DOI: https://doi.org/10.17816/nb637196

Gender Identity Disorders in Schizophrenia

Vladimir E. Medvedev[1–3], Sergei I. Gushanski[1, 4]

[1] Peoples' Friendship University of Russia, Moscow, Russia;
[2] Clinical Hospital No. 1 (Volynskaya), Moscow, Russia;
[3] International Institute of Psychosomatic Health, Moscow, Russia;
[4] Psychiatric Clinical Hospital No. 13, Moscow, Russia

ABSTRACT

BACKGROUND: Aspects related to the clinical differentiation of gender identity disorders in patients with schizophrenia remain insufficiently studied.

AIM: To examine the clinical and psychopathological characteristics of gender identity disorders in schizophrenia spectrum disorders in terms of their typology, dynamics, and treatment.

MATERIALS AND METHODS: The study included 35 patients aged 18–65 years diagnosed with schizophrenia or schizotypal disorder according to the ICD-10, who reported dissatisfaction with their biological gender. Clinical-psychopathological, clinical-catamnestic, and statistical research methods were used.

RESULTS: A typological differentiation of gender identity disorders was conducted, determined by the structure of mental disorders and the patterns of the endogenous process course. The studied conditions were classified into two types: in Type 1, gender identity disorders manifested within the framework of affective-delusional psychoses in episodic schizophrenia (*n*=13), while in Type 2, they were observed in schizotypal disorder (*n*=22). In Type 1, the manifestation of gender identity disorders predominantly (69.2% of cases) occurred between the ages of 21 and 24 years. As schizophrenia progressed, 38.5% of cases showed a complication of delusional themes, with the emergence of characteristic signs of Kandinsky–Clérambault syndrome. At the peak of depressive-delusional psychosis, patients "suddenly realized" that they "belonged to the opposite gender" and began to "recall" and exaggerate past events that allegedly confirmed their belief. The further dynamics of gender identity disorder unfolded in phases. As the affective-delusional psychosis resolved, ideas of gender transition faded. Over time, patients developed two stable symptom complexes — hypochondriacal or dissociative. In Type 2, gender identity disorders primarily occurred within the framework of schizotypal disorder. Their development was observed against the background of monopolar depressive disorders with features of "metaphysical intoxication." Further progression of Type 2 gender identity disorders was not distinctly linked to the dynamics of other psychopathological disorders, with gender transition ideas becoming overvalued or paranoid in nature.

CONCLUSION: The study identified clinical-dynamic types of gender identity disorders based on the structure of mental disorders and the patterns of the endogenous process course.

Keywords: gender identity disorders; schizophrenia; therapy.

To cite this article:
Medvedev VE, Gushanski SI. Gender Identity Disorders in Schizophrenia. *Neurology Bulletin.* 2025;57(1):12–19. DOI: https://doi.org/10.17816/nb637196

Received: 18.10.2024 **Accepted:** 25.10.2024 **Published online:** 21.01.2025

Article can be used under the CC BY-NC-ND 4.0 International License
© Eco-Vector, 2024

DOI: https://doi.org/10.17816/nb637196

Расстройства половой идентификации при шизофрении

В.Э. Медведев[1–3], С.И. Гушанский[1, 4]

[1] Российский университет дружбы народов им. Патриса Лумумбы, Москва, Россия;
[2] Клиническая больница № 1 (Волынская), Москва, Россия;
[3] Международный институт психосоматического здоровья, Москва, Россия;
[4] Психиатрическая клиническая больница № 13, Москва, Россия

АННОТАЦИЯ

Обоснование. Вопросы, касающиеся клинической дифференциации расстройств половой идентификации у больных шизофренией, изучены недостаточно полно.

Цель. Изучение клинико-психопатологических характеристик расстройств половой идентификации при заболеваниях шизофренического спектра в аспекте типологии, динамики и терапии.

Материалы и методы. Исследовали 35 пациентов 18–65 лет с диагнозами «шизофрения» и «шизотипическое расстройство» по МКБ-10, которые сообщили о неудовлетворённости своим биологическим полом. Использовали клинико-психопатологические, клинико-катамнестические и статистические методы исследования.

