







#### **Systematic Review**

# Hysteria and its deceptive masks

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# Abstract

Hysteria still exists, even if this stigmatizing term has been abandoned in favor of more descriptive terms (dissociative disorders, conversion disorders, functional disorders), and represents a frequent and disabling pathology. Even if in some situations, the establishment of a definitive diagnosis remains difficult, more and more clinical and paraclinical signs are developing to help in the diagnosis and the error rate is low. Thus, the clinician must currently make a positive diagnosis of conversion and no longer, as unfortunately often in the past, confine himself to evoking by default such a possibility in the face of an atypical picture accompanied by an extensive negative paraclinical assessment. The most probable etiology concerns triggering factors of a psychiatric nature (traumatic episode or psychic stress, vulnerability with a field of abuse in childhood, comorbidity of anxio-depressive disorders), which can, in turn, lead to changes in brain function, the exact neurobiological correlate of which remains to be determined, even if many leads have recently been suggested by brain imaging. The care of these patients requires an in-depth and specialized examination, if possible, with the help of a neurologist, then psychiatric care, combined with somatic follow-up. In the future, a better understanding of the etiological mechanisms will make it possible to develop more specific treatments.

# Introduction

The word hysteria has passed into everyday language, when we want to designate a more or less histrionic individual, it is nevertheless a real disease, it is a neurosis that has disappeared from the classifications of mental illnesses. Anxiety neurosis has erupted into various anxiety disorders [1]. The hysteric reproduces perfectly (or almost) the symptoms of certain diseases having an organic cause. The psychiatrist who follows a hysteric has the challenge to take up: to disentangle the true from the false while the patient, unconsciously, likes to cover her tracks.

Hysteria is thought to affect nearly one percent of the general population. Neuroses are relatively benign from a psychopathological point of view, insofar as they are never accompanied by a break with reality (what is called a delusion) or by disorganization of the personality (this is called a dissociation). But from the point of view of the individual who

suffers from them, they often entail a notable social handicap that limits him greatly in his daily life. It is moreover the occurrence of this handicap that leads him to consult.

Hysteria is a condition affecting mainly (but not exclusively) women [2]. The predominant idea at the time of Hippocrates was that the uterus was an autonomous living organism, which moved inside the human body. Disturbances highlighted, such as suffocation (the uterus swells, menstruation putrefies) or convulsions, are then related to the migration of this uterus. We now know that hysteria is the consequence of a symbolic fixation of anxiety on physical or psychological symptoms. Anxiety is not experienced as such: it is translated unconsciously and expressed by the body, according to a language that is not always easy to decipher, this is called a conversion.

# How to make a diagnosis of hysteria?

Let us specify from the outset that the hysterical patient triggers the symptom herself, but that she triggers it

unconsciously, that is to say, that she is unaware of the genesis of the symptom. The symptoms are factitious, and the doctor is challenged to prove it [3].

Hysterical symptoms, of a physical or psychic nature, take on a paroxysmal, intermittent, or lasting aspect; they are usually reversible. Among the various physical manifestations of hysteria, motor, sensory and sensory disorders are distinguished [4]. Motor disorders are convulsions or paralysis. A "classic" seizure usually begins with what is called an aura, consisting of abdominal pain, palpitations, a feeling of "lump in the throat" and visual disturbances. This table leads to a "pseudo loss of consciousness", without biting off the tongue or loss of urine (signs that are found during an epileptic attack), and to a fall (but the fall is not brutal so that the patient does not hurt herself).

Then comes the second so-called epileptoid phase, first tonic (with respiratory arrest and tetanization), then clonic (the person is animated by impressive convulsions), and finally resolving (with general fatigue and noisy breathing). The third period, that of contortions (during which we note the presence of disorderly movements and cries), precedes the phase of passionate attitudes, a sort of trance during which erotic or violent scenes are usually mimed. A gradual return to consciousness characterizes the end of the crisis, with residual contractures and disjointed words relating to passionate themes.

Most of the time, we see more watered-down pictures, limited to a simple pseudo-epileptic phase followed by agitation, a crying fit, and terminal appeasement. The minor forms are reduced to the classic nervous breakdown.

