# DELUSIONAL INFESTATION REVEALED THROUGH A MEDICO-LEGAL CONTEXT. CASE PRESENTATION

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Keywords: delusional infestation, case report, clinical description, treatment, evolution Abstract: The article presents the case of a male patient, aged 74 years diagnosed with delusional parasitosis, who is brought to the emergency room of the psychiatric hospital by the police and ambulance after he torched the households of some neighbours to stop the spread of parasites in the neighbourhood, being convinced that himself and his household are infested with lice. Psychiatric examination, physical examinations and laboratory explorations have ruled out other psychiatric or somatic conditions that could cause or explain the complaints. Secondary depressive and anxiety symptoms were insufficient to diagnose any distinct or remitting affective or anxiety disorder, decreasing the acute psychotic symptoms. The delirious symptoms developed gradually in the course of about two years, unnoticed by those around, in an unmarried patient, living alone in rural area where infestations with parasites in animal breeders are relatively common, with long-term preserved social and occupational functioning and a premorbid personality with paranoid and anancast traits. Treated with Risperidone 2mg/day, delirious nucleus dissolved gradually during maintenance treatment, as confirmed by patient's assessment 4 weeks after discharge. The case confirms the obsessive-compulsive role and paranoid personality traits (distinct sense of cleanliness, responsibility, also interpersonal sensitivity, interpretation and overreaction in the context of frustration) in the pathogenesis of the disorder. The case requires careful medical dispensary for assessing compliance and continuous social monitoring because of the forensic potential, questioning the role of the community and local authorities in identifying psychopathological decompensations with self and heteroaggression. The presence of auditory and visceroceptive hallucinations consistent with the delusional theme in the context in which the psychotic clinical picture is dominated by tactile hallucinations and delusional ideation of non-bizarre infestation raises the issue of nosological classification, according to DSM-5, all the other criteria of persisted delusional disorder being met.

## INTRODUCTION

Delusional disorder, somatic type, also known as delusional infestation, delusional parasitosis or Ekbom's syndrome is characterised by a hypochondriacal psychosis associated with schizophrenia, obsessional status, depression, bipolar disorder and anxiety disorders.(1,2) The condition is characterised by a fixed belief of having skin, body, or immediate environment infested by small, living pathogens despite the lack of any medical evidence. The diagnosis of primary delusional parasitosis can be made only after real infection or other underlying medical or psychiatric conditions have been excluded, because delusional parasitosis can be associated with several physical illnesses, psychiatric disorders or intoxications.(1,3,4,5) The primary delusional infestation develops without any known cause or underling illness and meets the criteria for persistent delusional disorder according to the International Classification of Diseases (ICD-10) or delusional disorder somatic type according to the Diagnostic and Statistical Manual of Mental Disorders (DSM-5).(5,6)

Secondary forms of delusional infestation are related to substance misuse (e.g. cocaine, amphetamines or cannabis), also antibiotics, dopaminergic medications, or during other somatic or psychiatric conditions (e.g. dementia, delirium, depression, schizophrenia, stroke, medical conditions that cause pruritus).(7) The diagnosis of primary delusional parasitosis is a diagnosis of exclusion that can be made only after medical or psychiatric conditions have been excluded.(1) Clinical picture of delusional parasitosis was noticed by Willan in 1799 and

Jördens in 1801, without the authors to suspect the psychiatric etiology of the disorder.(8,9) but it has been classically accepted that the first description of condition was made by Thibierge in 1894 and Perrin in 1896.(1)

Primary delusional infestation has an incidence of 0.7 to 3 in 100.000 inhabitants, being cited a tendency of increasing incidence. It occurs in all ages, especially in middle aged and older women, but the condition is also reported in men and all age groups.(10-12) Although the condition is rare, it poses serious practical problems to healthcare systems due to the tendency to become a lifetime disorder, with absent insight and sub-sequent non-compliance to treatment. About 60% of patients with delusional infestation have multiple coexisting psychiatric disorders.(13) Although in the past it was considered difficult to treat or resistant to therapy (14), recent studies indicate encouraging results of antipsychotics in the treatment of delusional infestation, atypical antipsychotics being considered as first line therapy with a response rate between 50-80%, while typical antipsychotics and Pimozide have been gradually abandoned due to side effects and risks.(15-24)

# CASE PRESENTATION

Patient, R,M,, 74 years old, retired, from rural area without known psychiatric history, was hospitalized urgently, brought by police and ambulance teams, accompanied by his sister, for clinical symptoms suggesting an acute psychotic syndrome dominated by delusional parasitosis, (lice), delirious disorganized behaviour with risk of danger, multiple sensory

<sup>1</sup>Corresponding author: Sanda Dura, Str. Lucian Blaga, Nr. 2A, 550169, Sibiu, România, E-mail: sanda.dura@yahoo.com, Phone: +40728 856116 Article received on 26.11.2016 and accepted for publication on 05.12.2016 ACTA MEDICA TRANSILVANICA December 2016;21(4):16-18 delusional hallucinations, soliloquy, insomnia.

