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Review Article

Pseudo-Neurological Disorders

E.I. Bon *, Maksimovich N.Ye, N.V. Kokhan, Sitsko A.D

Grodno State Medical University, Grodno.

***Corresponding Author:** E.I. Bon, Grodno State Medical University, Grodno.

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Abstract:

Pseudoneurological disorders are conditions in which psychological or depressive experiences manifest as physical, seemingly neurological, symptoms. Patients complain of pain, dizziness, or other bodily ailments, while objective examinations reveal no organic abnormalities. These symptoms are often mistakenly considered exaggerated or imaginary, leading patients to miss out on the help they need. These symptoms often stem from underlying forms of anxiety and depression, disguised as somatic complaints. Understanding the psychogenic nature of such conditions allows for appropriate treatment and restoration of the patient's emotional and physical well-being.

Keywords: pseudoneurological disorders; depression; anxiety; somatization

Introduction

A special group of depressive equivalents, often concealed behind the mask of neurological symptoms, is often not adequately reflected in the theory and practice of neuropathology. "Functional" complaints, uncorroborated by objective examination, are usually regarded as evidence of "simple suspiciousness" that does not require therapeutic intervention, or of certain self-serving attitudes on the part of the patient, which, in one way or another, relieves the attending physician of any responsibility for the patient's well-being. Even obvious affective disorders, in the absence of signs of organic damage to the central nervous system, are sometimes interpreted less from a psychopathological perspective than from a purely mundane one, which prolongs the inpatient treatment of patients who do not receive adequate pathogenetic therapy with psychotropic medications. The undeniable role of negative emotions in the occurrence of all sorts of spontaneous painful sensations in various parts of the body is sometimes not adequately reflected in the clinical thinking of modern specialists; While undisputed during the heyday of classical clinical medicine, this position does not fit into the Procrustean bed of organ pathology. The true nature of these pathological sensations (often the only clinical manifestation of latent anxiety and depression) is often either not recognized at all or is established retrospectively during successful treatment with antidepressants [1].

Increased intensity of painful sensations, reaching the level of "algic melancholia" (as opposed to a decrease or complete blocking of pain sensitivity, leading to the development of "anesthetic melancholia" in severe forms of depression) is observed primarily in depressions in borderline clinical states, hypochondriacal states with elements of vital depression, relatively mild but prolonged depressions of old age, and so-called endoreactive dysthymia. The clinical expression of anxiety and depression ultimately turns out to be all sorts of algias and paresthesias (more precisely, dysesthesias) against a background of general malaise and "inner restlessness." Various painful sensations in the trunk and limbs, back and chest, spine and lumbosacral region, headaches and dizziness, sciatica and toothache (to which the patient cannot "get used" even after prolonged presence) can thus act as "masks" of depression, requiring therapeutic intervention even in the absence of conscious anxiety and melancholy, not only in adults but also in older children. Unpleasant, oppressive painful sensations in the clinical picture of vegetative and hypochondriacal depression arise in this case, among the general series of vital experiences, as a feeling of suffering in its most primitive expression (in the form of physical pain), as a "specific bodily echo of the patient's affective life" – that is, not just a sensation, but simultaneously a unique affective state with a specific localization of affect. At first glance, it is almost impossible to clearly distinguish it from true pain phenomena of peripheral origin, although the patients themselves often define “stomach colic” or tightness in the chest as mental, rather than physical, suffering [1,2,3].

Even in the presence of peripheral lesions or known anatomical abnormalities of local innervation, the leading role of affective disorders in the development of symptoms cannot be ruled out. For example, women with emotional disorders associated with postpartum asthenia often develop cutaneous hyperalgesia, in which pain sensations are so severe that they refuse to hold their child. These sensations are combined with pronounced hyperesthesia – increased skin sensitivity, accompanied by painful sensations reminiscent of acute myalgia or neuralgia [4,5].

Cutaneous hyperesthesia is accompanied by disintegration of sensory functions, which is confirmed by the detection of reactive algic syndrome in such patients – increased sensitivity to palpation of sensitive areas and altered pain response to needles. A disruption of the pain aftereffect and the appearance of "island" sensory disturbances are also noted [6,7,8].

