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**Bodnar L. A., Zhyvotovska L. V., Skrypnikov A. M., Vorodyukhina A. K.****INDIVIDUAL PSYCHOLOGICAL CHARACTERISTICS OF PATIENTS WITH BODY DYSMORPHIC DISORDER SEEKING COSMETIC RHINOPLASTY****Poltava State Medical University (Poltava, Ukraine)**[bod.lesya@gmail.com](mailto:bod.lesya@gmail.com)

*Body dysmorphic disorder (BDD) is characterized by excessive attention to non-existent or minor defects in appearance. Most people with BDD do not realize that their defect is minimal or absent. They misjudge the psychiatric origin of their problems and often desire aesthetic treatment to solve their appearance problems, that is, they seek cosmetics for the treatment of a mental disorder.*

*The aim of the work was to study individual-psychological features of individuals with dysmorphophobia who sought help from a plastic surgeon for cosmetic rhinoplasty.*

*We conducted a comprehensive clinical and anamnestic, clinical and psychopathological, psychodiagnostic and socio-demographic examination of our patients. Diagnostic assessment and systematization of the revealed mental disorders was carried out in accordance with the criteria of the International Classification of Diseases (ICD-10).*

*The study group included 30 people who did not have cosmetic defects of the nose, but who paid unreasonable attention to it, were categorically dissatisfied with their nose and insisted on changing its shape. From a wide range of non-psychotic mental disorders, these patients were diagnosed with dysmorphophobic syndrome within the hypochondriacal disorder (F45.2). Depressive symptoms, assessed by the MADRS scale as mostly moderate, were found in the majority of patients. According to the STAI, more than half of the patients had a high level of personal anxiety, which prevailed in its level over situational anxiety. According to the results of the questionnaire by K. Leongard - H. Shmishchek, it was found that the patients most often had dysthymic and anxious types of accentuation, alone or in combination.*

*Given the lack of absolute and relative indications for surgical intervention in people with BDD, their efforts to achieve an ideal image solely through plastic surgery and solve personal problems, as well as individual psychological characteristics of people with dysmorphophobia revealed in the study, it is necessary to improve a comprehensive system of psychotherapeutic measures in combination with pharmacotherapy, in order to reduce psychopathological symptoms, improve the level of psychosocial functioning and create the preconditions for decision to abandon surgery.*

**Key words:** body dysmorphic disorder, cosmetic defect, rhinoplasty.

**Connection of the publication with planned research works.**

The study is a fragment of the research work «Clinical-psychopathological and paraclinical studies and optimization of treatment and rehabilitation measures for the main forms of mental pathology and comorbid disorders», state registration № 0121U108235

**Introduction.**

With the increase in the number and popularity of cosmetic procedures and interventions, doctors of related specialties are increasingly faced with patients with body dysmorphic disorder (BDD), characterized by excessive attention to non-existent or minor defects in their appearance [1]. The prevalence of BDD in the general population ranges from 1 to 2%, and in patients with dermatological and cosmetic surgery is from 2.9 to 24% [2-3].

BDD includes distorted body perception with excessive concern for an imaginary defect. Most patients experience certain disturbances in social or professional functioning, and as a result of obsessive anxiety they may develop compulsive behavior. In severe cases, there is a risk of suicide. It has been shown that the frequency of suicide in individuals with BDD is 45 times higher than in the general population. This is 2 times more than among people with depression and three

times more than among people with bipolar disorder. An association was also found between undiagnosed body dysmorphic disorder and a higher risk of suicide among people who underwent cosmetic surgery than in the general population [3]. Most people with BDD do not realize that their defect is minimal or absent. They misjudge the psychiatric origin of their problems and often desire aesthetic treatment to solve their appearance problems, that is, they seek cosmetics for the treatment of a mental disorder [2-5].

The central position of the nose on the face makes the nose one of the most common problem areas in patients with BDD. Thus, aesthetic rhinoplasty is considered one of the most frequently requested and performed surgical procedures in this population. However, there is growing agreement that BDD should be considered a contraindication for aesthetic rhinoplasty as there is no favorable outcome [4-12]. Therefore, given the ethical, safe and legal considerations associated with aesthetic procedures in these patients, accurate identification and appropriate selection of procedures are crucial.