Результаты. Проведена типологическая дифференциация расстройств половой идентификации, которая определялась структурой психических расстройств, а также закономерностями течения эндогенного процесса. Исследуемые состояния были разделены на два типа: при 1-м типе расстройства половой идентификации манифестировали в рамках аффективно-бредовых психозов приступообразной шизофрении (n=13), при 2-м типе — при шизотипическом расстройстве (n=22). При 1-м типе манифест расстройств половой идентификации в подавляющем большинстве случаев (69,2%) относился к периоду 21–24 лет. На фоне прогредиентного течения шизофрении в 38,5% наблюдений отмечалось усложнение фабулы бредовых расстройств, появление характерных признаков синдрома Кандинского. На высоте депрессивно-бредового психоза пациенты «внезапно осознавали», что «относятся к противоположному полу», начинали «вспоминать» и гиперболизировать события прошлого, подтверждающие их идею. Дальнейшая динамика расстройства половой идентификации реализовалась фазно. По мере разрешения аффективно-бредового психоза идеи смены пола нивелировались. В дальнейшем у пациентов отмечалось формирование двух видов устойчивых во времени симптомокомплексов — ипохондрического или диссоциативного. При 2-м типе расстройства половой идентификации реализовывались преимущественно в рамках шизотипического расстройства. Развитие расстройства половой идентификации отмечалось на фоне монополярных депрессивных расстройств с явлениями «метафизической интоксикации». Дальнейшее прогрессирование расстройств половой идентификации 2-го типа не имело отчётливых связей с динамикой других психопатологических расстройств, идеи смены пола приобретали сверхценный или параноильный характер.

Заключение. В ходе исследования проведена клинико-динамическая типологическая дифференциация расстройств половой идентификации, которая определялась структурой психических расстройств, а также закономерностями течения эндогенного процесса.

Ключевые слова: расстройства половой идентификации; шизофрения; терапия.

Как цитировать:
Медведев В.Э., Гушанский С.И. Расстройства половой идентификации при шизофрении // Неврологический вестник. 2025. Т. 57, № 1. С. 12–19. DOI: https://doi.org/10.17816/nb637196

Рукопись получена: 18.10.2024 **Рукопись одобрена:** 25.10.2024 **Опубликована online:** 21.01.2025

ЭКО•ВЕКТОР
Статья доступна по лицензии CC BY-NC-ND 4.0 International
© Эко-Вектор, 2024

DOI: https://doi.org/10.17816/nb637196

Шизофрения вакытында җенес идентификациясе тайпылышлары

В.Э. Медведев[1–3], С.И. Гушанский[1,4]

[1] Патрис Лумумба ис. Россия халыклар дуслыгы университеты, Мәскәү, Рәсәй;
[2] № 1 клиник хастаханә (Волынск), Мәскәү, Рәсәй;
[3] Халыкара психосоматика сәламәтлеге институты, Мәскәү, Рәсәй;
[4] № 13 психиатрия клиник хастаханәсе, Мәскәү, Рәсәй

АННОТАЦИЯ

Нигезләмә. Шизофрения вакытындагы җенес идентификациясен клиник яктан дифференциацияләүгә кагылышлы мәсьәләләр әлегә тулысынча өйрәнелмәгән.

Максат. Шизофрения спектры авырулары вакытындагы җенес идентификациясе тайпылышларының клиник-психопатологик характеристикаларын типология, динамика һәм дәвалау аспектлары буенча өйрәнү.

Материаллар һәм алымнар. МКБ-10 буенча «шизофрения» һәм «шизотипик тайпылыш» диагнозы куелган, үзләренең биологик җенесеннән канәгать булмаган 18–65 яшьлек 35 пациентны тикшерәләр. Тикшеренүдә клиник-психопатологик, клиник-катамнестик һәм статистика алымнары кулланыла.

Нәтиҗәләр. Җенес идентификациясе тайпылышларынына типологик дифференция уздырыла, психик тайпылышларның структурасы, эндоген процессларның закончалыклары билгеләнә. Тикшерелә торган халәтләр ике типка бүлеп карала: беренче тип тайпылышлар өянәксыман шизофрениянең аффектив-саташулы психозлары кысаларында (*n*=13), икенче тип-шизотипик тайпылышлар вакытында (*n*=22) манифестацияләнә. 1-нче тип очрагында җенси идентификация бозылу манифесты күпчелек очракта (69,2%) 21–24 яшьләргә туры килә. Шизофрениянең прогредиент агымы фонында күзәтүләрнең 38,5% саташулы тайпылышлар фабуласының катлауланууын, Кандинский синдромының характерлы билгеләре барлыкка килүне күрсәтә. Депрессия-саташу психозының иң югары ноктасында пациентлар «кисәк кенә үзләренең капма-каршы җенескә карауларын» тоялар, аларның идеяләрен раслаучы үткәндәге вакыйгаларны гадәттән тыш көчәйтеп, арттырып искә төшерә башлыйлар. Алга таба тайпылышлар динамикасы динамикасы фазалап үсә, җенес алыштыру идеяләре нивелирлана. Икенче тип очрагында тайпылышлар күбесенчә шизотипик тайпылыш кысаларында гамәлгә ашырыла. Җенес идентификациясе тайпылышларының үсеше «метафизик интоксикация» күренешләре белән үрелеп бара торган монополяр депрессия тайпылышлары фонында бара. Икенче тип җенес идентификациясе тайпылышларының алга таба үсеше башка төр психопатология тайпылышларының динамикасы арасында ачык чагылган бәйләнешләр күзәтелми, җенесне алыштыру идеяләре паранойя характерын ала.

