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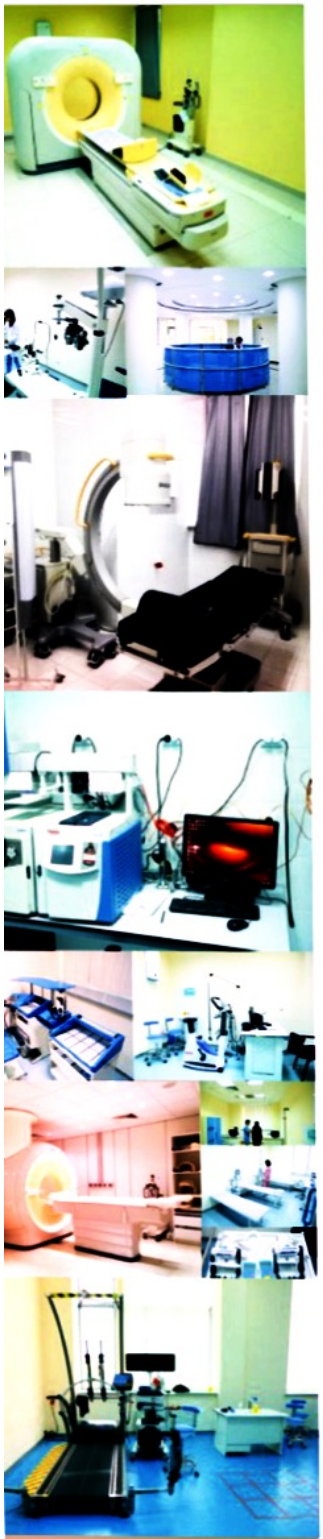

