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Review Article

Psychogenic Headache

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Abstract

Psychogenic headache is one of the most common psychosomatic manifestations, arising from emotional stress, anxiety, or depression. Unlike organic forms, this type of pain is not associated with physical brain damage but reflects internal mental conflicts and fatigue. Patients describe it as a distressing, vague, and difficult-to-define sensation, intensifying with stress and mental exertion. Similar symptoms are often observed in neurasthenia, cyclothymia, masked depression, and other affective disorders. Underestimating the psychogenic nature of headache often leads to lengthy and ineffective examinations, whereas a correct diagnosis requires attention to the patient's emotional state. Understanding the connection between the psyche and pain allows for more effective treatment and the prevention of chronic symptoms.

Keywords: psychogenic headache; depression; emotional stress; psychosomatics

Introduction

The pseudo-neurological group of psychosomatic disorders is primarily characterized by complaints of headache. This specific pain (usually diffuse, less commonly confined to one side of the head or in a limited, clearly defined area, the boundaries of which are often precisely specified by the patient) has long been considered a general symptom of any condition manifesting as "nervous weakness" in both sexes (primarily women) of any age. A persistent, occasionally intensifying headache (usually dull, aching, sometimes quite intense and even migraine-like) is one of the most persistent complaints in neurotic and pseudo-neurotic conditions. For example, it occurs against a background of constant emotional stress in 87% of patients with neurasthenic disorders (in 68% – in the middle or end of the workday and in 19% – in the morning), intensifying toward the end of the week and with intense asthenic workloads. Statistical data from a large number of observations show that psychogenic headache is more common than all other forms of headache combined [1,2].

A distinctive headache is one of the most consistent features of the depressive phase of cyclothymia. Headaches of varying localization and duration (sometimes up to a year or more), as equivalent to a depressive attack, were described as early as the early 20th century. A distinct alternation between migraine-like pain and full-blown attacks of manic-depressive psychosis or cyclothymia with feelings of depression and melancholy is possible. In some cases, headache is not only the initial but, in fact, the sole clinical manifestation of "monosymptomatic" masked depression. Many cases of hemicrania or diffuse headache associated with hysterical hypochondriacal disorders most likely also fall into the category of latent, masked depressions. A very severe headache, sometimes requiring the exclusion of a space-occupying cerebral process, can be one of the most persistent symptoms in the neurosis-like prodrome of schizophrenia, which is characterized primarily by affective disturbances [1,3,4].

As with functional cardiovascular disorders, complaints of "constant" headaches typically conceal mild and not so much painful as extremely unpleasant or even excruciating ("to the point of nausea"), "incomprehensible" sensations (complaints of "simple" headaches are relatively rare). Patients describe them very figuratively and vaguely, speaking of fullness and tension in the skull, of overflowing and emptiness, of a sensation as if something is tearing, of squeezing in the temples and back of the head, etc. Unlike headaches of an organic nature, these sensations are most often vague, muffled, and difficult to define ("I don't know how to say it; it's either pressing or bursting; there's something wrong in the head; there's some kind of disorder in the head, I can't explain it in words"). It is possible to spend hours and even days with such a patient without knowing exactly what they are feeling. Attempts to clarify their nature often only intensify the pain and cause extreme irritation in patients ("it just hurts and that's it"). Very peculiar, vague, and undefined, these sensations often boil down to essentially an abnormal, pathological feeling of an almost tangible substance of the brain (similar to the "feeling of the heart" in cyclothymic states). Many patients complain of painful sensations "in the brain" rather than in the head ("my brain hurts; it's like someone is pressing on my brain"), which are sharply intensified by anxiety and "upset." The head itself feels "somehow different, stale, like it's not my own, bad, like after a hangover, like drunk, like a beer cauldron" [2,5].

Even the extremely weak and usually imperceptible sensations that accompany the thought process as a "subjective lining" can, against the background of general mental hyperesthesia, reach the point of painful manifestations. A sharp exacerbation of painful sensations in the head (with complaints of a "feeling of brain strain") is characteristic when intense mental effort with prolonged concentration is required ("it hurts to think, it makes you feel sick, as if you might lose consciousness"). The thought process turns into severe suffering ("the brain feels like a continuous wound"). A particularly clear connection between headache and decreased mental productivity, as well as an inability to concentrate for long periods, is usually observed in individuals over 60–65 years of age (especially in late-life depression) [2, 6, 7].