History of the disease. Both, the patients' claims and the heteroanamnesis taken from his sister and local policemen who knew the patient revealed that the psychiatric suffering debuted about two years ago, the patient being convinced to be infested with lice, which he said he felt them "wandering throughout the body, the skin, under the skin", entering the eyes and preventing him to see, entering the nose and mouth when he breathe, speak or eat. Meanwhile, the patient continued his daily activities in the household being active in the community, its concerns related to the lice he said to have on his body and in his household not being a concern for the neighbours, due to the relatively common situation in rural communities. Gradually, the patient started to eat less and stay awake most of the night for fear of lice swallow. He felt the parasites like "a lump in the stomach", had no appetite, he was "sick all the time and the food had no taste". He feared that the lice had already invaded all organs". He used to wash himself several times a day. He said he saw the lice "like shimmering silver points". He forbade the neighbours and family to visit him for fear not to infest them. He called the local sanitation authorities, which carried out the disinfection of the entire household 2 times, but the patient remained convinced of the usefulness of labour. He continued to seek the support of the authorities which no longer intervened causing the patient to act on his own to stop the spread of parasites in the entire village. The patient neglected his nutrition, he no longer leaved the household to buy food, being seen by the neighbours walking naked in the yard and talking alone, and doing household activities during the night. 3 months ago, he took out in the yard the entire furniture and the clothes and burned them in a desperate attempt to get rid of parasites. He felt guilty to have caused this harm to the community and he felt responsible to find a solution. On the night preceding hospitalization, the patient deliberately set fire to some shelters for animals of two neighbours to stop the spread of parasites. The neighbours called the police, firefighters and family and asked for safety measures to avoid the risk of patient harming others or himself. The patient accepted hospitalization and the antipsychotic treatment being convinced that "something must be done".

History of life. The patient was the 3rd child in a family of religious peasants, workers, very anchored in the traditions of the village. There is no known family history of mental suffering. He worked hard in the household since childhood, unhappy when his brethren did not fulfil the household obligations, as confirmed by his sister. He graduated from vocational school and worked 35 years as a railway mechanic. At school, he was conscious, he did not have many friends because he did not like the colleagues who were "not serious" or "spoke badly". At work, he was serious, hardworking, appreciating only the hardworking colleagues. After work, he used to work in the family's household. In the village, he was known as a hard-working man, very skilled, always helpful. He was never married, had no children, lived with his parents whom he cared alone after his brothers moved out from the parents' house. After the death of his parents, he remained in the parental household which he continued to maintain. In his youth, he had two love affairs. There was no marriage because the women did not agree to move with his parents and the patient did not imagine leaving the household and his parents. He said he did not regret not getting married, being convinced that it was his duty to be with his parents and keep the household. Town policemen who accompanied him on admission and the patient's sister said that the patient home was always clean and tidy. Pension income was enough. The relationships with his brothers and sisters were fluctuating since youth, the patient being unhappy with their lack of interest towards the work in the household.

After the death of parents, the relations became tenser due to disagreements over inheritance. He performed military. He had a clean criminal record.

The patient used to consume about 500-1000ml vine daily, without episodes of acute intoxication. He had not been smoking for 20 years. He did not take any drug treatment.

Psychiatric clinical examination. Quick observation on admission: the patient entered the emergency room with a bizarre gesture suggesting the pick up of insects on the body and keeping them fingers crossed. He addressed the others violently "Do not touch me! Do not sit next to me". He refused to sit down, agreeing to sit on the chair located in the farthest corner of the room only after he was assured by the medical staff that the entire room will be disinfected after his departure. Mimicry was hypermobile, sad look, with tendency "to fix", occasionally checking the space around looking for lice fallen off from his body, avoidance of eye contact, looking down. Clothes were clean, tidy but improper for the outside temperature, hygiene maintained. The patient was cooperating, but reserved and tense. The verbal contact was easy and the speech efficient.