Every doctor is confronted during his career with a certain number of patients for whom a precise diagnosis cannot be established. For some of them, time allows obtaining a diagnosis with the appearance of more florid and clearer symptoms and signs. For others, the cause of the symptoms remains unknown and if the disorders persist for at least six months, the terminology that most often applies is that of the undifferentiated somatoform disorder according to the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DMS -IV). When the clinical presentation is neurological (that is to say, it includes a motor, sensory or sensory disorder), we speak of conversion disorder, again according to the DSM-IV. Hysteria disappears from DSM-5, it is replaced by somatic symptoms. We, therefore, remain so far in a descriptive register, although the term "conversion" refers to Freudian theories of a transformation of psychic conflicts into physical symptoms [5].

The International Classification of Diseases of the World Health Organization (CIM-10) tries, for its part, to propose an etiological model since it classifies these neurological disorders in the chapter of dissociative disorders, characterized by "a complete or partial loss of integration of memories, awareness of identity, immediate sensations, and control of bodily movements" and that it implies that a psychological factor is associated with it, even if it is denied by the subject.

The old term hysteria also referred to an etiology since, according to its etymology (hustera = uterus in Greek), it was understood that the clinical manifestations were secondary to a migrating uterus which interfered with the transmission of nerve impulses.

### **Lasting functional symptoms**

It is important to mention which symptoms are often met

- Motor disorders
- -abasia (more or less complete loss of the ability to walk)
- -astasia (more or less total inability to keep the upright position).
  - -dominant hand disorders (paralysis, paresis).
  - -muscular weakness.
  - Sensitivity disorders
  - -anesthesia
  - -hyperesthesia
  - -various pains (such as headache).
  - Contractures and cramps
- -blepharospasms (periodic contractions of the orbicularis of the eyelids).
- -cramps in the stomach and esophagus, which can go as far as dysphagia, vomiting.
  - -functional colopathy.
  - -anuria, dysuria.
  - Sexual disorders
  - -frigidity.
  - -vaginismus.
  - nervous pregnancies.
  - Sensory disorders
  - -monocular diplopia.
  - -aphonia.
  - -deafness.

#### **Depersonalization**

- -Pseudo-dementia syndrome
- -Pseudo-depressive or even pseudo-delusional syndrome
- -Psychopathology of hysteria
- -Overflowing imagination
- -Oedipus
- -Phallic fixation.

### What about today?

The first question that hysteria poses is perhaps the following: was it Freud who went to the hysterics or was it the hysterics who went to Freud? It is difficult to answer this, although initially, it was the hysterics who went to Freud, later it is not certain that Freud did not go to them from time to time [6]. The important thing is to emphasize one of the essential behaviors of the hysteric, he comes back tirelessly to the doctor to ask him the same questions because for the hysteric the doctor is the representation of the woman or the man according to his own sex, his question is ambiguous because it does not seem to be linked to sex, insofar as the doctor can be either a man or a woman. These questions, which the hysteric asks without his being aware of it, concern sex. It should be remembered that the place held by the doctor is not a place gendered by the one who occupies it but by the function that the hysteric attributes to him, he comes to ask this question: "who is he, the doctor"? There is a heuristic function there, as for research, concerning hysteria, it is not excluded that the very long stagnation of general medicine or even psychiatry, was linked to voluntary or unconscious deafness to questions asked by the hysteric patient.

The hysteric, in fact, forces the doctor to do something he does not want to do, he violates it permanently, he leads the doctor towards a new reading of the body which goes so far as to rely on signs inscribed on the body. Take, for example, make-up, the doctor seems to be facing him, in an extremely comfortable position, "he knows what make-up means", which frees him from thinking. This external aspect of the woman does not always translate these sorts of the boulevard or Gallic joys which one lends to her. It is there, after a short moment of surprise, that interrogation can be introduced, which perhaps leads us to ask ourselves questions about the meaning of this make-up. Most of the time we quickly close this file because it does not lead to funny things but to all these hysterical questions that are perfectly intolerable and that we do not want to hear.