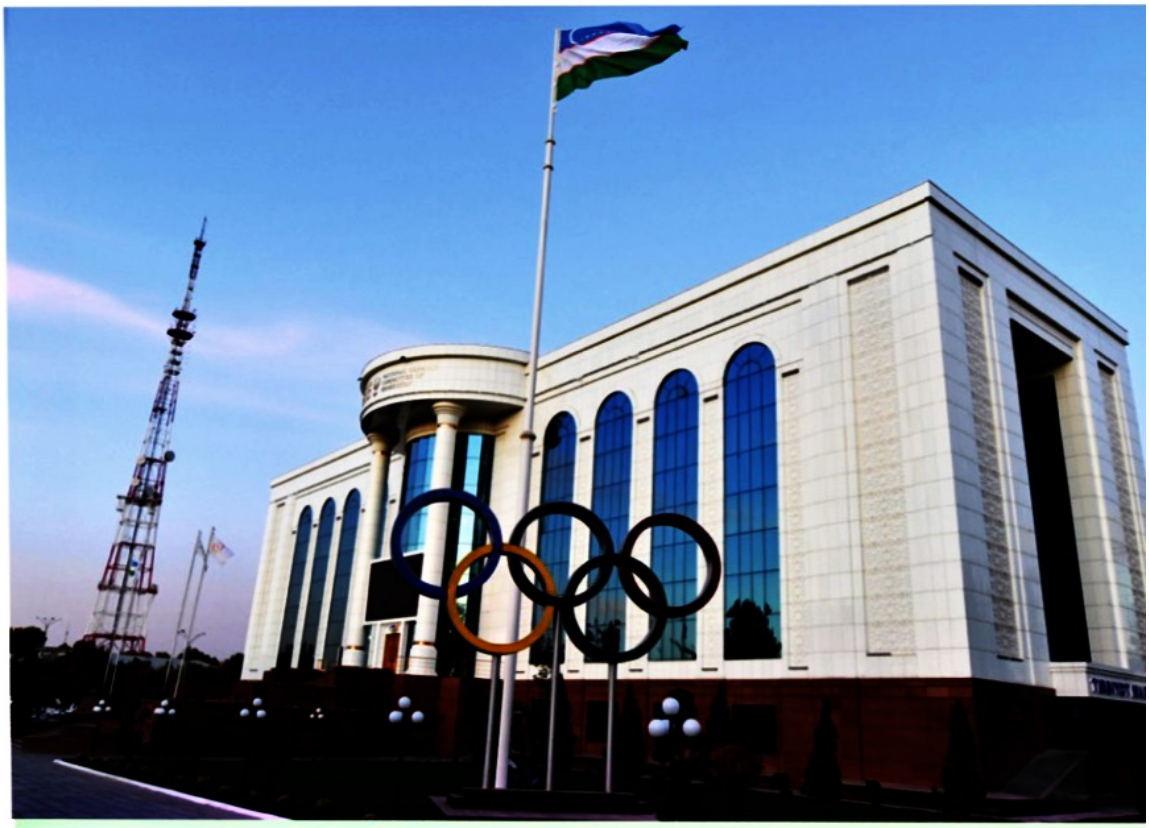

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ТОШКЕНТ

СОДЕРЖАНИЕ

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ANXIETY AND DEPRESSIVE DISORDERS IN DIABETES

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ҚАНДЛИ ДИАБЕТДА ХАВОТИР ВА ДЕПРЕССИВ БУЗИЛИШЛАР

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ТРЕВОЖНЫЕ И ДЕПРЕССИВНЫЕ РАССТРОЙСТВА ПРИ САХАРНОМ ДИАБЕТЕ

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Annotation: *This article examined the level of anxiety and depression from psychoemotional disorders in patients diagnosed with type 2 diabetes. Using psychodiagnostic methods, indicators of dependence of the levels of anxiety and depression in patients with the duration of diabetes were presented.*
Key words: *Diabetes, anxiety, depression, Beck questionnaire.*

Аннотация. *Ушбу мақолада 2-тип қандли диабет аниқланган беморларда психоэмоционал бузилишлардан хавотир ва депрессия даражаси кўриб чиқилди. Психодиагностика усулларидан фойдаланган ҳолда беморларда аниқланган хавотир ва депрессия даражаларини қандли диабет кечишининг давомийлигига боғлиқлиги кўрсаткичлари тақдим этилди.*
Калит сўзлари: *Қандли диабет, хавотир, депрессия, Бек сўровномаси.*

Аннотация: *В данной статье изучен уровень тревожности и депрессии от психоэмоциональных нарушений у больных с диагнозом сахарный диабет 2 типа. С помощью психодиагностических методов представлены показатели зависимости уровней тревожности и депрессии у больных от длительности сахарного диабета.*
Ключевые слова: *Сахарный диабет, тревога, депрессия, опросник Бека.*

Introduction. Diabetes is the seventh leading cause of disability worldwide. [12, 13]. Mental disorders are very common in type 2 diabetes. According to electronic registries, they occur in at least 37-40% of these patients [15]. In practice, in patients with type 2 diabetes in endocrinological hospital, clear psychopathological symptoms are detected in at least 80% of cases [9, 10].

Anxiety-phobic disorders are one of the most common mental disorders today. According to WHO data in 2017, 18.1% of the world's population suffers from anxiety-phobic disorders [5]. By 2030, the number of people diagnosed with depression in the world will be 630 million it is estimated to reach a person. Currently, there are 350 million patients suffering from depression [8].

In addition to the known complications, type 2 diabetes is often associated with depressive states and pathological anxiety, eating disorders and cognitive impairment and dementia [3, 4, 7, 9].

There is evidence that type 2 diabetes is associated with bipolar affective disorders [12], eating disorders and obesity, alcoholism, and sleep disorders. Many diabetes patients suffer from stress disorders, have severe personality abnormalities and panic disorders and phobias are often identified. Co-existing psychopathological symptoms often lead to serious differential diagnostic difficulties and misinterpretation of the patient's condition [1, 2, 6].

These psychopathological conditions can seriously affect the course and therapy of type 2 diabetes [2], but endocrinologists, clinicians and general practitioners do not pay enough attention to their diagnosis. The main reasons for this are the underestimation of the importance of mental disorders in type 2 diabetes and the lack of skills to identify them. The situation is complicated by the fact that data on the prevalence of mental disorders in Type 2 diabetes vary significantly.

According to foreign sources, it ranges from 8.5 to 44.7% [16], and in Russia, according to some studies; these figures reach 87.9% [11].

Mental disorders cause a decrease in the quality of life and compliance of patients. In addition, independent of other factors, they shorten the life of patients with type 2 diabetes [14]. This category includes a wide group of psychopathological conditions, in the origin and clinical presentation of which pathological anxiety takes the leading place. Although pathological anxiety can be triggered by life circumstances, it does not correspond to their real importance and arises from internal causes. Pathological anxiety affects decision-making and makes adaptation difficult. It is not controlled by the patient, dominates the mind and manifests itself in the form of a number of well-defined psychopathological syndromes that tend to be prolonged. The main ones are constant and paroxysmal anxiety. Anxiety disorders occur in at least 30-35% of patients with type 2 diabetes, and according to some reports, up to 60%. In type 2 diabetes, general anxiety disorder is reported in 15-20% of patients, agoraphobia in 12-15%, panic disorder in 2-13%, and social phobia in 8-11%. These anxiety disorders can be combined with each other, as well as with affective, stress, and cognitive disorders [11].