Hyperesthesia in the occipital region of the head is often observed, accompanied by complaints of severe headache. Any touch to the scalp

causes discomfort; even a light breeze, raindrops, or combing the hair can cause acute pain. Water treatments, especially showers, irritate the skin of the back, leading to myalgia and neuralgia along the spine [9].

At the same time, decreased tactile and pain sensitivity of the skin and mucous membranes is possible, leading to the development of zones of anesthesia and hemianesthesia. Sometimes, anesthesia of the mucous membrane of the eyes occurs – irritation does not cause lacrimation or blinking, and the pupillary response to painful stimuli is impaired. Similarly, anesthesia of the upper respiratory tract is manifested by the absence of a cough when inhaling irritants. A similar decrease in sensitivity is observed in the genital area, which is associated with frigidity in some women with hysterohypochondriac disorders [10].

Most often, we are talking about labile, "moving" anesthesia, the intensity and location of which rapidly change under the influence of emotional factors, which is not always recorded by doctors.

Sharp cutaneous hypoesthesia with decreased pain, tactile, and sometimes temperature sensitivity (sometimes combined with anesthesia of the mucous membranes) explains patient complaints of "numbness," paleness, and coldness of the extremities, numbness, and a feeling of "deadness" in certain areas of the body. In some cases, this decreased sensitivity is so pronounced that patients do not even notice burns, such as from hot water bottles or hot water bottles applied to their "icy" feet [8].

Of particular interest are localized hyperesthesias, which are often accompanied by complete or partial anesthesia in other areas of the body. The patient's psychological attitude and mental state have a significant, sometimes decisive, influence on the perception of pain stimuli, leading to extreme lability of pain sensitivity. Thus, the "terrible pain" that just caused the patient to scream can suddenly disappear for no apparent reason, as if by magic [4,5].

The connection between cutaneous sensitivity disturbances and generalized mental hypoesthesia explains cases of self-injury and self-harm. Particularly indicative is the pronounced hypoesthesia (even to the point of complete anesthesia) observed in patients with chronic alcoholism and depressive-hypochondriac disorders, which is observed precisely during moments of self-injury, whereas outside of these states, they exhibit hyperesthesia [6].

One of the most distressing manifestations of mental hyperesthesia in affective disorders is the so-called "legitimate" patient complaints of pain. For example, one of our patients was repeatedly hospitalized in somatic wards complaining of "unbearable" pain in the area of a shrapnel wound. Although X-rays confirmed the shrapnel had been lodged under the left shoulder blade since 1941, this does not explain the periodicity of the pain, which occurs exclusively during the depressive phase of the cyclothymic cycle and disappears upon transition to the hypomanic phase or with treatment with antidepressants [3].

Overt or latent depression with pronounced mental hyperesthesia actually acts as an activator of existing organic or functional disorders of organs and systems, manifesting them clinically.

The organic "base," identified primarily in depression, is reflected, for example, in frequent complaints of lumbar pain when bending over, as well as cramps and painful muscle contractions with sudden or unusual movements. Patients often emphasize a clear connection between pain and specific movements, but these manifestations are typically associated with pronounced affective fluctuations, which can be identified with a thorough and qualified interview [9].

An example of overestimating the "organic" and underestimating the "functional" condition is cervical osteochondrosis, which is often attributed to any pain in the shoulder girdle or cervicoccipital region. Determining the true relationship between organic and functional disorders in a patient is a complex but extremely important task for the treating physician, as the effectiveness of therapy depends on it [5, 6, 7].

Mental Hyperesthesia

Hypersensitivity to certain sounds, light stimuli, or touch has long been known clinically in both nervous and internal and skin diseases. It is precisely this excessive mental and physical sensitivity, in its many manifestations, that makes an emotionally unstable patient feel like a "pathetic person with flayed skin" [6].

Mental hyperesthesia can turn even a simple touch into a source of pain and make any, even the most insignificant, painful sensation "hellish." It underlies numerous somatic complaints in "problem" patients, for whom "everything hurts" [7].

The intensity and disproportionate nature of pain in response to minimal stimuli, as well as the persistence of these sensations in the clinical picture, make such patients typical representatives of the group of "pain hyperpaths." They suffer from everything: a ray of sunlight shining through the curtains hurts the eyes; the smells of a spring morning cause a "scratchy throat"; A gentle knock on the door causes a shudder throughout the body and causes "unbearable" torment – "as if someone were hitting my head with a hammer"; a loud word rings in the ears and triggers a sharp headache; a quiet invitation to dinner is perceived as a "rending crack"; even one's own voice sometimes seems "as disgusting as the scraping of iron on glass" [7,8].

