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Research Article

The Features of the Manifestations of Psycho-Vegetative Disorders in Children and Adolescents

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Abstract

Purpose of the Study: Establishing features of the manifestations of psycho-vegetative disorders in children and adolescents throughout a long observation.

Materials and Methods: In the pediatric hospital, 102 patients with functional vegetative-somatic disorders with follow-up from 3 to 17 years were examined. The study used clinical-psychopathological, clinical-follow-up, cohort-dynamic methods.

Results and Conclusion: Functional vegetative-somatic pathology in children and adolescents proceeds in the form of a psycho-vegetative syndrome. At the manifestation stage in preschool childhood, the psychopathological component is "masked" in nature and later becomes more complex in the clinical picture. In adolescence, the vegetative-somatic symptoms are smoothed out, while the psychopathological component determines the clinical picture with the subsequent possible "normalization" of the condition. The use of psychopharmacological therapy allows to correct psychopathological disorders and control the vegetative-somatic symptoms.

Keywords: *Children and Adolescents; Somatic-Vegetative Pathology; Psycho-Vegetative Syndrome; Age Dynamics*

Introduction

The data presented in the literature indicate a widespread psychosomatic pathology among children and adolescents, understood as mental disorders of the borderline level, manifested by functional vegeto-somatic symptom complexes [1-5]. The latter are represented in any organic-physiological system with a fixed specificity characteristic of childhood. The vast majority of works interpret these disorders exclusively from the psychogenetic position [1,5-9], based on classical psychoanalytic studies [10,11,12] and exclusively within the framework of the depressive syndrome spectrum [1,5,6,13,14]. However, our clinical experience, based on long-term examinations (psychopathological and pathopsychological characteristics, an analysis of heredity and intrafamily structure) of children and adolescents aged 1 to 17 years with a diverse functional somatic-vegetative pathology based on a multidisciplinary pediatric clinic[1], has revealed a syndromic variety of this kind of pathology. Affective symptom complexes, mainly depressive, including bipolar - 53.39%, affective-delusional, including with hallucinations and elements of mental automatism - 8.10%, personal, including crisis, - 14.44%, neurotic and neurosis-like - 14.22%, psycho-organic, including epileptiform, - 9.85% [15] were highlighted. In nosological terms, one can also talk about a significant variety - from the actual neurotic disorders and personality deviations to phase-circular and schizoaffective processes, as well as decompensation states of residual-organic cerebral insufficiency. In general, functional somatic-vegetative disorders can be

[1]Scientific Clinical Institute of Pediatrics named after academician Yu.E. Veltishchev.

considered within the framework of a variant of psychopathological diathesis [16], namely psychovegetative diathesis, which we treat as clinical manifestations of a multifactorial hereditary-constitutional predisposition to both mental proper (mainly affective) and functional somatic-vegetative disorders. These disorders occur in the form of phases and reactions against the background of dysontogenetic disorders and ontogenetic crisis influences under conditions of predisposing family and other microsocial influences, and regulatory disorders associated with the emotional sphere can be combined with constitutional (congenital) organ anomalies [15]. Such an approach to the studied disorders corresponds to the biopsychosocial model according to which both biological (genetic, anatomical, physiological, biochemical, etc.) disorders and psychological factors (including thinking, emotions, and patient behavior), and social factors (in particular, socio-economic, factors of social microenvironment, cultural factors) play an important role in the development of a disease or some disorders [17]. At the same time, the question of the dynamics of the psycho-vegetative symptom complex over the course of a long observation remains, with a change in the age periods in sick children. Despite the importance of such observation for the prognosis of the disease and the organization of an adequate comprehensive correction of psycho-vegetative disorders in this group of patients, we came across only a few literary sources (but without a detailed psychopathological analysis) with a focused study of this problem [18,19].

Aim of the Study

The aim of the work was to establish the features of manifestations of psycho-vegetative disorders in children at different age stages, with an assessment of the influence of age periods, over a long-term observation.

