

A Delusional Parasitosis Case Responding to Low Dose Risperidone Treatment

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ABSTRACT

A delusional parasitosis case responding to low dose risperidone treatment

Delusional parasitosis is a somatic type delusional disorder encountered in presenile women who suffer from a fixed false belief that they are infested with parasites. Despite a detailed examination and assurance, patients are not convinced that they have no parasitic infection. Repetitive applications and tests increases the treatment cost very much. In this article, we present a 76 years-old woman who had persistent thoughts about being infested by parasites for two years, and made deep scars widely distributed on her body, and was refusing any psychiatric diagnosis. Our aim was to draw attention to the delusional disorder which was a rare disease with poor prognosis, and to report results of low dose risperidone treatment with favorable outcomes of given psycho-education to the patient and her family.

Keywords: Delusional disorder, delusional parasitosis, parasite delusion

ÖZET

Düşük doz risperidon tedavisine yanıt veren delüzyonel parazitoz vakası

Delüzyonel parazitoz, genellikle ileri yaş kadınlarda görülen, hastaların parazitlerle enfekte olduklarına yönelik sabit bir yanlış inanca sahip oldukları somatik tip bir delüzyonel bozukluktur. Kendilerine detaylı açıklamalar yapıldı, bir parazit enfeksiyonu olmadığına yönelik güvence verilmesine rağmen, hastalar ikna olmazlar. Tekrarlayan uygulamalar ve tetkikler, tedavi maliyetini oldukça artırır. Bu makalede, 76 yaşında, 2 yıldır delüzyonel parazitozu olan, vücudunun parazitlerle istila ettiğini düşünen, bu parazitleri çıkarma isteğiyle vücudunda derin yaralar açan ve psikiyatrik hastalığı olduğunu reddeden bir kadın hastayı sunuyoruz. Amacımız, nadir görülen, dirençli ve kötü prognozlu bir gidişe sahip olan delüzyonel bozukluğa dikkat çekmek ve düşük doz risperidon tedavisi ile hasta ve aileye verilen psiko-educatimin olumlu sonuçlarını bildirmektir.

Ahtar kelimeler: Delüzyonel bozukluk, delüzyonel parazitoz, parazit delüzyonu



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INTRODUCTION

Delusional parasitosis is a delusional disorder, characterized by a delusion of having parasitic infestation (1). The disorder was first defined as “acarophobia” in 1894 by a French dermatologist Thieberge (2), and later it was defined as “Presenile Dermatological Delusion” in 1938 by a Swiss psychiatrist Ekborn or as “Ekborn syndrome” (3), and it is still named in the literature as “Ekborn Syndrome” (4). Delusional disorder is included in the current classification of DSM-5 in “Delusional disorder, somatic subtype” (5). Delusional parasitosis can be classified etiologically as primary and secondary (6). While it is named as primary delusional parasitosis if it is encountered generally with sudden symptoms,

and independently from any other diseases, it is called as secondary delusional parasitosis if it is developed accompanying another disease or under substance use (6). The prevalences of delusional parasitosis is unknown (7). It is generally encountered between ages 50 and 70 years, and it is observed three times more frequent among females than males (8). As it is commonly encountered at later ages, it is important to differentiate delusional parasitosis from dementia disorders, and to provide correct treatment and follow-up.

Patients with delusional parasitosis are generally referred to psychiatry outpatient clinics by other physicians, because they have no insight, and they apply to many branches of internal medicine before they are referred to psychiatric outpatient clinic (9).

Complications such as infection, bleeding, iron deficiency and anemia due to bleeding of skin lesions may be seen in patients with delusional parasitosis (10).

The present case which is diagnosed with a treatment resistant disease according to the literature is interesting because it has responded to low dose risperidone in such a short time. It was aimed in the case presentation to review medical complications accompanying delusional parasitosis, and re-emphasize this rarely encountered disease.