Another fundamental question must also be addressed, many works attempt to differentiate what is called hysteria and psychosomatic medicine. This is a very bad neighborhood, from the very fact that it comes to constitute either a limit, or a transition, or a continuity with hysteria. But one could develop for a very long time the problem of psychosomatic inflation and the unanswered questions on which these psychosomatic conceptions lead. Even if we stick to its most original level, that is to say, the fact that certain types of strictly medical conditions, especially lesions, come under what is called psychosomatics. It seems obvious that both stomach ulcer and eczema are not fantasies, whereas it is with fantasies that the doctor tries to explain what he does not understand. Some theoreticians agree to declare that what characterizes the psychosomatic patient is precisely the absence of fantasies, this position is however difficult to maintain. It is enough to have seen these patients, to have spoken to them for enough time, to discover that their fantasies are obvious on condition of being attentive and of having overcome this particularly acute anxiety that emerges from all psychosomatic patients. Because

psychiatrists, psychoanalysts, are not so used to psychosomatic patients, which organic doctors call real patients.

The most ignorant psychoanalyst of somatic medicine knows that stomach ulcers can degenerate into cancer, which is a terrible disease. So, the latter is seized with a kind of fear, for which his psychoanalytic asceticism has not prepared him. It is to avoid this fear that he avoids the psychosomatic patient, yet from time to time, he would like to speak to him, however, it is not so frequent that a psychosomatic patient asks for analysis because he generally does not wish to learn too much about his illness. Sometimes the psychosomatic illness will reveal itself during the analysis, in all cases, the patient has things to say, but the analyst is not always ready to hear them. Once again, you absolutely must not listen, you must silence, that is one of the difficult neighborhoods with hysteria. This forces us to continue to reflect on an area that we thought was closed, that we would even like to avoid, which also forces us to try to go beyond certain current positions of the problem. Indeed, it is not by deepening the anatomy-clinical method that we will see more clearly in these psychosomatic diseases, it is not either by applying in a rigid way a certain form of the logic of reasoning even of psychoanalytical rationalization. That we will move forward.

#### Practical concepts of hysterical management

The general practitioner, the specialist who is not a psychiatrist, but preferably a family doctor who knows the entourage, the patient, and his or her history, is the best placed to exercise this psychosomatic medicine, to also realize that it escapes our categorizations. It is not only stomach ulcers, eczema, arterial hypertension, asthma, and other allergic manifestations that constitute psychosomatic medicine, there is practically no disease that escapes it [7]. It is not the psychiatrist, nor the analyst who is best placed for this listening. Their place is secondary, not so much in terms of importance, but in time. The best service that the analyst can render to the psychosomatic patient would be to establish cooperation, in ways yet to be invented, with the organic doctors, to treat with these practitioners, the material collected in the field. The role of the psychiatrist is therefore to establish a collaboration where his function is to fill in the too glaring gaps in medical training which only prepares the doctor to read in his patient organic facts and not specifically "human" facts. Neither the doctor, nor the psychiatrist, nor the patient would lose by restoring this psychosomatic dimension by working together. If a definition of psychosomatic illness had to be given, it would be "a disease where the patient overflows with humanity", where the patient, instead of confining himself to well-localized, well-serialized, very precise responses to his doctor, where this patient would deliver something that could not have passed through simple language.

It must often be recognized that the hysteric and the psychosomatic patient are put in the same bag, they are boring people who do not "keep themselves in their place". However, the hysteric forces us to attempt a split in order to mutually illuminate the two fields of hysteria and the psychosomatic component inherent in human nature. It

is undoubtedly the hysteric who led Freud to discover the unconscious, or at least to articulate, as he did, a coextensive and consubstantial relationship with sexuality. There is only a sexual unconscious, there is no human sexuality except underpinned by the unconscious, this should reflect on all well-intentioned attempts to teach or provide information on sexuality. Although it is necessary to talk about things that until some time ago had to remain hidden, it is dangerous to reduce teaching, information on sexuality, to biology, where nothing distinguishes the animal from the man. Even to morality, where nothing distinguishes the man from the angel, that is to say from the fantasy, it cannot become information on sexuality because in any case, it will not be possible to make people understand to each of us what is his true sexuality.