One of the common manifestations of general hyperesthesia is diffuse or localized cutaneous hyperesthesia. Even the lightest touch of clothing can cause severe torment for patients, and often the only comfortable clothing is a loose, soft nightgown. In women with emotional disorders after childbirth, cutaneous hyperalgesia can be so pronounced that they even refuse to hold their children. Cutaneous hyperesthesia is often accompanied by painful sensations reminiscent of myalgia or neuralgia [1,2,10].

Such patients may experience reactive algic syndrome: increased sensitivity to palpation of specific areas of the skin and altered pain sensitivity, even to the point of developing "islands" of sensory impairment. Scalp hyperesthesia is often observed, with complaints of a "terrible headache." Even light touch, raindrops, or combing the hair cause severe irritation. Water treatments, especially showers, can cause significant discomfort. Back skin hyperesthesia is often accompanied by myalgia and neuralgia, and even a slight breeze or touching the back of a chair can cause pain [10].

Along with increased sensitivity, a significant decrease in tactile, especially pain, sensitivity of the skin and mucous membranes is sometimes observed, leading to the development of zones of anesthesia or even hemigemia (loss of sensation on one side of the body). For example, anesthesia of the mucous membrane of the eye may occur, in which even the introduction of a foreign body does not trigger the usual lacrimation and blinking reflexes, and pupillary responses to painful stimuli are impaired. Similarly, anesthesia may affect the mucous membranes of the upper respiratory tract – coughing is absent when inhaling irritants. Anesthesia of the mucous membranes of the genitals also occurs, which is likely associated with manifestations of frigidity in some patients with hysterohypochondriac disorders [5-10].

Most often, such anesthesia is very labile and "flexible": its intensity and location quickly change under the influence of emotional and affective factors, which is not always noticed by the treating physicians. Severe cutaneous hypoesthesia with decreased pain, tactile, and sometimes temperature sensitivity (sometimes combined with mucous membrane anesthesia) underlies patient complaints of "numbness," pallor, and coldness of the extremities (most often on the dorsal surfaces of the hands and feet), a sensation of numbness, paralysis, and even numbness in various parts of the body. In some cases, hypoesthesia is so pronounced that only after emerging

from an acute affective state associated with the fear of death from cardiac arrest or cerebral hemorrhage do patients discover and "feel," to their surprise, burns from bottles and hot water bottles, which they applied to their "icy" feet [5].

Of particular interest are localized hyperesthesias, sometimes accompanied by complete or relative anesthesia of other areas. The significant, often decisive, influence of the psychological attitude and mental state of these patients on the perception of pain stimuli results in extreme lability of pain sensitivity: the "terrible pain" from which the patient was just "screaming" may suddenly disappear without any apparent reason, as if by magic. Disturbances of cutaneous sensitivity and general mental hypoesthesia are to a certain extent associated with cases of self-injury and self-mutilation. Particularly indicative in this regard is the distinct hypoesthesia (before complete anesthesia) in chronic alcoholism with depressive-hypochondriac disorders, detected in patients at moments of self-harm, whereas outside of these states, obvious hyperesthesia is observed [2].

One of the most distressing manifestations of mental hyperesthesia in affective disorders, particularly in the clinical setting of neurotic and cyclothymic conditions, is pronounced auditory hyperesthesia, usually accompanied by persistent sleep disturbances. Intolerance to loud sounds ("as if I were feeling the sound not with my ears, but with my head, with my bare brain") makes everyday life extremely difficult for such patients and leads to inevitable conflicts with others. The extreme affective tension of these patients turns their lives into "continuous torment," and their nights into true torture: extraneous noises and rustlings prevent them from sleeping, the buzzing of a fly drives them to despair or even frenzy, and someone's quiet snoring evokes anger and rage, with a desire to "take everything by storm" and "shake the soul out" of their neighbors in the ward [3,5,9,10].