Materials and Methods

Using clinical, psychopathological, clinical follow-up, and cohort-dynamic methods, 102 patients were examined, 40 of them in preschool age (4 - 6 years old), 62 people in adolescents[2]. The minimum follow-up period is 3 years, the maximum is 14 years.

Results and Discussion

Psycho-vegetative symptom complex with functional paroxysmal tachycardia (PT)

Under observation were taken 15 children aged 12 - 17 years. and 10 children up to 7 years with functional PT. It was found that for children of an early age group in the pre-manifest period (before the first attack of PT) these or those distortions of early development are characteristic, more often in the form of asynchrony and dissociation, as well as syndromically unformed episodic or permanent psycho-vegetative disorders. For preschool age, affective disorders of a predominantly bipolar type of various depths, from erased to typical "vital" depressions and manic states (in single cases), as well as manifestations of affective circadian character within personality, often schizoid features, with a distinct predominance of the depressive pole, are most typical. Depression at this age is characterized by the diversity and variability of pathological affect (a combination of hypotension with adynamia, anxiety, fear with polythematic phobias). In some cases, the erased delusional component manifests itself in a complex affective (depressive or manic) syndrome. In some cases, we can talk about affective equivalents of epileptiform states, polymorphic disorders with a neurotic picture (fears, obsessions, etc.) or hallucinatory-delusional phenomena. In the adolescent group, symptom polymorphism decreases, the dominant position is occupied by depressive disorders of various depths, but more monomorphic than in the younger age group; schizoid personality manifestations become more severe, the latter in combination with crisis-specific symptoms and are often difficult to distinguish from manifestations of endogenous processuality. In isolated cases, we can talk about the symptoms characteristic of epileptiform, age-related crisis or neurotic disorders proper. In some patients by this age, a distinct personality pathology is formed, more often than a schizotimic circle, combined with crisis-specific polymorphic disorders (fears, affect fluctuations, behavioral deviations, etc.). As for the dynamics of functional vegetative

[2]No gender characteristics are given, since no significant differences were found for this parameter.

pathology in comparison with the dynamics of psychopathological symptoms, a clear connection is observed between the frequency and severity of cardial-arrhythmia attacks, their reduction or stabilization and fluctuations in mental status, its stabilization, transition to residual states, or practical rehabilitation.

Psycho-vegetative symptom complex with functional hyperthermia

The group with functional hyperthermia [20] included 25 patients (up to 7 years old - 10 people, 12 - 17 years old - 15 people). Pre-manifest mental disorders (with a manifest in the form of functional hyperthermia) are extremely polymorphic. Gross personal and behavioral deviations, and affective disorders of a situational and phase nature, and paroxysmal syndromes, and states of a neurotic type, including various, mainly motor obsessions, are noted. The most characteristic are diverse fears - from situational and so-called. physiological distinctly delusional with appropriate protective behavior, illusory and hallucinatory deceptions of perception. The significant frequency in the pre-manifest period of pathological sensations not related to physical diseases that can be interpreted as senestopathies, including senestalgia, is also noteworthy. This is important, since in the manifest states and subsequently it is precisely the special pathological sensations (both against the background of hyperthermia and outside it) that are the most typical psychopathological symptoms in these patients. In general, in the younger age group, psychopathological disorders in a manifest attack are syndromically polymorphic (adynamic or anxiety-depressive states, with and without senestopathies, fears with illusory deceits, actually neurotic reactions). With age, this polymorphism increases sharply, but at the same time, the predominance of syndromes with leading senestopathic symptoms (mainly various types of depression and depressive-delusional states) is clearly revealed. In addition, various symptoms of the neurotic circle are revealed here, including obsession, polymorphic schizophrenia-like hallucinatory-delusional disorders, paroxysmal conditions (syncopes, seizures of Kloos). In the older age group, the conditions of the so-called. asthenic insolvency [21], which also belong to the depressive circle. But here senestopathic depressions also prevail, including depressions with hypochondriacal symptoms, suicidal tendencies, and more clearly expressed ideas of attitude. As a rule, autonomic symptoms in the form of functional hyperthermia are completely reduced or are manifested by short-term episodes during periods of exacerbation.