The notion of hysteria seems to be known to everyone, it has thus become commonplace to the point of no longer being a medical term in common language, everyone has an idea of hysteria, an idea which is not always the same. What Freud has shown us that this knowledge is eminently conducive to repressions, and by this very fact, to the demonstration of repression, the essential merit of the hysteric in the Freudian discovery is to have put the finger on this dimension of repression, that is to say on the very incompleteness of discourse. The interpretation of repression, which is at the same time its lifting and its conscious creation, in no way aims to complete a hysterical note, even if at the start it may be its fantasy, during the months or the years which allow it to discover the "joys" of incompleteness. This knowledge about the hysteric always functions in the same way: the knowledge of a part of the clinic of hysteria, the knowledge of a part of the therapy of hysteria, the knowledge of a part of the theory, or the analytical theorization of hysteria, necessarily hides another knowledge. This is what can interest the psychiatrist or despair depending on his initial training, his possible empathy for hysterics is also a source of analysis.

#### Hysteria: A historical but modern concept with another name

In antiquity, Hippocrates devoted several chapters of his Medical Treatises to describing the symptoms of hysteria and their treatment. It was not until the 19th century that interest was reborn in the medical community for this intriguing clinical presentation through Jean-Martin Charcot, who established his fame, in part, by presenting patients in "great hysterical crisis during his legendary Tuesday Lessons [8]. Subsequently, one of his students, Sigmund Freud, will develop the concept of intrapsychic conflict "converted" into a somatic symptom. Then, in the past century, we witness a dismissal of this pathology, both on the part of psychiatrists and neurologists, to the point where it is even suggested that hysteria no longer exists [9]. The broadening of the spectrum of psychiatric diagnoses, such as personality disorders, further confuses the concept of histrionic personality.

With the advent of new investigative techniques such as electrophysiology and brain imaging, interest has been revived in recent decades and it has recently been established that hysteria, renamed conversion disorders or dissociative

disorders (see below) above), or more simply in the language used with the patient, functional disorder (the function being disturbed, but the organ supposed to be healthy), remains today a frequent and disabling pathology. It is estimated that up to 30% of patients in a general neurology consultation present with medically unexplained symptoms [10] and their follow-up shows that more than half (55%) show no improvement at eight months of evolution [11]. Long-term follow-up of patients with dissociative motor and/or sensory Hemi syndrome has shown that twelve years later, 83% of them remain symptomatic and nearly 30% have ceased all professional activity at an average age of 44 years [12].

# Medically unexplained neurological symptoms: A missed diagnosis?

One of the reasons why a current of thought arguing that hysteria had disappeared was that it was understood that it was simply misdiagnosis. In 1965, a study suggested that if these patients were followed long term, the organic disease was found in two cases over three to ten years [13]. A recent meta-analysis [14] of 27 studies from 1965 to 2005 showed that the diagnostic error rate seems to decrease over the years but this is explained by the improvement in the methodology of the studies and not by progress in medicine (such as the appearance of the cerebral scanner for example). It is currently estimated that the misdiagnosis rate in conversion disorders is 4%, which is comparable to other psychiatric (schizophrenia: 8%) and neurological (motor neuron disease: 6%) diseases.

If we now know that a diagnosis can be made with as certainty as for other diseases, it is obvious that this is based on criteria that must be as objective as possible, knowing that it is a question of a clinical diagnosis and that no biological marker is available. In this sense, a major effort to validate clinical and paraclinical signs (the most important of which are reported below) has been made and continues to generate research.

For motor dissociative disorders, the Hoover sign is clinically sought (automatic extension movement of the diseased leg which is felt by the examiner during a forced flexion movement of the healthy leg; based on the walking reflex), of which a quantitative version with myometric measurements [15] showed that involuntary automatic movement was more marked during dissociative paresis than during organic paresis.

