Clinical note

C. Vidal Castro
C. Rejón Altable
A. C. Sierra Acín

Thought, perception and delusional infestation

Centres Assistencials Dr. Emili Mira i López
Santa Coloma de Gramenet (Barcelona). Spain

The authors report a case of delusional infestation in a 45 year-old woman seen in an out-patient setting. A review of published literature about this disorder and its nosological classification over different historical periods and by different authors is performed. Difficulties in separation of the delusion and hallucination symptoms in body phenomena are discussed.

Key words:
Delusional parasitosis. Delusional infestation. Monosymptomatic hypochondriacal psychosis. Tactile hallucination.

Actas Esp Psiquiatr 2006;34(2):140-143

Percepción y pensamiento en los delirios de infestación

Se describe un caso de delirio de infestación en una mujer de 45 años atendida ambulatoriamente. Se realiza una revisión de literatura publicada sobre este trastorno y su clasificación nosológica en diferentes etapas históricas y por las distintas escuelas. Se discute la difícil separación de los síntomas delirio y alucinación en los fenómenos de la corporalidad.

Palabras clave:
Delirio de parasitosis. Delirio de infestación. Psicosis hipocondríaca monosintomática. Alucinación táctil.

INTRODUCTION

Delusional disorder or disorder due to persistent delusional ideas occurs as a stable and well-defined delusional system that is typically enclosed in a personality that maintains many aspects intact. It sometimes has hallucinatory phenomena, although they are generally not prominent. After several approaches during the second half of the XIX century, the description of paranoia was definitively defined by Kraepelin who recognized different subtypes according to the delusional content. He differentiated it from *dementia praecox* (later called schizophrenia by Bleuler). In the beginning he accepted that auditory hallucinations could occur in paranoia, but later ruled it out. The present diagnostic classifications (ICD-10 and DSM-IV) describe a similar disease to that of Kraepelin except for the possibility of the existence of non-prominent hallucinations (auditory in the case of ICD-10 and auditory or tactile in the DSM-IV) and related with the delusional system. In general, it is believed that the hallucinations may affect any delusional disorder modality. However, they are often difficult to evaluate and differentiate from false delusional interpretations and illusions. Within the delusional disorder subtypes, the somatic one, also called monosymptomatic hypochondriacal psychosis, is classified, in turn, into four subtypes according to the delusional content of the ideas (those affecting the skin, those of body deformity, of body smell and others).

In the delusional idea of skin infestation, the patient believes he/she has organisms living on the surface of the skin or under the skin. There are sometimes even graphic descriptions, that could be considered visual hallucinations or more commonly a vivid projection of the ideation. Internal body sensations are erroneously interpreted as evidence of the parasite activity. The patients show «proofs» of the infestation, showing skin lesions. The «matchbox sign» in which the patient brings a small container saying he/she has captured «insect bodies» or «eggs» is typical. They sometimes self-administer strange and dangerous treatments. They generally progressively withdraw socially due to shame or fear of transmitting the infection. This type of delusion disorder is not rare and is easily observable in liaison psychiatry[1]. In a meta-analysis of 1,223 cases collected over 100 years, Trabert[2] observed predominance in women that increased with age. The delusion duration was 3 ± 4.6 years. Social withdrawal was more a premorbid trait than a secondary phenomenon and the prognosis was not as unfavorable as usually thought (almost half remitted in the observation period or in the catamnesis). Comparing the pre-pharmacological era patients (before 1960) with those after, remissions increased from 33.9 % to 51.9 %. The prognosis was better the shorter the symptomatic period prior to treat-

Correspondence:
Carol Vidal Castro
Centres Assitencials Dr. Emili Mira i López
Av. Prat de la Riba, 171
08921 Santa Coloma de Gramanet (Barcelona) (Spain)
E-mail: carolvidal25@hotmail.com

ment. Drug treatment is with neuroleptics. Pimozide is the preferred option and the delusional ideas can be considerably modified with a psychological approach. The major problem is not the response to treatment but its adherence and compliance.

