ORIGINAL ARTICLE

INTERNATIONAL JOURNAL OF ARTIFICIAL INTELLIGENCE

ISSN: 2692-5206, Impact Factor: 12,23
American Academic publishers, volume 05, issue 01,2025

Journal: https://www.academicpublishers.org/journals/index.php/ijai

RESULTS OF STUDYING THE HORMONAL STATUS OF OBESITY IN WOMEN OF REPRODUCTIVE AGE

Xayrullayeva Hilola Akbar kizi

Teacher at Sozangaron technical school of public health named after Abu Ali Ibn Sina

Abstract: This article presents medical data on the results of the study of the hormonal status of obesity in women of reproductive age. The main factors leading to the development of obesity: a sedentary lifestyle, improper nutrition, as well as socio-economic factors are considered scientific facts.

Key words: Resistance and relative hyperinsulinemia, obesity, fertile age, hormones.

Causes of obesity in women of childbearing age:

1. Physiological factors: changes in the hormonal background associated with the menstrual cycle, pregnancy and lactation can lead to an increase in body weight.

2. Socio-economic factors: Food supply, education level and economic status also play an important role in the formation of eating habits and, as a result, obesity.

3. Psychological factors: Stress, depression and other mental disorders can lead to overeating and less healthy eating.

4. Ineffective weight management strategies: Many women resort to short-term diets that do not lead to sustainable results, which can exacerbate the problem.

Hormonal indicators were studied in 60 obese women aged 18 to 38 (groups I and II), the results of the study were compared with 25 healthy women aged 18-38 (group III), the results of the study are presented in the table.

Description of hormonal status:

ORIGINAL ARTICLE

INTERNATIONAL JOURNAL OF ARTIFICIAL INTELLIGENCE

ISSN: 2692-5206, Impact Factor: 12,23
American Academic publishers, volume 05, issue 01,2025

Journal: https://www.academicpublishers.org/journals/index.php/ijai

Indicator	Group I (n=30) (M±o)	Group II (n=30) (M±o)	Group III (n=25) (M±o)	P 1;II
FSG, ME/l	5,00±13	4,03±5	6,19±4	0,014
LG, ME/l	13,33±7	12,77±3	4,23±28	0,036
LG/FSG	2,66±6	3,16±8	0,68±33	0,004
Testosterone, nmol/l	3,29±1	3,39±63	1,54±2	0,049
DGEAS-s, pg/ml	2,46±1,6	2,01±1,2	1,85±0,7	0,205
Progesterone, nmol\l	1,24±97	1,30±56	1,39±56	<0,001
TTG, mME/l	1,99±1,7	1,68±1,5	1,79±0,8	0,320
T4, nmol/l	113,68±27,97	102,25±24,23	116,95±21,6	0,594
ПРЛ, мМЕ/л	353,9±216,6	323,2±202,4	361,2±178,8	0,689
Cortisol, nmol/l	389,1±106,61	342,1±112,01	411,9±100,74	0,174

The level of FSG in patients of group I and II was significantly lower than that of group III and was 5.00±13 and 4.03±5ME/l and 6.19±4 ME/l, respectively (r=0.014). In addition, in addition to the low level of FSG, 1 patient from group I had a higher than normal level, i.e. 37.36 ME/l.

In patients of group I and II, the amount of LG was statistically significantly higher than in the comparison group - 13.33±7 and 12.77±3 and 4.23±28 ME/l, respectively (r=0.036). 1 patient in group I had a lower than normal level, i.e. 0.1 ME/l.

The LG/FSG index was significantly higher in the main groups compared to the control group - 2.66±6 and 3.16±8 and 0.68±33 (r=0.004).

Testosterone levels were higher in obese patients than in the control group, 3.29±1 and 3.39±63 nmol/l and 1.54±2, respectively (r=0.049).

However, the amount of adrenal androgen DEAS-s in groups I and II was not statistically significantly different from that of group III. In one patient from group I, we can see that the amount of DEAS-s is higher than normal. (997.0 pg/ml).

Progesteron darajasi I va II guruh bemorlarida III guruhga nisbatan statistik jihatdan sezilarli darajada past bo‘ldi - 1,24±97 va 1,30±56 hamda 1,39±56 nmol/l (r<0,001). Bu gormonda ham istisno holati kuzatilgan bo`lib, I guruhdagi 30 nafar bemordan 3 nafarida (10%) progesteron darajasining normadan yuqoriligi qayd etildi.

The amount of prolactin, TTG, T4 and cortisol in patients of group I, II did not statistically significantly differ from group III.

ISSN: 2692-5206, Impact Factor: 12,23
American Academic publishers, volume 05, issue 01,2025
Journal: https://www.academicpublishers.org/journals/index.php/ijai

60 women with gynecological diseases in the main group were divided into two subgroups: 30 with polycystic ovaries and 30 without polycystic ovaries.

In women with obesity and polycystic ovaries, the values of insulin and HOMA-R were also significantly higher than in patients without polycystic ovaries - 22.31 ± 10.5 and 15.04 ± 8.7 μEd, respectively. /ml (r<0.001) and 4.92±2.3 and 3.59±2.8 (r=0.004).