Йомгак. Тикшерү барышында җенес идентификациясе тайпылышларына клиник-типологик дифференциация уздырыла, психик тайпылышларның структурасы, эндоген процессларның закончалыклары билгеләнә.

Төп сүзләр: җенес идентификациясе тайпылышлары; шизофрения; дәвалау.

Өземтәләр ясау өчен:
Медведев В.Э., Гушанский С. И. Шизофрения вакытында җенес идентификациясе тайпылышлары // Неврология хәбәрләре. 2025. Т. 57, № 1. 12–19 б. DOI: https://doi.org/10.17816/nb637196

Кулъязма алынган: 18.10.2024 **Кулъязма хупланган:** 25.10.2024 **Бастырылган online:** 21.01.2025

ЭКО•ВЕКТОР
Статья доступна по лицензии CC BY-NC-ND 4.0 International
© Эко-Вектор, 2025

BACKGROUND

The issue of gender identity disorder (GID) has been studied since the second half of the 19th and early 20th centuries [1–5]. Scientific evidence from the early and mid-twentieth century provides several examples of clinical cases in which patients with GID insisted on castration surgery for males and removal of the mammary glands, uterus, and appendages for females [6–10]. Contemporary scientific data is indicative of an expansion in the spectrum of gender identity, with the inclusion of non-binary gender identity, at the expense of patients with fluid identity who do not wish to choose between male and female sex [11, 12].

In the contemporary discourse, the terms, including *gender identity disorders*, *transsexualism*, *transgenderism*, and *gender (sexual) dysphoria*, are used to describe sexual identity disorders [13–16]. This diversity is primarily attributable to the absence of a unified approach in the existing classifications. The 10th Revision of the International Classification of Diseases (ICD-10) employs the term transsexualism, underscoring the necessity to distinguish transsexualism from other mental disorders, including schizophrenia and GID in organic brain lesions and personality disorders. In the 2013 edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), the diagnosis of GID was moved from the category of sexual disorders to a separate category and renamed. Thus, the term *gender dysphoria* is used instead of *gender identity disorder*. In the 11th Revision of the International Classification of Diseases (ICD-11), the definition of gender identity-related health has changed again. The diagnostic categories transsexualism and *gender identity disorder of childhood* are replaced by the terms *gender incongruence of adolescence and adulthood and gender incongruence of childhood*. Gender incongruence has been relocated from the chapter "Mental and Behavioral Disorders" to a new stand-alone chapter "Conditions Related to Sexual Health". The changes in approaches to the classification of GID may reflect the depsychopathologization of these conditions and the shift in emphasis to the psychosocial aspects of the problem. These changes may also be aimed at preventing stigmatization [15–17]. However, the scientific validity of these approaches remains controversial [18–21].

According to foreign authors, the comorbidity of GID with other psychiatric disorders is approximately 30%–80%, with personality disorders reaching 20%–60% [15, 16]. Other prevalent comorbidities associated with GID include affective disorders (45%–60% current depression, 60% history) and anxiety disorders (35%–40% current anxiety, 28% history) [14–16]. Furthermore, approximately 30% of transsexuals have either a history of suicide attempts or report suicidal ideation [15, 16]. The coexistence of these psychiatric disorders with GID has been demonstrated to result in more profound interpersonal, social, and sexual maladjustment [13, 14].

Despite the changing classification of GID and the presence of comorbidities, researchers question whether GID is an independent disorder or a syndrome within other mental disorders [19, 22, 23]. Some studies consider the possibility of both. For example, Starostina and Yagubov consider transsexualism to be an independent disorder and make a differential diagnosis with schizophrenia spectrum disorders, in which GID is evaluated as a syndrome [24]. According to Smith et al., in some patients with schizophrenia, gender dysphoria is not associated with psychotic disorders and often precedes the onset of psychotic symptoms [25]. In this respect, the separation of transsexual patients into a specific group is questionable.