George Thibierge described the first case documented in 1884, using the term «acarophobia.» Other terms used to describe these cases are: dermatophobia, parasitophobia and entomophobia[3]. At the end of the XIX century, the term «phobia» was not used in the sense of «neurosis,» but rather there was a semantic transformation to separate it from the cognitive notions of «obsession» and «delusion.» These three concepts were contained in the same concept of «fixed idea» that had been used by previous writers to refer to insanity[5]. In 1938, Ekbom was the first to differentiate it from entomophobia, stressing its etiological, behavioral and prognostic heterogeneity versus the pre-existing unitary model. He described eigth patients with delusional infestation, using the term Dermatozoenwhan[3]. In 1946, the English term «delusion of parasitosis « was introduced by Wilson and Miller.

Publications after that of Ekbom proposed a syndromic model that considered delusional infestation as a possible manifestation of different psychiatric presentation patterns. Several reports suggest an association between the occurrence of affective psychosis and the presentation of delusional infestation. The second major area of primary associated condition seems to be that of organic psychosis and acute confusional states related with drug and/or alcohol abuse. The third association group is with delusional disorder or monosymtomatic hypochondriacal psychosis. On the contrary to this syndromic approach model, Skott concludes that the complaint of false infestation should only be conceptualized as a non-specific symptom that may occur in infinite varieties of individual bio-psycho-social contexts. He proposes four areas of concern in the evaluation of patients with delusional infestation: environmental, personality, biological and psychological factors[3]. Opinion is divided regarding the framing of delusional infestation as a subtype of delusional disorder or symptomatic hypochondriacal psychosis. Some authors consider it as an independent picture with specific characteristics[4].

To integrate these different notions, an etiologic hypothesis on two levels should be considered. In many cases, the disorder occurs as a non-specific symptom, whose adequate management and understanding depend on individual, comprehensive and multidimensional diagnostic formulations. In some, the symptom may be a manifestation of the primary disorder, sometimes psychiatric and very occasionally physical. The association in this case of pruritus and paresthesia phenomena and the subsequent development of delusional disorder should be stressed. However, the disorder often exists as an essential unitary syndrome[3].

However, when a patient reports the presence of a body sensation related with the disorder and once its organic origin (paresthesias) has been ruled out, it must be questioned if he/she is not also suffering a special type of hallucination. The field of body hallucinations is extensive and its examination complex. Setting aside the cenestopathies for one moment, Berrios[5] mentions the distinction between tactile hallucinations and the remaining hallucinations of the so-called «distance senses» such as sight, hearing, smell and taste, since the former do not fulfill the main criterion to be considered a hallucinatory perception («perception without object»). Thus, for example, the concept of pseudohallucination introduced by Kandinsky as space to classify unclassifiable hallucinatory experiences is not applicable to the tactile sense where the questions of insight and exterior space do no occur. The view of the hallucination as a symmetric and homogeneous disorder in the five senses is broken in regards to the impossibility that pseudohallucinations may occur in some sensorial modalities. To respond to these difficulties, German and French psychiatry have contemplated the hypochondriacal delusional-hallucinatory phenomenon from a more inclusive perspective than that of British influenced psychiatry. The latter systematically tends to classify all the types of abnormal experiences that do not fit into the mold of «distance senses» hallucinations as delusions (it is paradigmatic in the case of the self disorders). Thus, European continental psychiatry places less emphasis on the «perceptual» aspects of the phenomenon than on its «cognitive» or «aperceptual» aspects, on the contrary to the «intellectualistic» view of Locke on delusions and hallucinations, still in force in English psychiatry. The debate on psychopathology of delusional infestation has been discussed by Berrios[5]. Of the two main schools of thought, the first, «sensorialist» sustains that the primary disorder is a tactile hallucination or illusion (even a real sensation) with the subsequent delusional interpretation. Among these authors, some think that the primary phenomenon could be the perceptive component, although not necessarily hallucinatory. Even though their classic works use the notion of «chronic tactile hallucinosis», Bers and Conrad, take an intermediate position since they found it difficult to decide what was primary and what was secondary. On the contrary to the sensorialistic point of view, others defend the cognitive approach according to which the syndrome was primarily delusional. The British position has been to consider these states as fundamentally having a delusional nature. Skott concludes that «Psychiatric symptoms (in the delusional parasitosis) are extremely varied. Patients may suffer illusions, erroneous concepts, and delusions, and in rare cases, hallucinations».