Regarding abnormal movements, clinical diagnostic criteria have recently been modified and, despite a retrospective study design, their validation showed 100% specificity and 83% sensitivity for detecting "certain" or "probable" psychogenic abnormal movement. ". These criteria are based on the characteristics of sudden onset, distractibility, inconsistency, weakness or associated sensory disturbance, associated somatization, pain or fatigue, potential secondary benefit, and potential model (exposure to a neurological disease beforehand). Psychogenic tremor has been the subject of a separate validation [16] demonstrating that the most reliable sign to differentiate it from essential tremor would be the presence of distractibility (specificity and sensitivity of 73%); the tremor will change or even disappear when the patient has

to concentrate on another task, for example, the finger-tonose test.

For gait disorders and sensory disorders, it is the clinician's experience that takes precedence since there is not yet a clearly validated sign, although there is a trend to formally test observations, as by example the very recent "chair sign" [17]. A group of patients with psychogenic gait disorder could propel a chair on which they were seated better than a group of patients with organic impairment. For sensory disorders, it is the atypical presentation (not respecting a neurological territory) which is a classic index suggesting a non-organic deficit.

The renewed interest in dissociative neurological disorders is therefore clearly reflected by the plethora of scientific articles that have recently appeared which attempt to better characterize and describe these signs, which have been known for several centuries and, in parallel with the development of evidence-based medicine, to obtain reproducible and reliable signs.

#### Dissociative/conversion disorders: A psychiatric illness?

If these disorders are therefore better and better characterized, their cause is still not established with certainty. According to the Freudian concept, it was accepted that it was a psychiatric illness with the resolution of the intrapsychic conflict through the production of the somatic symptom. Studies have indeed established that there were more psychic traumatic events in these patients [18], more antecedents of physical and sexual abuse [19] and that they were more prone to other psychiatric disorders, such as depression and depression. Anxiety [20]. However, it is also known that the demonstration of such an antecedent is not reliable, in particular, because of the subjective evaluation of the importance of the possible trauma, and a history of an "event stressful" is often reported also before the onset of an organic neurological disease [21].

### Dissociative/conversion disorders: A neurobiological correlate?

If we admit that the primum movens resides in a psychic dysfunction, the fact remains that the very particular clinical presentation, which sometimes very closely mimics a neurological deficit, suggests a cerebral dysfunction. As early as 1995, brain imaging studies using SPECT, PET, and functional MRI revealed different patterns of abnormal activation of certain cortical and subcortical regions. No clear model is currently established due to methodological problems [22]; most of these studies could only be carried out with small groups of patients, the clinical presentation of dissociative disorders being very heterogeneous (different types of seizures, paresis or sensory disorders of various distribution, etc.). However, it does show that hyperactivity of the frontal regions [23,24], (orbitofrontal cortex and anterior cingulate), secondary to emotional phenomena, could, in turn, inhibit the regions responsible for the symptom, such as the contralateral precentral motor cortex, for example, during motor disorders or parietal in sensory disorders. Since these frontal regions are involved in volition, a disturbance of their activity could

therefore prevent voluntary movement. A study on seven subjects [25], carried out when the symptom (sensitive-motor Hemi syndrome) was present and when it had recovered, showed that there was hypoactivation of the thalamus and the basal ganglia, in particular the caudate nucleus, which recovered concurrently with symptom resolution. This suggests that cortical-subcortical striato-thalamocortical loops, crucial in the regulation of movement, are also involved in the production of the dissociative somatic symptom. It is, therefore, possible that these loops are themselves under the influence of the limbic system (involved in emotional regulation). Indeed, it is well known that the caudate nucleus and the thalamus are in connection with the amygdala (emotional processes) and the orbitofrontal cortex (volition) [26]. A recent study [27], set out to demonstrate this potential link between emotional regulation and the production of a neurological symptom: a patient suffering from a dissociative motor Hemi-syndrome was subjected, during the acquisition of images by functional MRI, to a task forcing her to remember a traumatic event (announcement of rupture from the spouse); in parallel with hyperactivation of the amygdala (witness to the involvement of emotional memory), hypoactivation of the motor cortex contralateral to its deficit was observed.