The comorbidity between GID and schizophrenia has been examined by Russian and foreign researchers. For example, Russian authors have noted that among individuals with GID, schizophrenia spectrum disorders account for approximately 24% [23, 24, 26, 27]. Consequently, Grigorieva's thesis (2005) concludes that the development of schizophrenia within the context of GID syndrome is characterized by a specific form of informational illumination, thereby attributing the delusional nature of the concepts of sexual metamorphosis [22]. According to other researchers, schizophrenia may influence the clinical manifestations of GID [24, 26, 27].

Currently, the issues related to the clinical differentiation of GID in patients with schizophrenia are insufficiently studied. Aspects of personality predisposition, psychopathological mechanisms of GID development and differentiation, clinical varieties of this phenomenon, and peculiarities of psychopharmacotherapy and psychotherapy in patients with GID in schizophrenia remain poorly or inconsistently addressed.

The study aimed to investigate the clinical and psychopathological characteristics of GID in schizophrenia spectrum disorders in terms of typology, dynamics, and therapy.

MATERIALS AND METHODS

A total of 35 patients aged 18–65 years with the diagnosis of schizophrenia (F20) and schizotypal personality disorder (F21) according to ICD-10 were examined at the Department of Psychiatry, Psychotherapy, and Psychosomatic Pathology of the People's Friendship University of Russia (Moscow). These patients reported dissatisfaction with their biological sex. The study was approved by the Ethics Committee of the People's Friendship University of Russia (Protocol No. 7 dated September 21, 2022).

Exclusion criteria: organic lesions of the central nervous system, other psychiatric disorders, and severe somatic diseases. Patients with endocrine and genetic diseases resulting in GID were not included in the study.

Clinical, psychopathological, follow-up, and statistical research methods were used.

RESULTS

Out of 35 examined patients, 20 were male at birth and 15 were female at birth. The mean age of patients with male sex at birth was 34.7 years, and that of patients with female sex at birth was 32.5 years.

The study demonstrated the clinical and dynamic heterogeneity of schizophrenia with GID. The typological differentiation of GID was determined by the structure of the mental disorders, as well as by the regularities of the endogenous process.

The studied conditions were classified into two types: in Type 1, GID manifested within the affective and delusional psychoses of episodic schizophrenia (*n*=13), whereas in Type 2, they were observed in schizotypal personality disorder (F21; *n*=6) and paranoid schizophrenia (F22.81; *n*=16).

Regardless of the type of schizophrenic process, 91.4% of patients exhibited aggravated heredity, including psychiatric disorders (42.9%), alcohol and drug abuse (40.0%), and suicides (8.6%). Meanwhile, 80.0% of patients demonstrated residual organic genesis, including perinatal and prenatal problems (25.7%), enuresis in preschool and early school age (37.1%), history of craniocerebral trauma (40.0%), and neuroinfections and intoxication with psychoactive substances (17.1%), clinically manifested by intolerance to stuffy rooms, hot weather, motion sickness on rides, frequent headaches, concentration difficulties, and memory impairment. The majority of patients exhibited neurotic disorders during their childhood, with 80.0% of cases manifesting as specific fears, such as the dark or heights.

The premorbid characteristics of patients included a predominant combination of schizoid (51.4%), hysterical (25.7%), and sensitive (22.9%) traits, which manifested as challenges in adapting to group settings among children. Among their peers, the patients exhibited withdrawal, preferred quiet activities, and were frequently ridiculed.

In most observations (88.6%), GID occurred in conjunction with affective disorders, including depression (68.6%) and mania (6.7%). In some cases (25.7%), there was psychogenic harm (conflicts or losses) at the initial stages of GID. In addition to GID, the prevalence of dysmorphic disorders (91.4%), depersonalization (68.6%), and autoaggressive tendencies (48.6%) was observed in patients with schizophrenia. In all cases, GID developed according to the mechanism of sudden insight, with a re-evaluation of past events, pseudoreminiscences, and the emergence of dominant ideas about one's own sex.

Despite the presence of common hereditary, premorbid, and comorbid psychopathological syndromes, the other clinical and dynamic characteristics of the two isolated types of GID were different.