CASE

A 76 years old female patient, who was graduated from the high school, and was a housewife and widower with three children was living in Ankara. She was previously diagnosed with diabetes mellitus and hypercholesterolemia, and had no known psychiatric disease history. The patient was directed from dermatology clinic for psychiatry consultation. The patient told that she had redness in her hands approximately two years ago after buying a product from delicatessen store, she saw marks on her back, arms, and legs after the redness, and she told that those marks were insect bites. She also told that those marks were increased all over her body within the last 2 years time. As she scratched the itchy areas more, and even she pulled the skin areas which she thought the hook of insect was there by the help of a pair of tweezers, she had widespread lesions all over her body. Skin lesions were evaluated as "There are locally scaly excoriated areas on the back, lower legs and on the gluteal region. There are post-inflammatory hyperpigmented areas with healed lesions around and also accompanied by new lesions. The patient was diagnosed with "hemorrhagic scaling with intense excoriation on elbows" by a dermatologist. The patient who applied to dermatology clinics of different hospitals during the last two years, was told that she did not have any parasitic infestations, and lotions with antibiotics were recommended for healing of skin lesions.

It was learned in the family interviews that the wounds in her gluteal area and legs got deeper, and she

had significant bleedings from these areas. She was diagnosed with anemia at the internal medicine outpatient clinic and iron deficiency anemia was diagnosed after differential diagnoses of other diseases which might cause anemia after all examinations including endoscopy/colonoscopy, and she has been treated for 8 months by iron supplements. Except from the belief that she had a parasitic disease, and obsession with her skin, the patient was functionally quite well, and she had no problem in her social relationships and in her daily activities.

In her psychiatric examination, her appearance was consistent with her age; her self-care was sufficient; she had complete cooperation and orientation; her affect was consistent with her mood, and her mood was euthymic. In her thought content, she had the delusion that she was contaminated by a product from delicatessen store, which she ate 2 years ago, and insects were circulating in her body. Her associations and flow of speech were normal. She was responding the questions in a logical consequence. Her Standardized Mini Mental test score was 29/30. Considering "Delusional Parasitosis" as the preliminary diagnosis whole blood, routine biochemical tests, anemia parameters, vitamin B12, vitamin D, and thyroid function tests were ordered. Cranial magnetic resonance (MR) imaging was performed to differentiate an intracranial pathology.

The laboratory results were high in fasting blood glucose = 241 mg/dl, LDL = 239 mg/dl, triglyceride = 231 mg/dl, total cholesterol = 333 µg/dl, and low in hemoglobin = 11.6 g/dl, and iron = 52 µg/dl. Thyroid function test results were FT3 = 2.05 pg/mL, FT4 = 0.83 ng/dL, TSH = 5.1 µIU/mL, and also vitamin B12 = 479 pg/mL.

In cranial MR examination, it was determined that there were secondary atrophied dilations in sulci and fissures of both hemispheres with ventricular dilation, and nodular ischemic gliotic changes in frontal parietal white matter. Neurological consultation was reported as these lesions were consistent with the patient's age and diabetes, and a dementia or cerebrovascular disease was not considered.

Psychiatric treatment was started with sulphiride

50mg/day. After two months' treatment, as there was no improvement in complaints of patients, sulpirid was switched to risperidone 1mg/day, and the dose was increased gradually to 2mg/day. Because of sedation side effect, risperidone dose was decreased to 1mg/day. During the control visit in the second month of risperidone treatment, it was observed that patient did not mention about insects; she stopped picking her skin; and number of skin lesions was decreased. In the third month of treatment, the patient stopped the drug, because she thought that she was recovered, and she started to mention about insects and picking her skin.

The patient and her family received psycho-education, and she started to use the drug regularly, and her complaints were recovered in a short-time. In the 6-month follow-up period, the patient has sustained remission in delusional parasitosis with 1mg/day risperidone treatment. Anemia follow-up has been performed by the internal medicine outpatient clinic, and after her hemorrhagic lesions were recovered, the anemia parameters returned normal within normal limits.

