

## FEATURES OF ANTHROPOMETRIC PARAMETERS IN WOMEN OF DIFFERENT MORPHOTYPES WITH POLYCYSTIC OVARY SYNDROME

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Currently, reproductive life is associated with psycho-emotional and social conditions of women, which is reflected in the functional capacity of the female genitals and homeostasis in general and, thus, affects both the medical and social aspects of later life [1,2,3,6,7,10].

According to the literature, it is known that the harmonious development of the organism is influenced by its constitutional features, namely: anthropological parameters, physical development that contribute to human adaptation to changing living conditions in the environment. Given the constant change in the size of the human body and the possible impact of this factor on the function of internal organs, namely the reproductive sphere, requires the need for further study of this problem [5,8,9,12].

The pathogenesis of polycystic ovarian syndrome, as well as its clinical manifestations are being studied by many gynecological schools today. However, to some extent there is a problem in the correct diagnosis, because this pathology is associated with a problem not only in the proper functioning of the ovaries, but also the adrenal glands, hypothalamus and pituitary gland. Therefore, the possibility of not always adequate diagnosis of polycystic ovarian syndrome is associated with the fact that there is still no unanimity of scientists in determining the pathogenetic aspects of this problem [4,11].

Additional methods of examination, namely ultrasound, help in the diagnosis of polycystic ovarian syndrome. Quite often we observe another structure of the ovaries - multifollicular structure of the ovaries, which can be formally attributed to a variety of polycystic ovaries. However, these are different concepts, not the same in origin or in the impact on the health and reproductive function of women.

Therefore, it is very important today to correctly predict and create quality treatment schemes for this problem, which in the future will allow such patients to give birth to healthy offspring.

Thus, the aim of our study was to assess the body size of patients with polycystic ovary syndrome, to study their somatotypes and component composition of body weight.

**Material and methods.** 105 women aged 20 to 36 years of different morphotypes were selected for the study. These patients were interviewed according to a specially designed questionnaire and divided into groups: 50 women with multifol-

licular ovarian structure and 25 - women with polycystic ovary structure. The comparison group consisted of 30 women without disturbances of ovarian structure (healthy women).

In our work, we used a mathematical scheme of somatotyping according to Heath-Carter, which included the determination of ectomorphic, mesomorphic and endomorphic components of the somatotype.

J. Matiegka's formulas were used to determine the component composition of body weight.

The absolute amount of muscle tissue was determined according to the recommendations of the American Institute of Nutrition (ANI).

Variational-statistical processing of research results was performed using the program "Statistica 6.0" with the definition of the main variational indicators. The reliability of the results was determined using the Student's t test.

**Results and discussion.** When assessing the growth, weight, body surface area and Kettle II index in women of the study group, it was found that in patients with multifollicular (MFO) and polycystic ovarian structure (PCOS) the values of these indicators are significantly higher compared to those without polycystic ovarian structure ( $p < 0.05$ ), Table 1.

In patients with PCOS, it was found that body weight in this group was significantly higher than in the studied women with MFO ( $p < 0.001$ ). However, a significant difference in body weight in women with MFO and in healthy patients ( $p > 0.05$ ) was not detected (Table 1).

The body surface area of women with PCOS was significantly larger than in patients of the comparison group and the control group. It was also noted that patients with multifollicular structure of the ovaries had a significant increase in body area compared to healthy women ( $p < 0.05$ ), Table 1.

The mass growth rate was significantly higher in patients with polycystic ovarian structure compared to patients diagnosed with multifollicular ovarian structure, as well as patients in the control group ( $p < 0.001$ ), Table 1.

It was also noted that in patients with polycystic ovaries shoulder girth at rest and in a tense state was greater than in patients with multifollicular structure of the ovaries and, accordingly, the control group ( $p < 0.001$ ,  $p < 0.05$ ), Table 2.