Very vague, sometimes barely perceptible, yet extremely distressing and excruciating, thymopathic headache typically arises against a background of increasing affective tension, prolonged emotional overload, and unresolved negative emotions. Typically, the onset or intensification of headache pain occurs when vague anxiety or irritation is suppressed, for example, during a

protracted clinical examination with a repeated referral for a skull X-ray ("so there's something there!") or during an emotionally significant conversation with a doctor or family member. The headache's psychogenic origin is also indicated by its dependence on external factors: the pain develops only at work or only at home, or on weekends or holidays (and the underlying connection between the pain and negative emotions is usually not recognized by the patients themselves). Complaints of heaviness and dull aching in the head are common, predominantly or exclusively in the morning (strictly in line with daily mood fluctuations), especially upon awakening, and also in the evenings, as a sleepless night approaches. The feeling of heaviness and distension in the head is usually accompanied by surges of uncontrollable thoughts of an anxious and depressive nature (the head is "overflowing with thoughts, swollen with them, bursting") [1,5,8].

Pain sensations are often changeable and fleeting. The head hurts sometimes on the left, sometimes on the right, sometimes here, sometimes there – the pain "wanders, shifts from place to place." The nature of the pain changes: sometimes dull, sometimes sharp, sometimes there's a pressing sensation in the back of the head, sometimes a crushing sensation in the crown, sometimes a shooting sensation in the temples ("like a sword being thrust in and pulled out"), sometimes a tingling sensation in the forehead, like a needle, and "the cerebellum feels cold, sometimes hot." The intensity, location, and nature of the sensations vary from day to day and even during a conversation with a doctor. The most consistent complaints are a feeling of pressure and heaviness (the head "heavy, as if filled with lead"); the so-called neurasthenic helmet syndrome is often encountered – a sensation of a band, a hoop on the head, a belt constricting the forehead, or a skullcap on the back of the head. "This is what we call a helmet, distinguishing between the back of the helmet, the top, and sometimes, when it is full, the visor. Only the face remains free: he experiences a feeling of pressure in all these parts..." [8,9,10].

At the peak of a depressive-hypochondriac state, a feeling of pressure and heaviness in the head can take on an increasingly "materialized" character, transforming (especially in endogenous depression) into a sensation of "some kind of physical defect" or a foreign body in the head, as if it were bothering and "as if something were there" [6].

Contrary to the widespread belief that throbbing headaches are rare in anxious depression with hypochondriacal disorders, many patients complain of precisely this type of pain – "throbbing with every heartbeat." This most often occurs in the evenings, when "the pounding of the heart in the temples prevents sleep," or during moments of maximum affective tension. This may be caused not only by pronounced general hyperesthesia, but also by arterial hypotension or, conversely, labile hypertension, which are characteristic of such conditions [2,6].

Unlike psychogenic pulsating headache, vascular headaches are rhythmic with palpable pulse beats and typically subside with compression of the carotid artery. Paroxysmal neuralgic headaches are also possible, often accompanied by similar sensations in other parts of the body [1,3,5].

Complaints of headache may mask extremely unpleasant sensations in the occipital or temporal muscles, accompanied by cutaneous hyperesthesia in these areas. Sharp muscle tension and pain in the cervical-occipital region sometimes require the exclusion of meningeal syndrome [2,6].

Many patients suffer from attacks of acute pain resembling migraines (boring, shooting, gnawing, burning), often accompanied by dizziness, nausea, or vomiting. For example, one of our patients experienced "wild spasms" in her forehead, accompanied by excruciating vomiting, at night, due to a latent depression that developed after her husband's infidelity, with persistent sleep disturbances and a feeling of "nausea" in the morning [5,7].

Headaches associated with emotional stress often manifest as so-called "teacher's migraine," which occurs primarily on weekends – during the relaxation period following emotional stress [5].

One of the common types of painful sensations associated with anxious depression is a distinctive headache with motor restlessness – pronounced akathisia, reminiscent of complications associated with neuroleptic treatment. This pain is essentially the equivalent of the fear of death in patients with phobic disorders of the neurotic order (so-called anxiety neurosis) [5, 6, 7].

Emotional stress is accompanied by changes in the blood supply to the cerebral cortex, with the appearance of pathological vascular reactions – inert, paradoxical, and undulating. These reactions are reinforced by the mechanism of classical conditioned reflex, forming a type of individual response to adverse stimuli associated with negative emotions. Feelings of displeasure and any "sensations" have long been associated with trophic processes in the brain, particularly with its oxygenation [2, 5, 8].

Patients themselves often cannot clearly distinguish their specific painful sensations from feelings of anxiety, melancholy, or a premonition of danger. This “subtype” of headache – the so-called depressive, or thymopathic, headache – along with senestopathic and neuralgic headaches, is distinguished as one of the three main types of pain in depressive states [7].