At the beginning of the interview, the patient spoke in a low, monotonous voice, the speech was sometimes fadding due to exhaustion and hopelessness. During the interview, he became more confident and the speech gained spontaneity. He was space, time, auto- and allopsychically oriented. Disease insight was absent. In terms of perception, he had multiple sensory hallucinations (epidermal, hypodermic visual, interoceptive, gustatory), delusions and delusional perceptions about the delusional theme. Spontaneous attention was reduced with selective hyperprosexia regarding the delusional theme. There could be noticed mild fixation hypomnesia secondary to hypoprosexia, selective hypermnesia, delusional memories, coherent thinking, increased flow of ideas, dominated by delusions of infestation, adherence, interpretation. suspiciousness, delusions and apprehensions. Mood was dominated by emotional instability, alteration of depression and dysphoria, moments of intense anxiety. Regarding volition and behaviour, the following could be noticed: selective hyperbulia, disorganized, hallucinatory-delusional behaviour. During the interview, he continued to gather imaginary insects on the body that kept them in his fist. Instinctual life was globally diminished, with reduced appetite and neglected food needs, isolation, decreased survival instinct and risk of self-harm mixed with hipnic disorders. Pre-morbid personality with paranoid traits (interpersonal sensitivity, interpretation, tendency to blame all of the others), obsessive-compulsive tendency (excessive preoccupation for cleanliness, order, rigor, responsibility).

Somatic examination. Blood pressure (BP) = 160/100 mmHg; the skin of the head and limbs with scratch marks, no signs of superinfection; examination of the skin of the head and body did not reveal the presence of parasites; mild pruritus; spontaneous and painless liver to palpation, with the lower edge of 2cm below the costal edge, persistent tension-type headache, normal functions of the other organs.

Laboratory explorations. Slightly higher values of liver enzymes, laboratory examinations with normal values (including eosinophils, erythrocyte sedimentation rate, C-reactive protein, electrolytes, creatinine, glucose, vitamin B12 and folate).

Diagnostic. Somatic-type delusional disorder

Treatment. Risperidone 2 mg/day; Lorazepam 1.5 mg/day; Zopiclone 7.5 mg/day at bedtime, hepatoprotective drugs

Evolution and prognosis. The symptoms gradually

decrease in intensity during the three weeks of hospitalization. Upon discharge, delirious episode was not completely dissolved, but the patient gained insight, acknowledging that his beliefs had been exaggerated but without being entirely convinced of their unreality. He was compliant to treatment. 4 weeks after discharge, the patient retained residual, vague delusions doubting more and more on their veracity, showing that the remission of an acute psychotic episode under antipsychotic maintenance therapy is a long process. Although there are cases cited in which remission occurred spontaneously, in our patient, antipsychotic intervention and the appropriate monitoring, medical and through social services, is urgent given the dangerousness. In the conditions in which the disorder is chronic, often during lifetime, many patients lose confidence in the medical system or in other institutions whose support they require, resorting to dangerous self-therapies or other initiatives at risk of danger for himself and for those around.

### DISCUSSIONS

The psychiatric disorder had a forensic onset with a high risk of personal and social danger which highlights the importance of future permanent monitoring of the patient through community institutions, also bringing into question the role of the peers and community in the early identification of individuals with psychiatric disorders. In the case of this patient, both family, and neighbours and local authorities were aware of the patient's problems, attending the progressive disorganization of his behaviour without recognizing the psychiatric etiology and its potential risk. Meanwhile, the case confirms the role of "enabling environment" (loneliness, isolation) and premorbid personality in the development of persistent delusional disorders, obsessive-compulsive and paranoid personality being identified in about 50% of patients with parasitosis infestation, as mentioned by Schwarz since 1929 et others, cited by (13).

On the other hand, nosological classification of the disorder is contrary to some extent to DSM-5 criteria for delusional disorder that states that tactile and olfactory hallucinations may be present, but not auditory or visual ones. This patient shows visual hallucinations consistent with the delusional theme, of small amplitude, occurred late in the delirium evolution, psychopathological manifestations being dominated and determined by the tactile and visceroptive hallucinations.

### CONCLUSION

Given that all DSM-5 criteria are met, the presence of visual hallucinations consistent with the delusional theme, but which does not dominate the clinical picture demonstrates that there is a heterogeneity of psychopathological manifestations without this to impede the diagnosis of psychiatric conditions, and that the diagnostic criteria in DSM are an indispensable tool, without being exhaustive.

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