Psycho-vegetative symptom complex with functional disorder of the gastrointestinal tract

We examined 29 patients (12 people up to 7 liters, 17 people 12 - 17 years old) with functional disorders of the gastrointestinal tract (various kinds of dyskinesia, reflux, irritable bowel syndrome, etc).

Pre-manifest mental disorders (with a manifest in the form of gastroenterological symptoms) occurred in this group both episodically and permanently within the framework of a personality-neurotic, affective or neurotic register. As in the previous group, pathological sensations imitating physical diseases predominate. The most characteristic are intestinal colic, manifestations of the «irritable bowel syndrome» with impaired stool frequency, various painful sensations in the abdomen (bursting, boiling, etc). In manifest states and subsequently, such sensations are most typical, being a manifestation of senestopathic symptoms. Various fears of various depths are also revealed - from situational to delusional.

In the younger age group, psychopathological disorders in a manifest attack are in the nature of senestopathic depressive states with a diverse, mainly disturbing type of affect. Disorders of the neurotic circle (obsessive, astenoadynamic) may also occur.

In the older age group, senestopathic depressions also prevail, but the actual depressive symptoms of various types (melancholy-vital, anxious, etc.), including asthenic insolvency, hypochondriacal depression, as well as depression with anorectic-bulimic disorders, suicidal tendencies, ideas of attitude manifest brighter. The localization of senestopathies can change with spread to other areas (cephalgia, cardialgia, etc).

Psycho-vegetative symptom complex with polymorphic vegetosomatic disorders

In the group of patients with polymorphic vegeto-somatic disorders (vegetative-vascular dystonia (VVD), functional skin disorders, respiratory pseudo-asthmatic attacks, etc.), 25 patients were observed (up to 7 years old - 10 people, 12 - 17 years old - 15 people).

The absence of predominant psychopathological disorders and personality and behavioral deviations was detected in only 2 patients. At the same time, the greatest polymorphism of pre-existing psychopathological disorders is noted without a noticeable predominance of any symptoms. The manifestation of vegetative disorders proceeded against the background of the strengthening of the preceding psychopathological symptoms in the form of an acute psycho-vegetative attack resembling panic attacks (anxious raptoid states) in adults, often accompanied by thanatophobia. Compared to other groups, various manifestations of depersonalization disorders, primarily somatopsychic depersonalization, are more characteristic.

In the adolescent period, age-related dynamic features that are fundamentally similar to other groups are revealed, including a clear interdependence of autonomic and psychopathological symptoms with a predominance in the clinical manifestations of the latter. In general, only a tenth of patients do not show such a dependence. Such dependence was most indicative of the parallel (psychotropic and vegetotropic) effect of psychopharmacotherapy - both positive (in the case of effective treatment) and negative (when it is canceled).

Thus, in general, the analysis of cohort follow-up examination data confirms the patterns identified in various age groups of patients. In the process of growing up of patients and with the reduction of the vegetative manifestations of psycho-vegetative diathesis, the actual psychopathological disorders come to the fore, which subsequently acquire a more monomorphic and in most cases reduced character (erased affective disorders, neurotic and neurosis-like manifestations, behavioral disorders, moderate specific endogenous deficiency symptomatology cerebrosthenic signs). Only in single cases of cardiac arrhythmias did the inverse relationship be noted: persistence of arrhythmia attacks with significant reduction of psychopathological manifestations. Also, in single cases, after long-term stable remission with the reduction of both somatic-vegetative and psychopathological disorders, exacerbations of the psychopathological symptoms of the affective and schizoaffective circle occurred on an outpatient basis.

We give a clinical observation.