In Type 1, the manifestation of GID (8 female and 5 male patients at birth) predominantly (69.2% of cases) occurred between the ages of 21–24 years. The development of GID was preceded by affective disorders (bipolar and monopolar in 69.2% and 30.8% of cases, respectively) and dysmorphic symptoms manifesting in adolescence. Dissatisfaction with their appearance mainly concerned changes in secondary sexual characteristics (genitals, mammary glands, hairiness, and body shape). In another 15.4% of cases, adolescence and early adolescence were accompanied by somatopsychic depersonalization with a feeling of alienation from one's own body (patients felt uncomfortable belonging to their own sex). Gradually, patients developed the conviction that others treated them with judgment and "laughed at their ugliness". The development of attitudinal delusions was concomitant with depressive symptoms, including depressed mood, anxiety, and sleep and appetite disturbances. In 46.2% of cases, patients exhibited suicidal ideation in conjunction with depressive symptoms. As schizophrenia progressed, 38.5% of cases showed a complication of delusional themes, with the emergence of characteristic signs of Kandinsky–Clérambault syndrome. These cases also exhibited paranoid ideation, including beliefs of influence and persecution. Furthermore, several patients exhibited delusions of possession, characterized by paranoid ideation of being "possessed by a being of the opposite sex" who "put thoughts into them and discussed and directed their actions". Pseudohallucinosis, characterized by the presence of voices in the patient's head, was observed in 38.5% of cases, with these voices reportedly commenting and giving orders.

At the peak of depressive-delusional psychosis, more often (69.2%) after receiving random information from the media or the Internet about transsexualism, patients "suddenly realized" that they "belong to the opposite sex" and began to "recall" and exaggerate past events that confirmed their belief.

In most cases (92.3%), patients reported sexual fantasies and attraction toward members of the same sex, perceiving these inclinations as constant, and engaging in casual same-sex encounters.

Autoaggressive tendencies were not observed in this particular type of GID. However, a proportion of patients (15.4%) initiated hormone therapy independently, devoid of medical supervision, with the objective of altering their physical appearance. Visits to endocrinologists and passport offices to change the name were episodic and not systemic.

All patients were followed-up by psychiatrists, repeatedly hospitalized in psychiatric hospitals, and exhibited an attack-like progressive course of paranoid schizophrenia. In most cases, the disease manifestation was unfavorable, leading to social disadaptation and disability. In eight cases (61.5%), patients had group 2 disability.

The further dynamics of GID unfolded in phases. As the affective-delusional psychosis resolved, either autochthonously (30.8%) or as a result of psychopharmacotherapy (69.2%), the ideas of sex reassignment subsided along with other productive and affective symptoms.

The first group of patients was treated in accordance with the clinical guidelines of the Russian Society of Psychiatry [28]; the treatment aimed to address acute psychotic symptoms, affective disorders, and the deactualization of delusions. Atypical neuroleptics were most effective in the treatment of psychotic disorders, with olanzapine (10–20 mg/day; 38.5%), risperidone (4–6 mg/day; 23.1%), quetiapine (400–600 mg/day; 15.4%), aripiprazole (up to 20 mg/day; 15.4%), and clozapine (up to 150 mg/day; 7.7%). In depressive symptoms, the drugs of choice were selective serotonin reuptake inhibitors, such as fluvoxamine (200 mg/day; 69.2%) and sertraline (225 mg/day; 15.4%), and serotonin-noradrenaline reuptake inhibitors, such as venlafaxine (up to 150 mg/day; 15.4%) [28]. During psychopharmacotherapy, a reduction in GID and the emergence of partial criticism were observed.

The subsequent psychotherapeutic treatment of patients with Type 1 GID (61.5%) was aimed at deactualizing sex reassignment attitudes and achieving psychosocial and psychosexual adjustment of the patients. The psychotherapy involved a multimodal integrative approach, with the selection of psychotherapeutic methods based on modern approaches described in published studies [29, 30]. Cognitive behavioral psychotherapy was used to reduce anxiety, depressive symptoms, stress, and emotional tension, as well as to change irrational attitudes to reduce self-stigmatization and the level of sensitivity to the opinions of others. In addition, group and family psychotherapy methods were used [29–32].

Over time, patients developed two stable symptom complexes — hypochondriacal or dissociative.

In the hypochondriacal development (61.5% of cases), despite the presence of officially altered data in documents or hormone intake, patients declined further efforts to change their sex due to hypochondriacal fear of possible complications from current hormone therapy and future surgical interventions.