Table 1. Indicators of length, weight, body surface area and Kettle II index in healthy women and women with MFO and PCOS ( $M \pm \sigma$ )

Indicator	Healthy women	MFO	PCOS	$P_{1-2}$	$P_{1-3}$	$P_{2-3}$
Weight (kg)	57,47±7,61	54,55±9,51	63,82±5,76	>0,05	<0,001	<0,001
Body length (sm)	165,2±5,6	162,1±7,2	161,6±8,2	<0,05	<0,05	>0,05
Body surface area (m <sup>2</sup> )	1,627±0,112	1,567±0,131	1,679±0,082	<0,05	<0,05	<0,01
Kettle II index	21,07±2,64	20,87±4,02	24,69±3,73	>0,05	<0,001	<0,00

notes: here and hereafter:  $p_{1-2}$  - the reliability of the differences between healthy and sick MFO women;

$p_{1-3}$  - the reliability of the differences between healthy and patients with PCOS women;

$p_{2-3}$  - the significance of differences between women with MFO and PCOS women.

MFO - women with multifollicular structure of the ovaries; PCOS - women with polycystic ovaries; H - healthy women

Table 2. Coverage of body size in healthy women and women with MFO and PCOS ( $M \pm \sigma$ )

Indicator	Healthy women	MFO	PCOS	P <sub>1-2</sub>	P <sub>1-3</sub>	P <sub>2-3</sub>
Shoulder in a tense state (sm)	26,13±2,87	24,08±1,62	25,05±1,45	<0,001	>0,05	<0,05
Shoulder at rest (sm)	27,48±2,82	23,09±1,69	24,07±1,32	<0,001	<0,001	<0,05
Forearms in the upper third (sm)	23,49±1,88	22,34±1,56	23,89±0,97	<0,001	>0,05	<0,001
Femur (sm)	53,02±4,37	47,79±3,70	49,57±5,88	<0,001	<0,01	<0,01
Shins in the upper third (sm)	34,76±2,68	31,97±1,94	33,23±2,00	<0,001	<0,01	<0,05
Chest at rest (sm)	85,31±6,06	85,16±6,74	89,77±3,22	>0,05	<0,001	<0,05

Table 3. Body diameters in healthy women and women with MFO and PCOS ( $M \pm \sigma$ )

Indicator	Healthy women	MFO	PCOS	P <sub>1-2</sub>	P <sub>1-3</sub>	P <sub>2-3</sub>
Transverse middle chest (sm)	25,04±1,64	23,46±1,98	24,39±1,90	<0,001	<0,05	>0,05
Transverse lower chest. (sm)	21,64±2,02	22,58±1,76	23,80±2,16	<0,01	<0,001	<0,05
Sagittal size of chest(sm)	17,31±1,61	19,69±1,61	21,17±2,12	<0,001	<0,001	<0,05

Table 4. The thickness of skin and fat folds in healthy women and women with MFO and PCOS ( $M \pm \sigma$ )

Indicator	Healthy women	MFO	PCOS	P <sub>1-2</sub>	P <sub>1-3</sub>	P <sub>2-3</sub>
On the back of the shoulder (mm)	7,468±3,012	5,018±0,918	5,568±0,785	<0,001	<0,01	<0,05
On the front surface of the shoulder (mm)	5,418±2,160	3,965±0,793	4,605±0,802	<0,001	>0,05	<0,05
On the forearm (mm)	3,654±1,850	3,192±0,634	3,800±0,652	>0,05	>0,05	<0,05
Under the shoulder blade (mm)	12,01±3,97	7,402±1,517	8,827±1,468	<0,001	<0,001	<0,001
On the chest (mm)	4,557±1,322	4,498±1,282	5,786±1,429	>0,05	<0,01	<0,001
On the abdomen (mm)	13,63±5,59	9,690±2,631	11,23±1,54	<0,001	>0,05	<0,01
On the side (mm)	11,85±4,91	9,857±2,872	12,45±1,95	<0,05	>0,05	<0,001
On the femur (mm)	14,43±4,40	12,80±2,05	13,50±1,47	<0,05	>0,05	>0,05
On the shin (mm)	10,48±3,03	10,08±1,55	11,36±1,47	>0,05	>0,05	<0,01

It was also noted that the circumference of the anterior surface of the forearm was significantly reduced in patients with MFO compared with women with polycystic ovarian structure and the control group ( $p < 0.001$ ), Table 2.