These patients often focus on tinnitus or head noise, which highlights the labyrinthine component characteristic of senesthetic headaches. Typically unnoticeable during the day, this noise (or monotonous buzzing in the ears) intensifies sharply in the evening, as soon as the patient lays their head on the pillow (the head then hums like a beehive, like telegraph wires, or a constant buzzer sounds like a samovar, or a steam locomotive puffs, like a string ringing, or even like something rumbling). At night, all these phenomena become even more intense, and hearing acquires an "abnormal sensitivity," which in some cases leads to persistent insomnia [5.6.7].

Complaints of tinnitus are primarily based on a particular focus of attention (anyone can hear the beating of their arteries if they want to). Iatrogenic factors, usually related to some examination or medical intervention that has become the subject of the patient's hypochondriacal fixation, can also play a role.

It should also be noted that the active demand for surgery, coupled with a willingness to resort to aggression and "revenge" for "incorrect" treatment, makes some of these patients among the most difficult patients for otolaryngologists.

Severe auditory hyperesthesia is a common manifestation of asthenia with a clinical picture of irritable weakness. A striking confirmation of the affective genesis of this hyperesthesia is the so-called "wind-up spring" symptom, when any unexpected noise or sound (and not so much the sound itself as its suddenness) causes a person to flinch or almost jump, causing a more or less prolonged tachycardia ("the heart pounds with fright"). This symptom always indicates an extreme degree of affective tension in a person focused on difficult thoughts, "withdrawn" [9,10].

In clinical settings of depressive states, complaints of "hearing loss" may also arise, when all sounds seem quiet and muffled, as if coming from afar, as when falling asleep – a kind of "deafness of attention" in a patient immersed in depressing thoughts or focused on their own condition. This may be deafness due to distraction, lack of attention (when the patient is lost in thought and the speech of others "doesn't reach" them), or deafness caused by an "excess" of attention due to a hypochondriacal fixation on one's hearing or iatrogenic influence (when the patient listens so intently to every word that they miss the next). Psychogenic hearing disorders not associated with organic changes, aggravation, or simulation (sudden deafness or hearing loss that occurs during a stressful situation and persists for a long time against the background of an affective state) are found in both adults and children [4].

Complaints of deteriorating vision are no less typical of affective disorders: decreased visual acuity, increased eye fatigue when reading, a sensation of a veil or fog before the eyes. These disorders, unrelated to organic changes and true visual asthenia, often become the object of hypochondriacal fixation in patients, requiring repeated examinations and consultations with ophthalmologists. The sensation of internal dizziness is often accompanied by complaints of more or less constant or intermittent blurriness, blurred vision, fuzziness, pallor, and dullness of the usual relief of surrounding objects. Less common is pronounced visual hyperesthesia with unusually heightened vision, or more often with complaints of "lightning," "sparks," and colored circles in the eyes, which usually do not cause particular anxiety in patients, or a sharp increase in headaches from bright light, which they begin to avoid. Such patients stop reading, cannot stand television ("even my head feels sick"), and refuse to go to the cinema. It is also worth considering patients who complain for weeks about a long-removed foreign body in the eye and bring themselves to actual conjunctivitis, constantly rinsing their eyes with various disinfectant and anti-inflammatory solutions and wiping them with gauze pads or handkerchiefs [2-8].

Peculiar sensitivity or intolerance to certain foods and various odors (even at minimal concentrations in the air) are also common in psychosomatic disorders. Gustatory hyperesthesia is often associated with glossodynia. Olfactory hyperesthesia can manifest as an aversion to previously neutral or pleasant aromas (e.g., tobacco or incense), while simultaneously being accompanied by a craving for odors (e.g., gasoline or oil paint) that normally evoke no positive emotions [7].

Conclusion

Depressive and anxiety-affective disorders can manifest with a wide range of somatic symptoms – from pain and disturbances in skin, auditory, and visual sensitivity to a paradoxical combination of hyperesthesia and anesthesia, which is why the true nature of the disease often remains unrecognized. The instability of sensations, their pronounced dependence on emotional state, and the patient's tendency toward hypochondriacal fixation often lead physicians to search for organic pathology, delaying the introduction of adequate treatment. Therefore, understanding the psychogenic origin of many "functional" complaints and the ability to distinguish them from true somatic disorders is crucial: only an integrative clinical and psychopathological approach allows for an accurate assessment of the patient's condition and the provision of effective therapy aimed at both the somatic and affective aspects of their suffering.

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