**The aim of the study.**

To study individual-psychological features of individuals with dysmorphophobia who sought help from a plastic surgeon for cosmetic rhinoplasty.

**Object and research methods.**

The authors examined 30 subjects (7 men, 23 women, aged 19 to 30 years), who did not have cosmetic defects of the nose; however, these individuals fixed unreasonably great attention on the nose; they were categorically dissatisfied with their nose and persistently demanded to change its shape. In the history, such patients had repeated visits to plastic surgeons, repeated rhinoplasty, while the results of these operations did not satisfy patients. The main motive for visits to plastic surgeons for all subjects was the desire to achieve an ideal image and, due to a change in appearance, to establish broken interpersonal relationships, or to achieve success in the professional field, taking advantage of their own appearance.

Subsequently, after obtaining informed consent, a comprehensive clinical-anamnesic, clinical-psychopathological, psychodiagnostic and socio-demographic examination of this cohort of patients was carried out. Diagnostic assessment and systematization of the revealed mental disorders was carried out in accordance with the criteria of the International Classification of Diseases (ICD-10) [13].

Using the clinical-anamnesic method, the authors studied the anamnesis, features of development, motives for surgery, repeated consultations with a plastic surgeon, support for this decision by relatives. Using clinical-psychopathological examination, the authors analyzed the complaints, evaluated the state of somatic, neurological and mental sphere. Psychodiagnostic examination included the use of the Montgomery-Asberg scale for the assessment of depression (MADRS), State Trait Anxiety Inventory (STAI), characterological questionnaire of K. Leongard – G. Shmishek (1981) [14]. The authors performed a socio-demographic survey using a specially designed scheme, including the following characteristics: age, level of education, marital status, nature of work, financial situation.

For statistical processing of research results, the authors used parametric and non-parametric methods of variational statistics. The difference was considered statistically significant at  $p \leq 0.05$ . The calculations were performed on IBM PC Pentium using Excel and Statistica 6.0 for Windows.

**Research results and their discussion.**

It was found that although the subjects did not have deformities and defects of the nose, they asked plastic surgeons to reduce ( $n=11$ ; 36.7%) or enlarge ( $n=3$ ; 10.0%) the nose, wanted to eliminate the invisible and contrived hump ( $n=2$ ; 6.7%) or curvature ( $n=1$ ; 3.3%), but more often ( $n=13$ ; 43.3%) they could not even clearly explain their desires to the surgeon and persistently asked to make the nose “just beautiful” and to achieve “perfect proportions”. All subjects showed excessive anxiety about the “defect” of the nose and actively wished to correct it. It is characteristic that the majority of patients ( $n=17$ ; 56.7%) asked plastic surgeons for surgery for the second time, since all previous attempts to make their nose “perfect” and “ideal” were, in their opinion, unsuccessful.

Almost all of the subjects complained about the limitation of social contacts due to “ugliness” and their own inferiority. In their opinion, self-doubt and constant fear of criticism from others impeded success in their career and personal life. Therefore, the vast majority of indi-

viduals ( $n=22$ ; 73.3%) asked a plastic surgeon for cosmetic surgery in order to improve their social functioning. Relatives and friends of none of the 30 subjects did not support them in the decision to rhinoplasty. They considered these actions completely thoughtless and unreasonable, which further worsened the mental state of the patients.

All subjects were diagnosed with non-delusional dysmorphophobia within the hypochondriacal disorder according to ICD-10 (F45.2). All of them had a depressive or subdepressive mood background, predominant complex of ideas about the presence of a “physical handicap”, which had a very negative effect on their social and interpersonal functioning. The patients constantly looked closely at the “defect”, fixed their attention on the nose, constantly touched the nose; complained about the sensation of increased attention of others to the nose and hostility towards themselves, which was accompanied by a component of anxiety. Typical for the majority of patients ( $n=21$ , 70.0%) was a hypertrophied desire to hide their “defect” in all possible ways, using inventions of the cosmetic industry and bright jewelry. Quite often, such attempts were frankly unsuccessful and led to a completely opposite result. Most patients were overly critical of their appearance, despite the fact that people around did not attach particular importance or did not notice the “defect” at all.