Thus, the hormonal status of women of reproductive age suffering from obesity is characterized by a high frequency of disorders.

Compared to the comparison group, insulin resistance (70%), hypoprogesteroneemia (18 in group I, i.e. 60%, 15 in group II, i.e. 50%), hypertestosteroneemia (in 15 in group I, i.e. 50%), 14 out of 46.7% in group II), hyperinsulinemia, increased basal level of LG, A decrease in the LG/FSG index, FSG content was noted.

In obese reproductive age patients, the amount of insulin is determined by obesity level (TVI), nature of fat tissue distribution, abdominal type of obesity, hormone level: LG, testosterone, DGEAS-s and indirectly HOMA-R, leptin. Insulin resistance and relative hyperinsulinemia persist along with an increase in blood serum XS and TG and are characteristic of polycystic ovaries.

In conclusion, we can conclude from the above that obesity among women of childbearing age is a complex problem that requires a serious approach and a complex solution. Fighting this disease is important not only for improving the quality of life of women, but also for the health of future generations. The strategy to effectively combat these problems should include both individual measures and social initiatives aimed at changing lifestyles and forming healthy habits.

Список использованной литературы/ References:

1. Авдонин П.В., Ткачук В.А. Рецепторы и внутриклеточный кальций -М.: Наука, 2019. -284 с.
2. Агеева В.В. Коррекция метформином метаболических нарушений у больных туловищным ожирением на ранних стадиях синдрома инсулинорезистентности: Автореф. дисс...канд. мед. наук. -С.-Пб., 2020. -20с.
3. Адамян Л.В., Алексеева М.Л., Минина Л.С. и др. Гормональный статус и стероидрецепторная система эндометрия у пациенток с доброкачественными опухолями и эндометриоидными кистами яичников //Акуш. и гин. -2018. -№9. -С.55-60.
4. Адашева Т.В., Хруленко С.Б., Задионченко В.С. и др. Клиническая эффективность ингибитора АПФ лизиноприла у больных с метаболическими факторами риска //Рус. Мед. журнал. - 2019. -Т.П. -№2. -С. 62-65.
5. Айламазян Э.К., Комаров Е.К., Михнина Е.А. Регуляция функции яичников у больных с диффузным нетоксическим зобом и невынашиванием беременности ранних сроков //Вести. Рос. ассоц. акуш.-гин. -2021. - №1. -С. 17-18.
6. Аидинлик С., Кауфманн Дж., Лахнит-Фиксон У., Ленерт Дж. Длительное лечение явлений андрогенизации комбинированным антиандрогенэстрогенэстрогенным

ISSN: 2692-5206, Impact Factor: 12,23
American Academic publishers, volume 05, issue 01,2025
Journal: https://www.academicpublishers.org/journals/index.php/ijai

препаратом //Вести. Рос. ассоц. акуш.-гин. -2019. -№ 4. -С.87-90.
7. Александров А.А., Кухаренко С.С., Беликова О.А. и др. Распределение жира в организме: с чем связаны его прогностические свойства в отношении сердечно-сосудистой заболеваемости? //Кардиология. -2020. -Т.36. -№ 3. -С.57-63.
8. Александров З.Д. Ультразвуковая характеристика плаценты в зависимости от клинических особенностей позднего токсикоза беременных: Автореф. дисс...канд. мед. наук,- Л., 2018. - 32 с.
9. Алиева Э.А., Овсянникова Т.В., Пшеничникова Т.Я. Бесплодие, обусловленное синдромом поликистозных яичников //Акуш. и гин.-2019. -№ 6. -С.59-62.
10. Аметов А.С., Демидова Т.Ю., Целиковская А. Л. Ожирение и сердечно-сосудистые заболевания //Тер. архив. -2020. - Т.73. -№8. -С.66-69.
11. Андгуладзе Н.Г. Клинико-гормональные аспекты течения беременности, родов и послеродового периода у женщин с ожирением: Автореф. дисс.... канд. мед. наук. - Тбилиси, 2023.-24 с.
12. Анциферов М.Б., Григорян О.Р., Чернова Т.О. Возможности применения препарата Сиофор (метформина гидрохлорида) у женщин с избыточной массой тела //Пробл. репродукции. -2022. -№2. -С. 49-55.
13. Артюкова О.В., Коколина В.Ф. Гипоталамический синдром пубертатного периода.//Вестн. Рос. асе. акуш.-гин. -2019. - №2. -С.45-49.
14. Артымук Н.В., Ушакова Г.В. Особенности течения беременности и родов у женщин с гипоталамическим синдромом //Акуш. и гин. -2019.-№3. -С.25-29.
15. Арустамян К.К. Репродуктивная функция женщин, страдающих гипоталамическим синдромом: Автореф. дисс....канд. мед. наук. -М., 2021. -19 с.
16. Бабичев В.Н. Состояние и перспективы нейроэндокринных исследований в физиологии репродуктивной системы //М., -2022. -Т.38.-№ 3. -С.6-13.