Constant pathological anxiety is characterized by unreasonable anxiety for various reasons, anxious fears with vague anxious expectations, and it makes the patient mentally exhausted and makes it difficult to control himself. Increased irritability and cognitive impairment are often noted. A characteristic feature of constant anxiety is sleep disturbances and frequent night awakenings, muscle tremors, irritability and severe headaches. Often a "startle" reaction is detected (increased fear of unexpected stimuli, for example,

a loud voice). There is also persistent tachycardia, increased sweating, and dryness of the mucous membranes, difficulty breathing, nausea, intestinal discomfort, unexplained mild-grade fever, chills, and other autonomic symptoms. These states persist for 6 months, and the combination of these features supports the diagnosis of generalized anxiety disorder. In type 2 diabetes, constant anxiety is often manifested in a subsyndromic form (up to 13% of patients), such a diagnosis cannot be made due to the incompleteness of the clinical presentation, but individual symptoms of anxiety (psychological, cognitive) last for a long time [9]. Therefore, it is very important to familiarize endocrinologists and general practitioners with the main categories of mental disorders in diabetes 2 type, to show the need for their early detection and to set appropriate diagnostic criteria.

Purpose. To study the importance of diabetes in the development of depression and anxiety syndrome.

Material and methods. Patients with type 2 diabetes (n=44) aged 45 to 60 years were examined. Patients were divided into groups according to the duration of type 2 diabetes. Based on this, patients aged up to 5 years (n=15) in-group 1, 5 to 10 years in-group 2 (n=13) and more than 10 years in-group 3 (n=16) were included. These patients underwent standard laboratory and instrumental tests, including postprandial glycemia, glycated hemoglobin, total cholesterol, and mild-density lipoprotein. The level of depression and anxiety in patients was assessed using the Beck questionnaire. This questionnaire is preferred in determining the level of anxiety and depression in patients due to its short time consumption and high reliability of answers.

Results. During the inspection, the folmilding indicators were recorded in the groups: Postprandial glycemia, glycated hemoglobin, and mild-density lipoprotein content were reliably higher ($r<0.05$) than those of group 1 (table №1). The increase in the duration of diabetes was expressed by glycemic decompensation. According to the results of the Beck depression questionnaire, mild depression was found in-group 1 (40%), moderate (44%) and severe (37%) depression was reliably high in-group 3 ($r<0.01$) (table №2). According to the results of the Beck anxiety questionnaire, mild anxiety was recorded in group 2 (38%), moderate anxiety (94%) in group 3, and potentially high anxiety in group 1 (27%) (table №3). An increase in the duration of diabetes was associated with a worsening of the depression level, and the anxiety syndrome was shown to be more severe at the time of diagnosis of diabetes.

Table №1

Indicators	1- group (n=15)	2- group (n=13)	3- group (n=16)
Postprandial glycemia, mmol/l	6,61±0,20	6,82±0,26	8,64±0,11*
Glycated hemoglobin,%	7,10±0,01	7,88±0,01	9,77±0,02*
Total cholesterol, mmol/l	4,4±0,11	4,71±0,12	5,22±0,15
Mild-density lipoproteins, mmol/l	1,97±0,28	2,75±0,16	2,78±0,16*

*Note: * - the difference with respect to mild quantitative indicators is reliable (*-r<0.05)*

The indicators of the level of depression according to the Beck questionnaire are presented in the folmilding:

Table №2

Depression levels	1- group (n=15)	2- group (n=13)	3- group (n=16)
Mild	40%**	31%	19%
Moderate severe	27%	38%	44%**
Severe	20%	31%	37%*
No depression	13%*	-	-

*Note: * - the difference with respect to mild quantitative indicators is reliable (*-r<0.05),*
***- the difference with respect to mild quantitative indicators is reliable (*-r<0.01).*

The indicators of the level of anxiety according to the Beck questionnaire are presented in the folmilding:

Table №3

Indicators	1- group (n=15)	2- group (n=13)	3- group (n=16)
Mild anxiety	20%	38%**	6%
Moderate anxiety	53%	62%	94%**
Potentially dangerous anxiety	27%***	-	-

*Note: ** - the difference with respect to mild quantitative indicators is reliable (*-r<0.01),*
****- the difference with respect to mild quantitative indicators is reliable (*-p<0.001).*

Conclusion. According to the results of the conducted research, a direct connection between diabetes and the development of depression and anxiety syndrome was found. An increase in the duration of diabetes was accompanied by an increase in the severity of depression, that is, the longer the disease lasted, the higher the severity of depression. The occurrence of anxiety syndrome in group 1 patients is reliably higher than in other groups, i.e. In the early years of the disease, anxiety was found to be at a high level. based on the above conclusions, by determining the psychoemotional status of patients diagnosed with diabetes at the time of their first consultation, comprehensive treatment together with

the main disease can ensure that patients do not suffer from diabetes and their quality indicators do not change negatively.