In the dissociative development (38.5% of cases), patients reported perceiving GID as the influence of their own subpersonality coexisting "inside them", "their second self of a different sex with a different name and a different character", now "controlled" and perceived critically. Moreover, the refusal to continue with sex reassignment was motivated by a "change of life priorities" and an "adjustment" of sexual and social life.

In Type 2, primarily manifested as paranoid schizophrenia (72.7%) and schizotypal personality disorder (27.3%), GID was predominantly (81.8%) diagnosed at an earlier age (11–14 years) compared with Type 1 GID. In all cases, the dysmorphic ideas preceding GID were not only related to gender characteristics, but also to other parts of the body (face shape, nose, ears, lips, bite, cheekbones, waist, hands, hips, thighs, ankles, and feet). Depersonalization, both somatopsychic (45.5%) and autopsychic (54.5%), was typical of all patients with Type 2 GID. Patients reported a feeling of "own alteration", "alienation of the ugly body", and "discomfort of being in this body". Most patients (77.3%) resorted to self-aggression (cutting, burning, scratching, and stripping) to "correct" their appearance and "restore sensitivity".

GID manifested along with monopolar depressive disorders with metaphysical intoxication. Patients lost interest in studies, had thoughts that they "did not fit into this world", ideas of low value, and suicidal intent. After accidentally reading information about transgenderism, patients "suddenly" concluded that all the symptoms they were experiencing were due to their gender non-conformity. In contrast to Type 1 GID, there was a complete absence of any homosexual motivation (fantasies, attractions, deviations, and experiences) for sex reassignment.

In 22.7% of cases, the initial stage of GID was characterized by contrast obsessions. The further course of Type 2 GID had no clear connection with the dynamics of other psychopathological disorders. It did not decrease with the normalization of the emotional background, the stabilization of dysmorphic and depersonalization symptoms, or with the addition of neurosis-like symptoms (obsessive doubts, rituals, and mysophobia, 72.7%), panic (22.75%), and eating disorders (anorexia, 13.6%). Conversely, sex reassignment thoughts became supratentorial or paranoid. Most patients (86.4%) exhibited behaviors that were deliberately provocative and demonstrative, which frequently led to conflicts in both the workplace and the family. These behaviors included defending their ideas, wearing clothes of the opposite sex, demanding to be addressed by the name of the opposite sex, and using cosmetics. In 95.5% of cases, the patients resorted to hormone therapy without consulting a physician. Psychiatrists and endocrinologists were consulted 1–2 years after the initiation of hormone therapy to obtain a certificate confirming the absence of contraindications to sex reassignment "after the transition had already begun". After achieving the desired results, three patients (13.6%) underwent surgical sex reassignment and changed their documents. Other patients expressed their firm intention to finalize their sex reassignment plans, save funds for surgery abroad, and then change their country of residence to create a "traditional" mixed-sex family.

The highest efficacy in the treatment of patients with Type 2 GID (63.6%) was achieved with lower doses of atypical antipsychotics than in Type 1 GID [5]. Therapy included quetiapine (50–100 mg/day; 18.2%), olanzapine (5 mg/day; 18.2%), ziprasidone (40 mg/day; 13.6%), paliperidone (6 mg/day; 13.6%), and aripiprazole (10 mg/day; 13.6%).

The objective of psychotherapy in patients with Type 2 GID was to achieve psychosocial and psychosexual adaptation, de-actualization of sex reassignment, and was conducted at all stages of follow-up. A multimodal integrative approach was used, incorporating methods of group and family psychotherapy, as well as cognitive behavioral psychotherapy [29–32].

CONCLUSION

A pilot clinical study of a representative sample of patients has shown that GID, regardless of the type of schizophrenia spectrum disorders, is characterized by aggravated heredity, residual organic background, and neurotic disorders in childhood. Patients have difficulty adapting among their peers.

In most cases, the development of GID is preceded by symptoms of dysmorphia, depersonalization, and affective disorders. GID manifests together with depression via the mechanism of sudden insight, with reevaluation of past events, pseudoreminiscences, and the development of dominant ideas about one's own sex.

However, given the heterogeneity of GID in schizophrenia spectrum disorders, clinical differentiation is determined by the type and course of schizophrenia spectrum disorders in which GID develop.

Two types of GID have been identified. Type 1 GID is closely related to affective delusional disorders. It is characterized by phase dynamics, in which a GID attack occurs with normalization of symptoms and resolution of other productive symptomatology.

Type 2 GID is characterized by supratentorial or paranoid manifestations, distinct from the dynamics of other psychopathological symptom complexes. Treatment efficacy primarily encompasses the management of affective, anxiety, and neurosis-like symptoms.