Conspicuous is the fact that almost all subjects had a normal or even pleasant appearance, but believed that they were “ugly” because of their nose and avoided contact with people for fear of ridicule ( $n=27$ ; 90.0%). The majority of patients ( $n=23$ ; 76.7%) complained that even their relatives did not understand them, considering their problem a manifestation of stupidity or a desire to stand out. 22 (73.3%) subjects had signs of a mirror symptom, i.e. constant use of a mirror, attempts to find an advantageous angle in which the “defect” would be hardly noticeable, reasoning about what kind of nose correction they need. 16 subjects (53.3%) had the symptom of photography, i.e. categorical refusal to be photographed under any pretext, and the fear that the photo would “perpetuate their ugliness”.

Psychodiagnostic examination using the MADRS scale showed that, in general, depressive symptoms were detected in 26 (86.7%) subjects, and the average score was  $26.23 \pm 1.4$ , which corresponded to moderate depression. This was confirmed by individual analysis, according to which the vast majority of subjects ( $n=18$ ; 60.0%) had moderate depressive symptoms, 8 (26.7%) subjects had mild symptoms, and only 4 (13.3%) subjects had no depressive symptoms.

According to the State Trait Anxiety Inventory (STAI), it was shown that personal anxiety (PA) prevailed over situational anxiety (SA). Thus, the average PA was determined at a high level (more than 45 points) and was  $46.23 \pm 1.07$  points, which was confirmed by an individual analysis, according to which PA was high in 20 (66.7%) patients, moderate – in 10 (33.3%), and its low level was not reported at all. The average score of SA in the subjects was lower and was determined at a moderate level –  $37.96 \pm 1.26$  points. The individual analysis showed that the overwhelming majority of patients had a moderate level of SA ( $n=21$ ; 70.0%), every fifth ( $n=6$ ; 20.0%) had a low level and 3 patients (10.0%) had a high level. Individual analysis of the combination of different degrees