The hip circumference in patients with polycystic ovaries significantly increased, which differs significantly from the hip girth in the group with multifollicular structure of the ovaries and the control group ( $p < 0.001$ ,  $p < 0.01$ ), Table 2.

Measuring the shin circumference in the upper third, we found that this value varies in all groups of subjects, and is the lowest in the group with multifollicular structure of the ovaries ( $p < 0.001$ ,  $p < 0.05$ ), Table 2.

Chest girth was statistically increased in women with polycystic ovarian structure compared with data from the group of healthy patients ( $p < 0.001$ ). And in patients with multifollicular ovarian structure, the assessment of the above indicator was statistically lower in contrast to patients with polycystic ovary structure ( $p < 0.05$ ), Table 2.

Regarding the examination of chest measurements, no significant changes in diameter, mid-sternum size, lower sternum size, transverse and sagittal measurements were found in patients of the studied groups. However, it was found that in the control group all the above indicators were significantly higher in contrast to patients with polycystic and multifollicular ovarian structure ( $p < 0.001$  and  $p < 0.05$ , respectively), Table 3.

Patients in the study groups were also assessed for the thickness of skin and fat folds.

It was noted that in patients with polycystic ovary structure

the thickness of the fat fold on the posterior surface of the shoulder varied more than in women with multifollicular ovarian structure and patients of the control group ( $p < 0.05$ ), Table 4.

When measuring the thickness of the fat fold on the anterior surface of the shoulder, it was noted that there is a significant difference with women from the control group ( $p < 0.001$ ), and with patients with polycystosis ( $p < 0.05$ ), Table 4.

It was also noted that the thickness of the fat fold on the forearm in patients with multifollicular structure of the ovaries is significantly statistically lower than in the group of patients with polycystic ovaries ( $p < 0.05$ ), Table 4.

The thickness of the fat fold under the shoulder blade in all groups varies significantly ( $p < 0.001$ ) and is lowest in women with MFO. The same can be noted about the thickness of the fat fold on the leg (Table 4).

It was also found that the thickness of the fat fold on the breast in patients with polycystic ovarian structure is statistically significantly greater than in patients of the control group and patients with multifollicular ovarian structure ( $p < 0.001$ ,  $p < 0.01$ ), respectively (Table 4).

Regarding the thickness of the fat fold on the side, it was noted that in the group of patients with multifollicular ovarian structure it is the lowest in contrast to the group of patients with polycystic ovarian structure and the control group ( $p < 0.001$ ,  $p < 0.05$ ), Table 4.

The size of the shoulder was also assessed in all groups of patients. It was found that the width of the shoulder in patients with multifollicular structure of the ovaries is the lowest in the study group of patients with polycystic ovaries ( $p < 0.01$ ), Table 5.

Table 5. Indicators of the width of the distal pineal gland in healthy women and women with MFO and PCOS ( $M \pm \sigma$ )

Indicator	Healthy women	MFO	PCOS	P <sub>1-2</sub>	P <sub>1-3</sub>	P <sub>2-3</sub>
Shoulder (sm)	5,951±0,362	6,137±0,357	6,400±0,279	<0,01	<0,001	<0,01
Forearm (sm)	4,930±0,288	5,316±0,462	5,655±0,365	<0,001	<0,001	<0,01
Femur (sm)	8,132±0,537	7,861±0,614	8,105±0,487	<0,05	>0,05	=0,0571
Shins (sm)	6,481±0,465	6,563±0,412	6,777±0,366	>0,05	<0,01	<0,05