DISCUSSION

Similar to other delusional disorders, delusional parasitosis is a disease which is difficult to manage due to loss of patient's insight, and is also an expensive disease because of difficult and repetitive tests and examinations. In this psychotic diseases, female/male ratio is 3:1 in individuals over 50 years of age, and increasing age causes increased frequency among females (11). Age and gender of our case were consistent with this information.

Boggild et al. (7) reported in 23 consecutive delusional parasitosis patients within 6 years of study that these patients applied to an average of 6 different healthcare personnel before they applied to psychiatry clinic, and they had very expensive examinations in different healthcare units without sharing previous medical information. It was shown in the same study that these patients applied to emergency units, infection, dermatology and microbiology specialists, and although they were referred to psychiatry clinic by

their physicians, only 17% of them accepted the reference (7).

Our case applied to many physicians in the two years time before her application to our outpatient clinic, and she had many examinations. Although she was recommended of a psychiatry application previously, patient applied to psychiatry outpatient clinic by the consultation request of dermatology clinic. As it was expected from patients with delusional disorders, our patient believed that she had no mental problem. If she was not requested for consultation and referred to a psychiatry outpatient as it had been done before, she would never attended at the psychiatry clinic. Therefore, our case is also emphasizing the significance of consultation-liaison in this aspect.

Lesions which our patient caused bleeding by picking her skin were body parts in reach of her hands, as it was mentioned in the literature. As it is known, iron deficiency anemia is not an expected condition in postmenopausal women, and if there is iron deficiency anemia in advanced aged postmenopausal women, detailed examinations for an underlying malignancy should be performed (12). As iron deficiency anemia was unexpected in our case because of her age and gender, all examinations including endoscopy/ colonoscopy were performed, and no etiological cause was determined. Her iron deficiency anemia which was considered by bleedings in deep lesions were being treated for 8 months. Serum iron level (minimum value=60µg/dl) was 52µg/dl in our case, and it might be considered that iron supplementation prevented further decrease in the level.

Symptoms of tiredness, easy fatigability, irritability, headache, and concentration difficulties (13), which were also the most common symptoms of anemia and present in our patient's history, might be considered as body symptoms supporting delusion of "being under infestation of parasites". This condition supports that treatment of medical complications have favorable effects on psychiatric treatment. On the other hand, it should also be considered that performing many examinations and drug recommendations may strengthen patient's delusion.

Although there is not any clear information in the

literature about the disease prognosis, it was reported only in one study that 17% of patients accepted to receive a psychiatric treatment. When the literature related to delusional parasitosis treatment was reviewed, it was noted that case presentations which responded to antipsychotic treatment such as haloperidol, pimozid, trifluoperazin, and risperidone were reported (11,14-16). In recent years, as extrapyramidal and cardiovascular side effects of typical antipsychotics have been considered, treatment preferences have been more frequently for atypical antipsychotics (15). Although the treatment duration is still debatable, it requires 1-4 weeks for treatment response. It has been recommended that treatment should be continued for a couple of months more after symptoms are subsided, and then tapered down, and if symptoms are recurred, then treatment should be rechallenged (16).

As our case was a 76 years old female, antipsychotic treatment was initiated at a low dose, and treatment response was waited for four weeks. There was no response to sulpiride treatment, so it was switched to risperidone treatment. The patient could not tolerate risperidone at 2mg/day dose because of sedation side effect, the dose was decreased to 1mg/day, and her

complaints were completely recovered in approximately four weeks, and the remission was subsided during 6-month follow-up.

Under the results of this case and information in the literature (14-16), it may be claimed that low dose atypical antipsychotics may be a good treatment option for patients with delusional parasitosis. Treatment response should be waited patiently, and doses should be increased gradually in consistence with the age will be helpful to increase patient compliance with the treatment. Moreover, when it is considered that these patients have very weak insights psycho-training given to the patient and the family constitutes an important part of the treatment.

Contribution Categories	Name of Author
Follow up of the case	R.N.Y., G.G.A., V.O.K.
Literature review	V.O.K., R.N.Y., G.G.A., E.G.
Manuscript writing	R.N.Y., V.O.K., E.G.
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