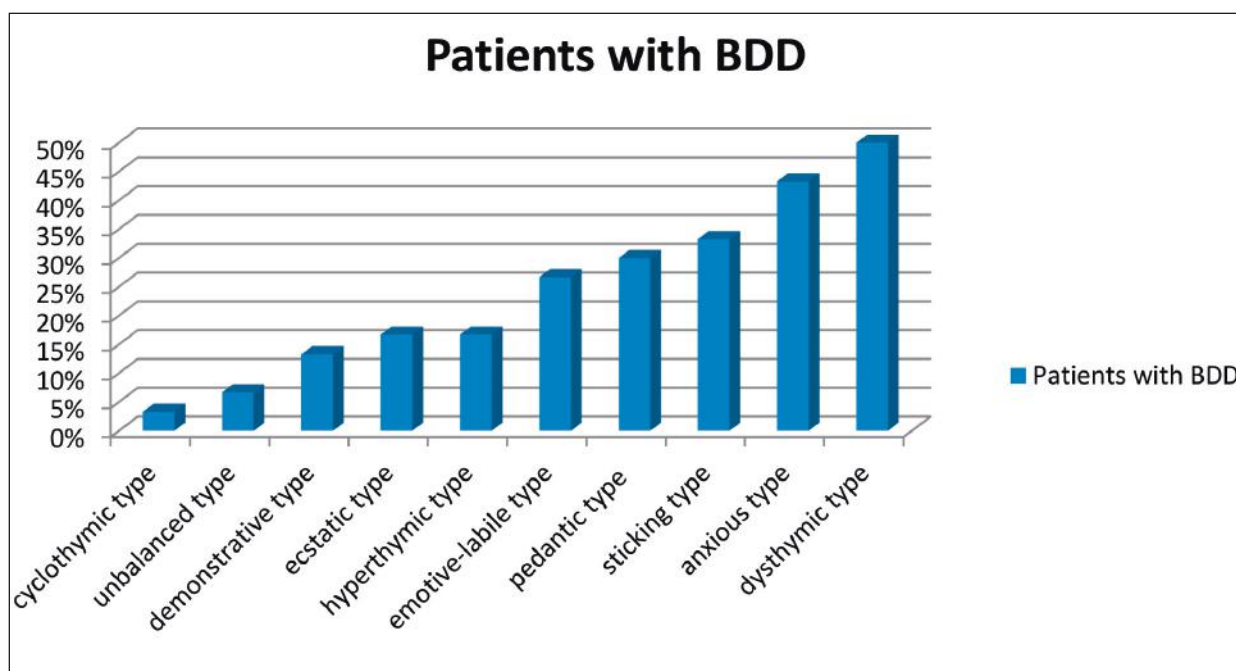


Figure – Accentuation of personality traits in patients with BDD.

of anxiety showed that most often (n=17; 56.7%) there was a combination of high levels of PA with moderate levels of SA. 3 (10.0%) patients had a combination of high severity of both types of anxiety, another 4 (13.3%) patients had a combination of moderate degrees, and 6 patients (20.0%) with low SA had a moderate level of PA.

To study the type and severity of accentuation of personality traits, the authors used the methodology of K. Leonhard-G. Shmishek (fig.).

It was found that patients most often (n=15; 50.0%) had a dysthymic type of accentuation of personality traits. In all patients, the score was determined in the range of 15-24 points, which indicated significant manifestations of obvious (18-24 points) dysthymic accentuation in 6 patients or a tendency (15-18 points) in 9 patients. When communicating with patients with dysthymia, there were difficulties due to their lack of contact, reticence and pessimistic attitude. Such patients had low self-esteem, were convinced of their own unattractiveness, fixed on this thought, which was reflected in behavior, conversation, perception of life and events.

The test results for almost half of the patients (n=13; 43.3%) indicated anxious accentuation (significant accentuation (n=5), tendency to accentuation (n=8)). Such patients were indecisive, passive, overly judicious. However, they still asked plastic surgeons to perform surgery because of self-doubt, their own unattractiveness, constant concern about the attitude of others, worries about an inferiority complex, intolerance to ridicule, inability to stand up for themselves, excessive self-criticism.

According to the test results, a third of the patients (n=10; 33.3%) had a sticking type of accentuation of personality traits: in the range of tendencies to obvious accentuation – 6 patients, minimal (10-12 points) and obvious (12-15 points) signs – 2 patients respectively. Patients with significant sticking accentuation “stick” on thoughts about the “inferiority” of their appearance, analysis of the defect; they were subject to prolonged

emotional distress, exhausting thoughts, and suspiciously monitored the reactions of others to themselves.

The pedantic type of accentuation of personality traits was found in 9 (30.0%) patients, mainly with a tendency to obvious accentuation (n=5), less often with obvious (n=3) or minimal (n=1) signs. Excessive seriousness, scrupulousness, reliability at work and neatness at home were combined with high demands on own appearance. In patients with significant signs of accentuation, this condition reached the level of obsessive thoughts with the desire to make their face perfect by nose correction.

Every fourth patient (n=8; 26.7%) had manifestations of emotive-labile accentuation, mainly at the level of tendency to obvious accentuation (n=5), less often – minimal signs (n=3). Such patients were emotional, sensitive, able to empathize and enjoy the success of others, but at the same time they were too vulnerable to insults, especially if such insults concerned their appearance.

Hyperthymic (n=5; 16.7%) and ecstatic (n=5; 16.7%) accentuation were reported with equal frequency, mainly with a tendency to obvious accentuation (3 patients, respectively) and with minimal symptoms (2 patients, respectively).

Demonstrative accentuation was observed in 4 (13.3%) subjects (tendency to obvious accentuation (2 patients) and minimal signs (2 patients)). Patients with demonstrative accentuations really wanted to draw attention to themselves, to achieve surprise among others, to cause admiration for their person. They were oppressed by the monotony, a closed circle of communication. Therefore, the decision to change the shape of the nose was made by such patients without the slightest hesitation. They believed that rhinoplasty would allow them to gain new impressions, sensations, and achieve an “ideal” image. Any disapproval of such actions by relatives or friends often provoked violent reactions.