Patient H., born 12.01.2001. He has been observed by a psychiatrist since June 13, 2006 at the Scientific Clinical Institute of Pediatrics named after academician Yu.E. Veltishchev., where he was stationed in connection with exacerbations of a skin disease.

Heredity.

On the father's side, grandfather and uncle suffered from alcoholism in a drunken form, did not receive treatment. Grandma suffers from hypertension. Father, 47 years old, with higher engineering education, unsuccessfully engaged in entrepreneurship with his wife, did not work for several years. Character uncommunicative, strict with children, but caring, loving.

On the mother's side, grandfather drank heavily, was not treated, abandoned his family. Mother, 44 years old, with secondary economic education, worked as a seller. After a failure with entrepreneurship she is for a long time without work. Suffers from hypertension, tachycardia attacks, sleep disturbances, obesity. She was treated at the Institute of Nutrition. By nature, sociable, cheerful, conflict-free. Spouses are happy with the marriage, the situation in the family is calm.

Brother 25 years old, healthy, character in mother.

The patient was born from the 6th pregnancy (4 medical abortions), which proceeded with toxicosis in the 1st half, with the threat of miscarriage, with a Rhesus conflict, with repeated hospitalizations to maintain the pregnancy. In urgent labor, placental abruption,

emergency cesarean section. The condition of the newborn without complications. Easy advancing in physical development with delayed speech development (phrases from 3 years, severe dyslexia). From an early age he was distinguished by increased mobility, sociability, smile, cheerfulness, at the same time exactingness, perseverance, with selective appetite. Moreover, he was excessively attached to his mother, "ached" in her absence, until 3 years old slept only with her. From the first year of life, seasonal mood changes were noted: in spring and autumn it usually became irritable, with manifestations of discontent. At the same time, manifestations of atopic dermatitis began with widespread rashes, nocturnal itching, with seasonal spring-autumn exacerbations.

From 4 years old, during periods of skin exacerbations, more and more pronounced and prolonged outbreaks of irritation, dissatisfaction with nagging, screaming, verbal and physical aggression (cursed, bite, beat mother with arms and legs). In the evenings, he became sharply excited, «mad», with an excessively elevated mood, appetite, and hyperactivity. At the same time, nocturnal enuresis became more frequent, falling asleep worsened, was afraid to sleep alone, said that he could be «bitten by a dragon.» Talked in a dream, gritted his teeth. In the morning, especially low mood, poor appetite. From the age of 5, an imaginary "friend Nick" appeared, with whom he "spoke on the phone" for a long time, saying that he came to him, went with them in a car (although he did not see him).

During the examination on June 13, 2006 (6.5 years old): short stature, normosthenic physique, low nutrition. On the skin of the buttocks and thighs rashes with combs. He moves quickly, grabs the toys and immediately throws it, starts whining, lays down on the sofa, in a capricious voice, demands the attention of his mother. In a conversation, he animates, eagerly communicates, draws, fantasizes about "friend Nick" who "lives in the village, loves to play with children, drives a car". Fantasy poor monotonous. Speech is dislalic, obscure. Left to himself, he begins and throws one game, then another. Easily annoyed, jerking mother. Cries easily at the mention of medical procedures, "injections".

Paraclinical examinations (ECG, REG, EEG, etc. - without significant deviations from the norm.

Subsequently, he received psychotropic therapy with pirlindole (up to 75 mg per day) and thioridazine (up to 75 mg per day), depending on the mental state. Seasonal exacerbations persisted (spring-autumn) with a decrease in mood, lethargy in the morning, excitement in the evening, causeless crying, acute discontent - up to aggression (mainly against the mother), sleep disturbances. Against this background, ARVI was very often sick, and temperature rises without inflammatory manifestations were also noted. At the same time, manifestations of atopic dermatitis were exacerbated, for which local therapy was used. In summer and winter, periods of high spirits prevailed. After 10 years, skin rashes almost stopped. Periods of disturbed mood persisted, but its manifestations gradually softened, behavior was streamlined, the condition was corrected with the same drugs in lower doses. From the age of 13, as he assures, "he stopped communicating with Nick", he understood that it was his fantasy. Since January 2018 (17 years old) without psychotropic therapy. He satisfactorily completed 9 classes, entered the information college. By puberty, gradually changed in character. Cheerfulness, sociability disappeared, became lonely, a homebody, isolated, did not know and was not interested in the circumstances of life of even close relatives. He did not find any noticeable sexual interests. He was only interested in computer games, he planned to become a "gamer," that is, to earn a game. When communicating, he was restrained, uninformative, and purely formal.