Table 6. Indicators of somatotype and component composition of body weight in healthy women and women with MFO and PCOS ( $M \pm \sigma$ )

Indicator	Healthy women	MFO	PCOS	P <sub>1-2</sub>	P <sub>1-3</sub>	P <sub>2-3</sub>
Endomorphic (points)	3,151±1,112	2,155±0,562	2,708±0,379	<0,001	<0,05	<0,001
Mesomorphic (points)	3,617±1,313	2,896±1,346	3,752±1,662	<0,01	>0,05	<0,05
Ectomorphic (points)	2,893±1,287	3,039±2,124	1,513±1,611	>0,05	<0,001	<0,01
Mateiko's muscle mass (kg)	27,28±4,09	22,42±3,06	23,91±2,23	<0,001	<0,001	<0,05
Bone mass according to Mateiko (kg)	10,20±3,33	8,150±1,034	8,811±0,668	<0,001	<0,05	<0,01
Fat mass according to Mateiko (kg)	8,171±1,139	7,594±1,746	9,142±1,202	<0,05	<0,001	<0,001
Muscle mass according to ANI (kg)	25,59±5,27	20,01±2,95	21,49±2,29	<0,001	<0,001	<0,05

Analyzing the measurement data of the width of the distal epiphysis of the forearm, we found that all patients in the three groups had a significant statistical difference ( $p < 0.001$ ), Table 5.

Regarding the measurement of the width of the distal epiphysis of the tibia in patients with polycystic ovarian structure, this figure is significantly higher than in patients with multifollicular ovarian structure, as well as the control group ( $p < 0.01$ ), Table 5.

Therefore, with the help of all measured body parameters, the somatotype and component composition of body weight of each patient of all study groups were calculated.

We found that patients with polycystic ovarian structure were dominated by the endomorphic Heath-Carter component in contrast to women with multifollicular ovarian structure ( $p < 0.001$ ), Table 6.

As for the ectomorphic component, it prevailed in patients with multifollicular structure of the ovaries in contrast to women with polycystic ovaries ( $p < 0.01$ ), Table 6.

Mateiko's muscle mass was statistically higher in women of the control group in contrast to the groups of women with multifollicular and polycystic ovary structure ( $p < 0.001$ ), Table 6.

We found that Mateiko's bone mass was lowest in patients with multifollicular ovarian structure compared with patients with polycystic ovarian structure ( $p < 0.01$ ), but Mateiko's fat mass was higher in patients with polycystic ovary syndrome ( $p < 0.001$ ), Table 6.

**Conclusions and perspectives of further developments.** Therefore, we proved that in patients with polycystic ovary structure, a mesomorphic component (54,0%;  $p < 0.05$ ), endomesomorphic component (9,1%;  $p < 0.05$ ) and indeterminate components were isolated and predominant (4,5%,  $p < 0.05$ ), and in patients with multifollicular structure of the ovaries is dominated by ectomorphic component (36,7%;  $p < 0.05$ ), ectomesomorphic component (8,2%;  $p < 0.05$ ).

It has been shown that the measurement of constitutional body parameters in women with anovulatory menstrual disorders is important and significant and this allowed to build discriminant models to determine the multifollicular and polycystic ovary structure.

Based on the results of research and constructed discriminant models, a computer program for predicting the multifollicular and polycystic ovarian structure was developed, which will further allow to develop optimal schemes for the correction of these conditions.

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## SUMMARY

### FEATURES OF ANTHROPOMETRIC PARAMETERS IN WOMEN OF DIFFERENT MORPHOTYPES WITH POLYCYSTIC OVARY SYNDROME

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The aim - to assess the body size of patients with polycystic ovary syndrome to study their somatotypes and component composition of body weight.