Thymopathic pain in the region is often described as "frontal fear" or "frontal dysthymia." "Patients complain of a sensation in the forehead, which is their only suffering. They try to find words for this sensation. It's not pain," they say. "If it were only pain," say others, "they often call it torture... With this sensation, patients are almost unable to think, and fear and anxiety force them to move incessantly. This sensation affects mental processes much more strongly than pain..." The resulting feeling of anxiety sometimes leads to suicide attempts [10].

It is important to note that patients themselves clearly distinguish these excruciating sensations from "ordinary" headaches, caused, for example, by a sharp increase in blood pressure, which they tolerate relatively calmly [8,10].

The very vagueness of distressing sensations, occurring in a specific affective tone and "incomprehensible" to the patient, typically contributes to a buildup of affective tension, with anxious thoughts about one's condition and a fear of stroke, paralysis, or other severe suffering. This virtually eliminates the possibility of a long-term headache as the sole clinical manifestation of a specific functional state of the cerebral cortex with increased excitability of the autonomic nervous system [6,7].

It is precisely the vagueness of such sensations, perceived as evidence of some general malaise in the body ("either the blood isn't flowing through the vessels, or there's pressure on the temples"), for which these patients seek and, one way or another, find an explanation, that sets them on the path of hypochondriacal introspection, analysis, and interpretation. Having become the object of hypochondriacal fixation, senarthetic sensations become overgrown with increasingly persistent and pronounced fears and concerns about the possible development or direct threat of cancer, stroke and other serious and incurable diseases [8,9].

A headache that has become the object of a patient's hypochondriacal fixation quickly makes them forget about heart pain and any other kind of pain. The fear of stroke, paralysis, or a brain tumor overshadows, even displaces, the fear of death from myocardial infarction: the years-long helplessness of a person confined to bed after a cerebral hemorrhage is immeasurably more frightening for the patient than instant death from cardiac arrest [7].

Finally, it is worth noting the unusually expressive disturbances hidden behind complaints of headache in schizoaffective states. Such patients complain of a feeling of weakness and fatigue in the head (or only in the cerebellum, in the back of the head) and a slight tingling in the brain, and feel a swelling in the right side of the head, resembling a water-filled sac; Their head swells ("fills up with air and becomes large to the touch and in appearance" during the onslaught of uncontrollable thoughts), then contracts again to its normal or even reduced size [4].

There is no longer a noise in the head – their brain rings, thunders, rattles ("this is the drying up and painful rupture of blood vessels", the "beginning and end" of which these patients sometimes feel). Something dangles in the head, turns over, gurgles; the brain moves ("as if breathing"), shakes, turns inside out; some planes in the brain knock against each other and a cracking sound is heard when "one lobe of the brain overlaps another" [3,4].

Many of these patients, nevertheless, are under the observation of neurologists for years due to stereotypical complaints of headaches, the nature of which no one specifies; but if in the initial stages of the process these complaints are most often caused by algia, paresthesia and other predominantly affective disorders with elements of interpretation, then as the

duration of the disease increases, we are increasingly talking about hallucinations of a general feeling and other symptoms of the paranoid circle [1].

Complaints of headaches may thus conceal disorders of senesthesia (“the head is pressing, bursting, pulling, drilling, burning, tingling”), and psychosensory disturbances (“the head is heavy, does not rest on the shoulders, as if crushed by a multi-pound load”, or less often – “somehow light, empty”), and a decrease in mental performance or disorders of thinking (“the head is stupid, does not work, does not understand”), and phenomena of derealization (“as if something is flickering in the head and everything around is perceived somehow not right, differently”), and depersonalization associated with a sharp change in senesthesia (“the head is not my own; both mine and not mine; as if both I and not I”) [1,6,7].

However, behind all these psychopathological phenomena lies, ultimately, depression and a sense of suffering.

Conclusion

Headache complaints in psychosomatic and affective disorders are a complex, multilayered phenomenon that rarely reflects the true intensity of pain and far more often expresses emotional tension, anxiety, depression, and senesthesia disturbances. These sensations are characterized by extreme uncertainty, volatility, and subjective torment, easily becoming the object of hypochondriacal fixation and often masking deeper affective or psychotic processes. Regardless of the form of manifestation – be it a "neurasthenic helmet," thymopathic pain, migraine-like attacks, or fantastic sensations in schizoaffective states – they are based on a single mechanism: affective suffering, which determines the perception and interpretation of bodily sensations.

Conflicts of Interest

The author declares no conflicts of interest.

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