At the time of examination (17.5 years old), the patient's condition is characterized by personal characteristics of the schizoid type (emotional impoverishment, formal communication, isolation, narrow interests with an overvalued connotation) without current psychopathological symptoms. In heredity, two-way burden of alcoholism (which corresponds to the peculiarities of the hereditary background in psychosomatic pathology in children [22]), personality schizoid and cycloid radicals. In premorbid, there are signs of dissociativeness in early development, vivid manifestations of hyperthymic-expansive traits in the whole cycloid type. The manifestation of somatic pathology at the age of 1 - 2 years in the form of atopic dermatitis with a fairly defined periodic (seasonally dependent) course of exacerbations. At the same time, erased (masked) affective disorders of the type dysthymic, also with seasonal dependence, began to appear at first. In the future, affective disorders became more and more pronounced, at the height of exacerbation taking on the character

of a mixed affective attack with behavioral disorders, a distinct circadian rhythm, evening manic episodes. This was joined by pathological fantasizing without a critical attitude, which was of a constant, non-phase nature. Appropriate psychotropic therapy made it possible to control the state, mitigating mood disorders and behavioral deviation, without noticeably affecting monotonous fantasies. In this case, the actual skin manifestations faded into the background and subsequently completely reduced without the use of dermatological agents. Affective disorders with distinct bipolarity lasted several years longer, gradually taking on an increasingly worn out character and, obviously, completely reduced at the stage of completion of the puberty period. In addition to the above, one can pay attention to the manifestations of other somatic disorders "masking" affective disorders - functional hyperthermia [20] and the phenomenon of "somatopsychic synergism" [23]. Sufficient social adaptation persists. It should be noted that the characterological manifestations of the puberty crisis have not actually manifested themselves, which may serve as one of the diagnostic signs.

Thus, we can talk about the interdependent course of somatic and psychopathological disorders in the framework of a single psycho-vegetative symptom complex. The change in the severity of the manifestations of each of the processes is characteristic: dissociativeness of early development, manifestation of somatic symptoms with "masked" manifestations of the psychopathological component, followed by the release of this component to the forefront, therapeutic remission of both psychopathological and somatic symptoms when using psychotropic therapy In case of nosological diagnosis within the framework of the current ICD-10, taking into account the combination of symptoms of phase and continuous course, attrition of puberty crisis manifestations, a characteristic personality shift from cycloid to schizoid, this case can be attributed to schizophrenic spectrum disorders, differentiating between schizotypic neurosis-like (cyclotymia-like) disorder disease (F21.3) and schizoaffective disorder (F25.2).

Conclusion

The data presented in the article indicate that the functional vegeto-somatic pathology in children and adolescents proceeds in the form of a psycho-vegetative symptom complex with a certain ratio of vegeto-somatic and psychopathological components, which changes during the course of the disease and the change in the age periods of childhood and adolescence. At the stage of manifestation in preschool childhood, the vegeto-somatic component prevails, and the psychopathological component is "masked" in nature. By adolescence, the psychopathological component of the psycho-vegetative symptom complex, becoming more complicated and intensifying, comes to the fore in the clinical picture, while the vegeto-somatic symptomatology itself is smoothed out or completely reduced. The use of psychopharmacotherapy, adequate for specific psychopathological manifestations, allows not only to correct psychopathological disorders, but also to control vegetosomatic symptoms

Conflict of Interest

The author claims no conflict of interest.

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