To solve the goals and objectives, were prospectively examined 105 women aged 20 to 36 years of different morphotypes. These patients were interviewed according to a specially designed questionnaire and divided into groups: 50 women with multifollicular ovarian structure and 25 - women with polycystic ovary structure. The comparison group consisted of 30 women without disturbances of ovarian structure (healthy women).

The body surface area of women with PCOS was significantly larger than in patients of the comparison group and the control group. It was also noted that patients with multifollicular structure of the ovaries had a significant increase in body area from healthy women ( $p<0.05$ ).

The mass-growth rate was significantly higher in patients with polycystic ovary structure compared to patients diagnosed with multifollicular ovarian structure and patients in the control group ( $p<0.001$ ).

It was also noted that in patients with polycystic ovary shoulder girth at rest and in a tense state was greater than in patients with multifollicular structure of the ovaries and, accordingly, the control group ( $p<0.001$ ,  $p<0.05$ ).

Regarding the examination of chest measurements, no significant changes in diameter, mid-sternum size, lower sternum size, transverse and sagittal measurements were found in patients of the studied groups. However, it was found that in the control group all the above indicators were significantly higher in contrast to patients with polycystic and multifollicular ovarian structure ( $p<0.001$  and  $p<0.05$ , respectively). Mateiko's muscle mass was statistically higher in women of the control group in contrast to the groups of women with multifollicular and polycystic ovary structure ( $p<0.001$ ).

We found that Mateiko's bone mass was lowest in patients with multifollicular ovarian structure compared with patients with polycystic ovary structure ( $p<0.01$ ), while Mateiko's fat mass was higher in patients with polycystic ovary disease ( $p<0.001$ ).

Therefore, we proved that in patients with polycystic ovary structure isolated and predominant mesomorphic component (54.0%;  $p<0.05$ ), endomesomorphic (9.1%;  $p<0.05$ ) and indeterminate components 4.5%,  $p<0.05$ ), and in patients with multifollicular structure of the ovaries is dominated by ectomorphic component (36.7%;  $p<0.05$ ), ectomesomorphic component (8.2%;  $p<0.05$ ).

**Keywords:** morphotype, polycystic ovarian structure, multifollicular ovarian structure, anthropometric measurements.

## РЕЗЮМЕ

### ОСОБЕННОСТИ АНТРОПОМЕТРИЧЕСКИХ ПАРАМЕТРОВ У ЖЕНЩИН РАЗНЫХ МОРФОТИПОВ С СИНДРОМОМ ПОЛИКИСТОЗНЫХ ЯИЧНИКОВ

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Известно, что на гармоничное развитие организма влияют его конституциональные особенности, в частности антропологические параметры, физическое развитие, способствующие адаптации к изменяющимся условиям жизни в окружающей среде. Постоянное изменение размеров тела и возможное влияние этого фактора на функцию внутренних органов, а именно репродуктивной сферы, ставит перед необходимостью дальнейшего изучения данной проблемы.

Обследовано 105 женщин в возрасте от 20 до 36 лет разных морфотипов. Пациенты опрошены по специально разработанной анкете и разделены на группы: 50 женщин с мультифолликулярной структурой яичников, 25 - женщины с поликистозной структурой яичников. Группу сравнения составили 30 женщин без нарушения структуры яичников (здоровые женщины).

В исследовании использована математическая схема соматотипирования по Хит-Картеру, которая включала определение эктоморфного, мезоморфного и эндоморфного компонентов соматотипа. Для определения компонентного состава массы тела использовались формулы Матейко. Абсолютную массу мышечной ткани определяли согласно ре-

комендациям Американского института питания.

Площадь поверхности тела женщин с синдромом поликистозных яичников была значительно больше, чем у пациенток группы сравнения и контрольной группы. Отмечено, что у пациенток с мультифолликулярной структурой яичников наблюдалось достоверное увеличение площади тела в сравнении со здоровыми женщинами ( $p<0.05$ ).