CLINICAL CASE

A 45 year old woman who contacted psychiatry for the first time on referral by her general practitioner. Native of Gualcazar (Cordoba). At a few months of age, her family moved to Roses (Girona) and then to Extremadura, then again to Cordoba and finally to Badalona (Barcelona) where she has lived since 9 years of age. Schooling until 19-20 years. She completed laboratory analyst and auxiliar studies. She worked

in a textile warehouse packaging sweaters for one week. After her father sent an application, she began work at 16 years old as a laboratory analyst in the company where she presently works. After, she combined studies and work. She explains slight conflicts due to work overload since years ago, which had not caused serious problems. Married since 24 years of age. She has two children, 16 and 13 years old. She is the second of four siblings (an older brother of 49 and two younger sisters of 41 and 39 years). Among somatic personal background, allergy to trimetoprim and unspecified alterations in smell stand out. She explains she has allergies to products, with eczemas, present on the face. At 22 years of age, she had a serious infectious condition without apparent sequels. Due to this, she was hospitalized for 2 months in which no specific diagnosis was reached. She underwent a cholescystectomy and amygdalectomy. There is no data of interest among the personal psychiatric background.

In regards to previous character traits, her family describes her as untrusting and uncommunicative. She describes herself as restless and «nervous» in childhood and presently as a «meticulous», «hard-working and responsible» person. As family psychiatric background, she has a sister under psychiatric treatment due to reactive depressive disorders because of a sentimental break-up. Authoritarian parents with little social relationships. She maintains a very close relationship with them and the rest of the family and very little with persons outside of this.

The present condition began 3 months before consulting about problems at work. She believes they overload her and give her sample products to analyze that cause physical discomfort (itching, smells, facial reddening, loss of hair, etc.). Secondarily, she feels anxious and has difficulty to perform her usual function. She interprets comments as referring to her. She believes that the manager wants her to leave her job and therefore manipulates her samples. Delusional interpretations in regards to her work activity, focused on her boss who «wants to take revenge on her.» She reports she has heard her saying on the telephone that she wants to denounce her. She varies in regards to the criticism made, which is sometimes partial «it is possible that she picks on me and the samples have not been contaminated» and on other occasions, she makes no criticism «they have done it to me, she has put microbes in the samples.»

Two months after the onset of the patient's malaise, and by referral from the company doctor, she came to the medical practitioner who put her on sick leave and referred her to psychiatry emergency service to assess «anxiety disorder with psychotic symptoms.» After assessment and initiation of treatment with Perfenazine 8 mg/day, she was referred to the reference mental health center and basic health care for detailed physical examination and complementary examinations that made it possible to rule out baseline somatic disease that justifies the symptoms. Good general aspect stands out in the clinical examination. Conscious and oriented in space, time and person. Untrusting and suspicious in the interviews, she focuses the conversation on the work problem and present stress she is suffering. Anxious and tearful when she speaks about her problem, but without observing structured affective symptoms. She maintains personal care and usual domestic activities and hedonic capacity is conserved. Without alterations of sleep or appetite. Senso-perceptive, olfactory, visual and tactile alterations (excessive odors, odors that others do not notice, itching in upper limbs, neck and head, vision of microbes that project from the computer screen and white stains on the surfaces that she recognizes as microbes). Self-referentiality with the work colleagues. Delusional interpretations in relationship with her work activity.

