й таза, більшістю тотальних й обхватних розмірів тіла. Також проведений кількісний аналіз достовірних та середньої сили недостовірних кореляцій між величиною дерматоскопічного індексу та антропо-соматотипологічними показниками. Встановлені особливості кореляцій розширюють сучасні уявлення щодо ризику виникнення доброякісних невусів.

Ключові слова: *захворювання шкіри, доброякісні невуси, дерматоскопічний індекс, антропометричні та соматотипологічні параметри тіла, кореляції, чоловіки.*