Psychotherapy for both GID types is aimed at achieving psychosocial and psychosexual adjustment of patients, accompanied by deactualization of the attitude toward sex reassignment.

ADDITIONAL INFORMATION

Funding source. The study had no sponsorship.

Competing interests. The authors declare that they have no competing interests.

Authors' contribution. V.E. Medvedev — basic idea, project management, formulation of basic points, research concept and analysis and describing obtained data, text writing; S.I. Gushanski — design of the study, collection and processing of materials, analysis of obtained data, literature review, text writing. All authors confirm that their authorship complies with the international ICMJE criteria (all authors have made a significant contribution to the development of the concept, research, and preparation of the article, as well as read and approved the final version before its publication).

Consent for publication. Written consent was obtained from the patient for publication of relevant medical information within the manuscript.

СПИСОК ЛИТЕРАТУРЫ | REFERENCES

1. Kraft-Ebing R. Sexual psychopathy, with special attention to the perversion of sexual feelings. St. Petersburg: Practical Medicine; 1909. (In Russ.)

2. Griesinger W. Vortrag zur eröffnung der psychiatrischen clinik zu Berlin für das sommer-semester 1868. *Archiv für Psychiatrie und Nervenkrankheiten.* 1868;1:636–654. doi: 10.1007/BF02089117

3. Ulrichs K. Anthropologische studiën über mannmännliche. Geschlechtsliebe. Leipzig; 1864.

4. Weininger O. Sex and character. London: William Heinemann; 1906.

5. Westphal C. Die contrare sexualempfindung, symptom eines neuropathischen (psychopathischen) zustandes. *Archiv für Psychiatrie und Nervenkrankheiten.* 1870;2:73–108. doi: 10.1007/BF01796143

6. Abraham F. Genitalumwandlung an zwei männlichen transvestiten. *Zeitschrift für sex wissenschaft und sex politiek.* 1931;18:223–226.

7. Benjamin H. Transvestism and transsexualism in the male and female. *Journal of Sex Research.* 1967;3(2):107–127.

8. Hirshfeld M. Die transvestiten — eine untersuchung uber den erotischen vercleidugstrieb mit umfangreichem casuistischem und historischem material. Berlin: Medicinischer Verlag; 1910.

9. Huelke H. Ein transvestit (der fall Hinrich B.). *Kriminalistik.* 1949;3:91–92.

10. Mühsam R. Chirurgische Eingriffe bei Anomalien des Sexuallebens. *Therapie der Gegenwart.* 1926;67:451–455.

11. Korolenko C, Dmitrieva N. Gender fluidity. In: *Actual problems of personality psychology: materials of the II International scientific and practical conference No. 2.* Part I. Novosibirsk: SibAK; 2010. P. 105–108. (In Russ.)

12. Mendelevich VD. Non-binary gender identity and transgendence beyond psychiatric discourse. *Neurology Bulletin.* 2020;52(2):5–11. doi: 10.17816/nb26268 EDN: APCCEM

13. Kibrik ND, Yagubov MI, Shigapova VI. Problems of medical care in people with gender identity disorder. *Andrology and Genital Surgery.* 2018;19(2):96–101. doi: 10.17650/2070-9781-2018-19-2-96-101 EDN: UVMQFC

14. Matevosyan SN, Vvedensky GE. *Sexual dysphoria.* Moscow: MIA; 2012. (In Russ.)

15. Ibrahim C, Haddad R, Richa S. Les comorbidités psychiatriques dans le transsexualisme: étude sur une population de transgenres libanais. *L'Encéphale.* 2016;42(6):517–522. doi: 10.1016/j.encep.2016.02.011

16. Zucker KJ, Lawrence AA, Kreukels BP. Gender dysphoria in adults. *Annu Rev Clin Psychol.* 2016;12:217–247. doi: 10.1146/annurev-clinpsy-021815-093034

17. Flores AR, Herman JL, Gages GJ, Brown TNT. How many adults identify as transgender in the United States? Escholarship, University of California; 2016.