According to the test results, some patients had unbalanced (n=2; 6.7%) and cyclothymic (n=1; 3.3%) accentuation at the level of tendency to obvious signs.

Thus, in the analysis of clinical and anamnestic data it was found that patients with BDD, who did not have cosmetic defects of the nose, sought to perform rhinoplasty to improve their social functioning, referred to plastic surgeons mainly more than once; these patients did not receive psychological satisfaction from previous operations, and did not have moral support and understanding from relatives and friends.

Of a wide range of non-psychotic mental disorders, patients were diagnosed with dysmorphophobic (100%) syndrome within hypochondriacal disorder (F45.2). Depressive symptoms, assessed on the MADRS scale mainly as moderate, were found in most subjects (n=18; 60.0%) with an average score of 26.23±1.4. According to the STAI, 66.7% of patients had a high level of personal anxiety with an average score of 46.23±1.07 points, which was significantly (p<0.001) higher compared with situational anxiety with an average score of (37.96±1.26 points), which corresponded to a moderate level. According to the results of the questionnaire of K. Leonard – G. Shmishek, it was found that the patients most often had dysthymic (50.0%) and anxiety (43.3%) types of accentuation, alone or in combination.

#### Conclusions.

Given the lack of absolute and relative indications for surgical intervention in this cohort of individuals,

their efforts to achieve an ideal image solely through plastic surgery, to solve personal problems, to establish disturbed interpersonal relationships, to succeed in the professional sphere, and the results of clinical and psychopathological and pathopsychological characteristics of such patients, it is necessary to improve a comprehensive system of psychotherapeutic measures in combination with pharmacotherapy, in order to reduce psychopathological symptoms, improve the level of psychosocial functioning and create the preconditions for decision to abandon surgery.

To prevent dissatisfaction with surgery in such patients, as well as in the context of the growing importance of forensic arguments, the surgeon performing rhinoplasty should be familiar with BDD. Educating professionals to systematic examination, diagnose and refer these patients to adequate psychiatric treatment is important given the high prevalence of BDD in surgical patients and the fact that cosmetic procedures improve the condition of these patients only in isolated cases.

#### Prospects for further research.

It would be advisable to further study the mental characteristics of patients with BDD in order to reasonably optimize treatment tactics, including a comprehensive system of psychotherapeutic measures in combination with pharmacotherapy.

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### ІНДИВІДУАЛЬНО-ПСИХОЛОГІЧНІ ОСОБЛИВОСТІ ОСІБ З ДИСМОРФОФОБІЄЮ, ЩО ПРАГНУТЬ КОСМЕТИЧНОЇ РИНОПЛАСТИКИ

Боднар Л. А., Животовська Л. В., Скрипніков А. М., Вородюхіна А. К.

**Резюме.** Зі збільшенням кількості та популярності косметичних процедур та операцій лікарі суміжних спеціальностей все частіше стикаються з пацієнтами з дисморфофобічним розладом тіла, що характеризується надмірною увагою до неіснуючих або незначних дефектів зовнішнього вигляду. Центральне положення носа на обличчі робить ніс однією з найбільш частих проблемних областей у пацієнтів з дисморфофобією. Тому, естетична ринопластика є хірургічною процедурою, на яку зберігається постійний попит серед цих осіб. Метою роботи було визначення індивідуально-психологічних особливостей осіб з дисморфофобією, що звернулися до пластичного хірурга для проведення косметичної ринопластики. Пацієнтам було проведено комплексне клініко-анамнестичне, клініко-психопатологічне, психодіагностичне та соціально-демографічне обстеження. Діагностична оцінка і систематизація виявлених психічних порушень проводилась у відповідності до критеріїв Міжнародної класифікації хвороб 10 перегляду. В досліджувану групу було включено 30 осіб, які не мали косметичних вад носа, однак фіксували на ньому невиправдано велику увагу, були категорично неза-