Although no other delusion contents outside of the central one that seems secondary to the somatic delusion interpretations were seen at the onset of the picture, the condition evolved to a delusional ideation of structure harm. It is oriented as a somatic type delusional disorder (DSM-IV TR). In the follow-up, organic condition causing the picture was ruled out. The patient showed mild improvement, with partial remission of the delusional symptoms at the onset, although this fluctuated. Poor therapeutic compliance made it difficult to increase the antipsychotic dose and she finally completely abandoned it since she did not think it was good for her. During the interviews, she was calm and explained good functioning outside the work setting although she maintained a conversation focused on her past situation at work. She always maintained her desire to return to work. She attempted returning to work in a different service within the same company and it was not possible.

DISCUSSION

Tactile hallucinations may be classified according to clinical or psychopathological criteria. The latter are important as they make it possible to differentiate hallucinations from delusions on a descriptive basis, for example, differentiating pure hallucinations from delusional interpretations. Purity of the hallucinatory states is questioned given that all the hallucinations are perception disorders that include a cognitive, interpretative component. Associated to different syndromes, the tactile hallucinations tend to be found in the clinical practice accompanied by delusional interpretations[5].

Delusional infestation is an example of the unresolved difficulties of contemporary psychopathology. Inclusion of the hallucination-delusional complex of infestation as a discreet entity within the monosyntomatic delusion picture, without paying attention to its links with the remaining tactile hallucinatory phenomena, comes from an analysis that does not respect the deep structure of the symptoms, reachable by a reconstructive psychopathological work. Considering the difficulty to distinguish a real tactile perception from an illusory or hallucinatory one or a perceptive alteration from a primary delusional idea by the appli-

cation of the operational criteria derived from the common definitions of hallucination (there is no object of shared perception or there does not have to be one) or delusion, it is necessary to subject this psychopathological material to reconstructive processes capable of including all the subsignificant information that the hallucination or delusional concepts leave out. And, it can be stated that psychopathology of the experience of the body tends to resist simpler symptomatic identification mechanisms, as we briefly explained in another part[6]. In the case of delusional infestation, we can explain its complexity according to the cognitive component of the perception. This is hypertrophied, leading to a secondary delusion that progressively becomes structured with the delusional interpretations that the patient presented makes on the setting and in relationship with the delusional subject matter, this explanation following the sensorialistic point of view. By extension, we could explain the auditory and tactile hallucinatory phenomena of the disorder by persistent delusional ideas, accepted in the present diagnostic classifications, as delusional interpretations of common phenomena of the senses. Another option is to consider this condition as basically having a delusion origin. That is, it can be made independent from the presence of primary tactile hallucinations, a position taken by the British psychiatry.

Parasitosis delusion supposes a cross between delusion and hallucination on a ground that is difficult to examine, corporality phenomena, that shows the fuzziness of the limits between both.

REFERENCES

1. Gelder MG, López-Ibor JJ Jr, Andreasen N. Tratado de psiquiatría (I). Barcelona: Psiquiatría Editores, 2003.
2. Trabert W. 100 years of delusional parasitosis: meta-analysis of 1,223 case reports. Psychopathology 1995;28:238-46.
3. TM Reilly. Delusional Infestation. Br J Psychiatry 1988;153(Suppl.): 44-6.
4. Morris M. Delusional infestation. Br J Psychiatry 1991;159 (Suppl. 14):83-7.
5. Berrios GE. Tactile hallucinations: conceptual and historical aspects. J Neurol Neurosurg Psychiatry 1982;45:285-93.
6. Rejón Altable C, Rodríguez Urrutia A. Koro-misidentification syndrome in schizophrenia? A plea for clinical psychopathology. Psychopathology 2004;37:249-52.
7. Diagnostic and statistical manual of mental disorders, 4th ed. Washington: American Psychiatric Association, 1994.
8. ICD-10 Classification of mental and behavioral disorders. World Health Organization, 1994.