Скорость роста массы тела была значительно выше у пациенток с поликистозным строением яичников в сравнении с пациентками с диагнозом мультифолликулярная структура яичников и женщинами контрольной группы ( $p<0.001$ ).

Выявлено, что у пациенток с поликистозом яичников хват плеча в покое и в напряженном состоянии был больше, чем у пациенток с мультифолликулярной структурой яичников и, соответственно, контрольной группы ( $p<0.001$ ,  $p<0.05$ ).

Что касается исследования размеров грудной клетки, то у пациентов исследуемых групп существенных изменений диаметра, среднего размера грудины, размера нижней ее ча-



сти, поперечных и сагиттальных размеров не обнаружено. Однако в контрольной группе все вышеперечисленные показатели достоверно были выше в отличие от пациенток с поликистозным и мультифолликулярным строением яичников ( $p<0,001$  и  $p<0,05$ , соответственно). Мышечная масса по Матейко была статистически выше у женщин контрольной группы в сравнении с группами женщин с мультифолликулярным и поликистозным строением яичников ( $p<0,001$ ).

Обнаружено, что костная масса по Матейко самой низкой была у пациенток с мультифолликулярной структурой яичников в сравнении с пациентками с поликистозной структурой яичников ( $p<0,01$ ), в то время как жировая масса по Матейко была выше у пациенток с поликистозом яичников ( $p<0,001$ ).

Таким образом, доказано, что у пациенток с поликистозным строением яичников отмечались изолированный и преобладающий мезоморфный компоненты (54,0%;  $p<0,05$ ), эндомезоморфный (9,1%;  $p<0,05$ ) и неопределенный компоненты (4,5%,  $p<0,05$ ), а у пациенток с мультифолликулярной структурой яичников преобладает эктоморфный (36,7%;  $p<0,05$ ) и эктомезоморфный (8,2%;  $p<0,05$ ) компоненты.

#### რეზიუმე

საკვერცხეების პოლიკისტოზის სინდრომით სხვადასხვა მორფოტიპის ქალების ანთროპომეტრიული პარამეტრების თავისებურებები

ე.მალინინა, გ.ჩაიკა, ო.ტარანი

ვინიცას ნაპიროვოს სახ. ეროვნული სამედიცინო უნივერსიტეტი, მეანობისა და გინეკოლოგიის №1 კათედრა, უკრაინა

ცნობილია, რომ ორგანიზმის პარმონიულ განვითარებაზე მოქმედებს მისი კონსტიტუციური თავისებურებანი, კერძოდ, ანთროპოლოგიური პარამეტრები, ფიზიკური განვითარება, რაც ხელს უწყობს ადაპტაციას გარემოს ცვლადი პირობების მიმართ. სხეულის ზომების მუდმივი ცვლა და ამ ფაქტორის შესაძლო მოქმედება შინაგან ორგანოებზე, სახელდობრ რეპროდუქციულ სფეროზე, განსაზღვრავს ამ პრობლემის შემდგომი კვლევის აუცილებლობას.

გამოკვლეულია 20-36 წლის ასაკის სხვადასხვა მორფოტიპის 105 ქალი. პაციენტების გამოკითხვა ჩატარდა სპეციალურად შემუშავებული კითხვარით და ისინი დაიყო ჯგუფებად: 50 ქალი – საკვერცხეების მულტიფოლიკულური სტრუქტურით, 25 ქალი – საკვერცხეების პოლიკისტოზური სტრუქტურით; საკონტროლო ჯგუფი შეადგინა 30 ქალმა საკვერცხეების სტრუქტურის დარღვევის გარეშე (ჯანმრთელი ქალები).