18. Kalinchenko SY. Transsexualism: the possibilities of hormone therapy. Moscow; 2006. (In Russ.)

19. Matevosyan SN. *Mental disorders with the syndrome of "rejection" of gender (clinical, phenomelogical and therapeutic and rehabilitation aspects)* [dissertation]. Moscow; 2009. 573 p. (In Russ.) EDN: QEEVEP

20. Clark TC, Lucassen MF, Bullen P. et al. The health and well-being of transgender high school students: results from the New Zealand adolescent health survey (Youth'2012). *J Adolesc Health.* 2014;55(1):93–99. doi: 10.1016/j.jadohealth.2013.11.008

21. Shields JP, Cohen R, Glassman JR, et al. Estimating population size and demographic characteristics of lesbian, gay, bisexual, and transgender youth in middle school. *J Adolesc Health.* 2013;52(2):248–250. doi: 10.1016/j.jadohealth.2012.06.016

22. Grigorieva TN. *Clinic and therapy of sexual identification disorders* [dissertation]. Moscow; 2005. 183 p. EDN: NPYJCB

23. Wilcox Vanden Berg RN, Gaffney CD, Paduch DA. Presentation and resolution of gender dysphoria as a positivesymptom in a young schizophrenic man who presented with self-emasculation: Frontiers of bioethics, psychiatry, and microsurgical genital reconstruction. *Clin Case Rep.* 2020;8(9):1735–1740. doi: 10.1002/ccr3.2935

24. Starostina EA, Yagubov MI. Clinical and phenomenological features of the formation of ideas of sex change in schizophrenic spectrum disorders.

S.S. Korsakov Journal of Neurology and Psychiatry. 2021;121(3):18–23. doi: 10.17116/jnevro202112103118 EDN: VQNFHN

25. Smith WB, Goldhammer H, Keuroghlian AS. Affirming gender identity of patients with serious mental illness. *Psychiatric Services.* 2019;70(1):65–67. doi: 10.1176/appi.ps.201800232

26. Dyachenko AV, Soldatkin VA, Bukhanovskaya OA, Perekhov AYa. Gender identity disorders in children and adolescents psychiatric practice. *Social and Clinical Psychiatry.* 2021;31(2):69–78. EDN: QIHIZL

27. Dyachenko AV, Bukhanovskaya OA, Soldatkin VA, Perekhov AY. Who submits a request to the psychiatrist for a gender change: results of a 30-year study. *Psychiatry (Moscow).* 2020;18(3):32–41. doi: 10.30629/2618-6667-2020-18-3-32-41 EDN: NCNKLY

28. Clinical recommendations of the Russian Society of Psychiatrists "Disorders of sexual identification". 2024. [cited 21 Oct 2024]. Available from: https://psy.su/content/files/Клинрекомендации%20F64.pdf?ysclid=m2jezgt8gg535186038 (In Russ.)

29. Erichev AN, Morgunova AM, Kotsyubinsky AP. Cognitice-behavioral psychotherapy for patients with paranoid delusion. *Russian Journal of Psychiatry.* 2011;(4):45–50. EDN: OJAIWB

30. Semenova ND, Burygina LA, Palin AV, Matrosova MI. Comprehensive approach to treatment of schizophrenia patients in outpatient setting: psychopharmacotherapy, psychosocial interventions, and treatment motivation. *Social and Clinical Psychiatry.* 2019;29(3):45–50. EDN: IGOBRP

31. Krishtal VE, Krishtal AA, Sukhoivanova EI. Complex system of rehabilitation of patients with schizophrenia. *Taurida Journal of Psychiatry.* 2014;18(1):32–35. EDN: UWPIQX

32. Semenova ND. On the development and current state of psychosocial therapy for schizophrenia patients. *Russian Journal of Psychiatry.* 2019;(5):40–44. doi: 10.24411/1560-957X-2019-11944 EDN: YVYXAZ

AUTHORS' INFO

*** Sergei I. Gushanski,** Psychiatrist;
address: 27 Stavropol st, bldg 2, Moscow, Russia, 109559;
ORCID: 0009-0009-6395-2985;
e-mail: summercountryrider@yandex.ru

Vladimir E. Medvedev, MD, Cand. Sci. (Medicine), Assistant Professor;
ORCID: 0000-0001-8653-596X;
eLibrary SPIN: 2814-4975;
e-mail: medvedev_ve@pfur.ru

ОБ АВТОРАХ

*** Гушанский Сергей Игоревич,** врач-психиатр;
адрес: Россия, 109559, Москва, ул. Ставропольская, д. 27, стр. 2;
ORCID: 0009-0009-6395-2985;
e-mail: summercountryrider@yandex.ru

Медведев Владимир Эрнстович, канд. мед. наук, доцент;
ORCID: 0000-0001-8653-596X;
eLibrary SPIN: 2814-4975;
e-mail: medvedev_ve@pfur.ru

* Corresponding author / Автор, ответственный за переписку