According to the results of this study, severe anxiety syndrome, carbohydrate and lipid metabolism disorders can be evaluated as important factors in the development of depression. Therefore, from the initial stages of treatment of patients diagnosed with diabetes, assessing the state of the psycho-emotional sphere, including anxiety and depressive disorders through medical-psychological questionnaires and psychodiagnostic tests, leads to an increase in economic efficiency in the treatment of their main diseases and, as a result, to an improvement in the quality of life.

Bibliography:

1. Abrahamian H., Kautzky-Willer A., Rießland-Seifert A. et al. Mental disorders and diabetes mellitus // Wien Klin Wochenschr. 2016. Vol. 128. Suppl 2. S. 170-178.

2. Calkin C., Gardner D., Ransom T., Alda M. The relationship between bipolar disorder and type 2 diabetes: more than just co-morbid disorders // Ann Med. 2013. Vol. 45 (2). P. 171—181.

3 Chien I, Lin C. Increased risk of diabetes in patients with anxiety disorders: A population-based study. J Psychosom Res. 2016;86:47-52.

4. Deschênes S, Burns R, Schmitz N. Associations between diabetes, major depressive disorder and generalized anxiety disorder comorbidity, and disability: Findings from the 2012 Canadian Community Health Survey — Mental Health (CCHS-MH). J Psychosom Res. 2015;78(2):137-142.

5. Ergashev A.D., Ibodullaev Z.R, Maxamatjanova N.M.- Covid-19 dan keyingi xavotir buzilishlarini samarali davolashda erikson gipnozini qo'llash-Jurnal nevrologii i neyroxirurgicheskix issledovaniy.-49 str.

6. Larcher S., Benhamou P., Pépin J., Borel A. Sleep habits and diabetes. Diabetes Metab // 2015. Vol. 41 (4). P. 263—271.

7. Maia A., Braga A., Brouwers A. et al. Prevalence of psychiatric disorders in patients with diabetes types 1 and 2 // Comprehensive Psychiatry. 2012. Vol. 53 (8). P. 1169—1173.

8. Maxamatjanova N.M. Mirxaydarova F.S. Mirxaydarova S.M.- The importance of diabetes in the development of depression. Инновационные исследования в современном мире: теория и практика 2 (8), 9-10

9. Maxamatjanova N.M. Mirxaydarova F.S. Mirxaydarova S.M.- Xavotir sindromi rivojlanishida qandli diabetning ahamiyati. Прикладные науки в современном мире: проблемы и решения 2 (2), 36-37

10. Starostina Ye.G. Saxarniy diabet i psixicheskiy rasstroystva. V kn.: Oslojneniya saxarnogo diabeta: lechenie i profilaktika / pod red. akademika RAN I.I. Dedova, M.V. Shestakovoy. M: Meditsinskoe informatsionnoe agentstvo, 2017. S. 705—743

11. Starostina Ye.G., Bobrov A.E., Moshnyaga Ye.N., Volodina M.N. Nepsixoticheskie psixicheskie rasstroystva pri saxarnom diabete // Uchenie zapiski Sankt-Peterburgskogo gosudarstvennogo universiteta im. akad. I.P. Pavlova. 2010. T. XVII. № 2, prilojenie. S. 29—31

12. Vinogradova Y, Coupland C, Hippisley-Cox J, Whyte S, Penny C. Effects of severe mental illness on survival of people with diabetes. British Journal of Psychiatry. 2010;197(4):272-277.

13. Whiting D, Guariguata L, Weil C, Shaw J. IDF Diabetes Atlas: Global estimates of the prevalence of diabetes for 2011 and 2030. Diabetes Res Clin Pract. 2011;94(3):311-321.

14. Whitworth SR, Bruce DG, Starkstein SE, Davis WA, Davis TM, Bucks RS. Lifetime depression and anxiety increase prevalent psychological symptoms and worsen glycemic control in type 2 diabetes: The Fremantle Diabetes Study Phase II. Diabetes Res Clin Pract. 2016;122:190-197.

15. Wu L., Ghitza U., Batch B. et al. Substance Use and Mental Diagnoses among Adults with and without Type 2 Diabetes: Results from Electronic Health Records Data // Drug Alcohol Depend. 2015. Vol. 156. P. 162—169..

16. Wu L, Ghitza U, Batch B, Pencina MJ, Rojas LF, Golstein BA, Schibler T. Substance use and mental diagnoses among adults with and without type 2 diabetes: Results from electronic health records data. Drug Alcohol Depend. 2015; 156:162-169.