კვლევაში გამოყენებულია სომატოტიპირების მათემატიკური სქემა პიტ-კარტერის მიხედვით, რომელიც

მელიც მოიცავს სომატოტიპის ექტომორფული, მეზომორფული და ენდომორფული კომპონენტების განსაზღვრას. სხეულის მასის კომპონენტური შემადგენლობის განსაზღვრისათვის გამოყენებულია მატეიკოს ფორმულა. კუნთოვანი ქსოვილის აბსოლუტური რაოდენობა განისაზღვრა ამერიკის კვების ინსტიტუტის რეკომენდაციების შესაბამისად.

სხეულის ზედაპირის ფართობი ქალებში პოლიკისტოზური საკვერცხეების სინდრომით იყო ბევრად მეტი, ვიდრე შედარების და საკონტროლო ჯგუფის პაციენტებში. აღნიშნულია, ასევე, რომ პაციენტებში საკვერცხეების მულტიფოლიკულური სტრუქტურით სხეულის ზედაპირის ფართობი სარწმუნოდ მეტია, ვიდრე ჯანმრთელ ქალებში ( $p<0,05$ ).

სხეულის მასის ზრდის სიჩქარე მნიშვნელოვნად მეტი იყო პაციენტებში საკვერცხეების პოლიკისტოზური შენებით, ვიდრე პაციენტებში საკვერცხეების მულტიფოლიკულური სტრუქტურით და საკონტროლო ჯგუფის ქალებში ( $p<0,001$ ).

დადგენილია, რომ პაციენტებში საკვერცხეების პოლიკისტოზით მხრის გარშემოწერილობა მოსვენების დროს და დაძაბვის პირობებში იყო მეტი, ვიდრე პაციენტებში საკვერცხეების მულტიფოლიკულური სტრუქტურით და, შესაბამისად, საკონტროლო ჯგუფში ( $p<0,001$ ,  $p<0,05$ ).

გულმკერდის გარშემოწერილობის პარამეტრების მხრივ (დიამეტრი, მკერდის ძვლის საშუალო ზომა, მკერდის ძვლის ქვედა ნაწილის ზომა, განივი და საგიტალური ზომები) პაციენტთა გამოკვლეულ ჯგუფებს შორის არსებითი განსხვავება დადგენილი არ არის. თუმცა, საკონტროლო ჯგუფში ყველა ზემოაღნიშნული მაჩვენებელი სარწმუნოდ მეტი იყო, ვიდრე პაციენტებში საკვერცხეების პოლიკისტოზური და მულტიფოლიკულური შენებით ( $p<0,001$  და  $p<0,05$ , შესაბამისად). კუნთოვანი მასა მატეიკოს მიხედვით სტატისტიკურად მეტი იყო საკონტროლო ჯგუფის ქალებში, საკვერცხეების პოლიკისტოზური და მულტიფოლიკულური შენების მქონე ქალების ჯგუფებთან შედარებით ( $p<0,001$ ).

გამოვლინდა, რომ ძვლოვანი მასა მატეიკოს მიხედვით ყველაზე მცირე იყო პაციენტებში საკვერცხეების მულტიფოლიკულური სტრუქტურით, საკვერცხეების პოლიკისტოზური შენების მქონე ქალების ჯგუფებთან შედარებით ( $p<0,01$ ), ამასთან, ცხიმოვანი მასა მატეიკოს მიხედვით მეტი იყო საკვერცხეების პოლიკისტოზური შენების მქონე პაციენტებთან შედარებით ( $p<0,01$ ).

ამრიგად, დადგენილია, რომ პაციენტებში საკვერცხეების პოლიკისტოზური შენებით აღინიშნება იზოლირებული და უპირატესად მეზომორფული კომპონენტები (54,0%;  $p<0,05$ ), ენდომეზომორფული (9,1%;  $p<0,05$ ) და დაუდგენელი კომპონენტები 4,5%,  $p<0,05$ ), ხოლო პაციენტებში საკვერცხეების მულტიფოლიკულური შენებით სჭარბობს ექტომორფული (36,7%;  $p<0,05$ ) და ექტომეზომორფული (8,2%;  $p<0,05$ ) კომპონენტები.