доволені своїм носом і наполегливо вимагали змінити його форму. Із широкого спектру неспсихотичних психічних розладів у цих пацієнтів діагностовано дисморфофобічний синдром в межах іпохондричного розладу (F45.2). Депресивна симптоматика, оцінена за шкалою Монтгомері-Асберга (MADRS) переважно як помірно виражена, була виявлена у більшості обстежених (n=18; 60,0%) із середнім бальним показником 26,23±1,4. Аналіз тривожності за методикою Ч.Д.Спілбергера – Ю.Л.Ханіна виявив у 66,7% обстежених високий рівень особистісної тривожності із середнім бальним показником 46,23±1,07, що виявилось значимо (p<0,001) вище за ситуативну, середнє значення якої визначалося на помірному рівні (37,96±1,26 бали). За результатами опитування за методикою К.Леонгарда-Г.Шмішека встановлено, що в обстежених найчастіше виявлялися окремо або в поєднаннях дистимічний (50,0%) та тривожний (43,3%) типи акцентуації характеру.

Враховуючи відсутність абсолютних та відносних показань до оперативного втручання в даної когорти осіб, їхнє намагання виключно за допомогою пластичної хірургії досягти ідеального образу, владнати проблеми особистісного плану, налагодити порушені міжособистісні стосунки, досягти успіху в професійній сфері, а також отримані результати аналізу клініко-психопатологічних та патофизиологічних характеристик таких пацієнтів, є необхідним вдосконалення комплексної системи психотерапевтичних заходів в поєднанні з фармакотерапією, з метою зменшення психопатологічної симптоматики, покращення рівня психосоціального функціонування та створення передумови для прийняття рішення про відмову від операції.

**Ключові слова:** дисморфофобія, косметичний дефект, ринопластика

#### INDIVIDUAL PSYCHOLOGICAL CHARACTERISTICS OF PATIENTS WITH BODY DYSMORPHIC DISORDER SEEKING COSMETIC RHINOPLASTY

**Bodnar L. A., Zhyvotovska L. V., Skrypnikov A. M., Vorodyukhina A. K.**

**Abstract.** The popularity of cosmetic procedures and surgeries is increasing every year. Patients with body dysmorphic disorder (BDD) are seeing more and more physicians from related specialties. The nose, with its central position on the face, is one of the most common problem areas in patients with BDD. Therefore, aesthetic rhinoplasty is a surgical procedure with a constant high demand among these individuals. The aim of the work was to study individual-psychological features of individuals with dysmorphophobia who sought help from a plastic surgeon for cosmetic rhinoplasty. We conducted a comprehensive clinical and anamnestic, clinical and psychopathological, psychodiagnostic and socio-demographic examination of our patients. Diagnostic assessment and systematization of the revealed mental disorders was carried out in accordance with the criteria of the International Classification of Diseases (ICD-10). The study group included 30 people who did not have cosmetic defects of the nose, but who paid unreasonable attention to it, were categorically dissatisfied with their nose and insisted on changing its shape. From a wide range of non-psychotic mental disorders, these patients were diagnosed with dysmorphophobic syndrome within the hypochondriacal disorder (F45.2). Depressive symptoms, assessed on the MADRS scale mainly as moderate, were found in most subjects (n=18; 60.0%) with an average score of 26.23 ± 1.4. According to the State Trait Anxiety Inventory (STAI), 66.7% of patients had a high level of personal anxiety with an average score of 46.23 ± 1.07 points, which was significantly (p < 0.001) higher compared with situational anxiety with an average score of (37.96 ± 1.26 points), which corresponded to a moderate level. According to the results of the questionnaire of K. Leongard – G. Shmishek, it was found that the patients most often had dysthymic (50.0%) and anxiety (43.3%) types of accentuation, alone or in combination.

Given the lack of absolute and relative indications for surgical intervention in this cohort of individuals, their efforts to achieve an ideal image solely through plastic surgery and solve personal problems, the results of clinical and psychopathological and pathopsychological characteristics of such patients, it is necessary to improve a comprehensive system of psychotherapeutic measures in combination with pharmacotherapy, in order to reduce psychopathological symptoms, improve the level of psychosocial functioning and create the preconditions for decision to abandon surgery.

**Key words:** body dysmorphic disorder, cosmetic defect, rhinoplasty.

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#### Conflict of interest:

There is no conflict of interest between co-authors in the article.

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