These "active" inhibitions of certain brain regions could then correspond to phylogenetically very old protection mechanisms since similar behaviors have been observed in the animal kingdom. The animal no longer moves, would have the function of hiding any potential clue to its location from a predator while waiting for the disappearance of the danger. Another example of "focal" deficit was seen in ducks that appeared sick and lame, while slowly driving a predator away from their nest. These behaviors aimed at ensuring survival could be found in humans where deficits, incomprehensible according to the laws of organicity, would be produced unconsciously in order to ensure better homeostasis of the system and, not far from Freudian theories, put aside a psychic danger or face an external situation (secondary benefit of being sick).

# What potential for a treatment?

As discussed so far, many advances and efforts have been made to better understand both the clinical and neurobiological aspects of this disease, but what about treatments? Since no definitive model has been established, targeted treatment is not yet possible. Several studies, often uncontrolled or on small groups of patients, have shown an interest in cognitivebehavioral therapies, physiotherapy, antidepressant drugs.

Currently, it seems reasonable to offer the patient multidisciplinary care [28], adapted to each situation. It is important to explain to the patient that he suffers from a known disease and it has been shown that the term best accepted by patients is that of functional disorder (29). One can then, by explaining that the function is disturbed (voluntary control of force, for example) but that the organ is intact (the brain and the nerves), reassure the patient about other serious pathologies that he might fear, and consider reversibility of the symptom. It is then useful to involve him in the care and

to explain to him the advantage of a psychiatric evaluation and follow-up. The patient must understand that we refer him to our psychiatric colleagues, precisely because we have established a positive diagnosis that requires the intervention of this specialty and not because by exclusion, even out of spite, we turn to another specialty.

Finally, it should always be kept in mind that if the diagnosis of a functional disorder is a positive diagnosis and not an exclusion one, the coexistence of an organic pathology is possible; we often observe patients suffering from epilepsy and psychogenic non-epileptic seizures or patients suffering from multiple sclerosis and functional disorders, such as psychogenic tremor for example. The management of these two pathologies in parallel will then be necessary.

#### **Practical implications**

- The term hysteria is no longer part of modern medical vocabulary. We will more readily speak of dissociative, functional, or conversion disorders
- The manifestations of these disorders are often neurological in nature, including in particular sensorymotor deficit symptoms, epileptiform manifestations, or abnormal movements
- A certain number of positive criteria have recently been developed making it possible to affirm the functional nature of these symptoms with better reliability
- Recent functional neuroimaging studies have shown a change in brain activity in the frontal cortex and basal ganglia, providing, for the first time, neurobiological support for hysteria.

#### Conclusion

Hysteria is resistant to any chemotherapy unlike anxiety disorders, it is an excellent candidate for psychoanalysis but unfortunately, hysterics only consider it very rarely. What about the anxiety of the hysteric? Is it underlying? Is hysteria a defense?

Certain symptoms encountered in hysterics, particularly somatic ones, are also observed in anxiety disorders. At first, the doctor may think that he is in front of an anxious patient. However, during the various visits, the observer will be able to note the erratic nature of these symptoms. They move from one organ to another; they change according to the prescription or the discontinuation of drugs. Thus, a patient began to vomit when asked to stop taking an antidepressant, prescribed by another doctor at low doses. Nothing seems logical about the onset or cessation of certain symptoms. The worst thing is to tell this type of patient that what he feels is not serious.

We can certainly better understand through hysteria what the defense mechanisms are, which we will find. Indeed, we can consider that the somatic symptoms of the hysteric allow him to better support intense anxiety that the patient does not know how to solve otherwise. This unconscious anxiety, which is easily verbalized in other patients for whom we can

then propose therapeutic strategies, is not easily accessible to the doctor. Indeed, the character that the hysteric gives us to see, and that as a doctor we reject, is the touching image of the afflicted, the innocent victim of an adverse fate and who assures us, by gratifying us with boundless confidence and admiration, that we are the only ones to understand him and to be able to help him.

In my point of view, after years of clinical practice, the main point about hysteria is to treat anxiety. It is sometimes successful, but for some patients, it is not, in those cases, I think that you have to reconsider the relationship, between the patient and the clinician.

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