

The Co-occurrence of Reduplicative Paramnesia, Intermetamorphosis and Capgras Syndrome: A Case Presentation

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ABSTRACT

The co-occurrence of reduplicative paramnesia, intermetamorphosis and capgras syndrome: a case presentation

Delusional misidentification syndromes include a group of delusional disorders involving a belief that the person(s)/ object(s)/ or place(s) around the patient have changed or have been changed. Those disorders can develop on the basis of mental or neurological disorders. In this paper, a case with Capgras syndrome, intermetamorphosis and reduplicative paramnesia is presented. The patient was a forty-three years old female and her complaints had been continuing for five years. She displayed reduplicative paramnesia, intermetamorphosis and Capgras syndrome in her history. Her mental status examination scores was 100 for Positive and Negative Symptoms Scale (PANSS, positive signs: 26, negative signs: 20, general psychopathology: 54) and 23 for Mini Mental Test. No pathology could be found in Bender Gestalt test. Because her physical and neurological examinations, as well as laboratory results and imaging findings were unremarkable, she was thought to fulfill the diagnosis criteria for Schizophrenia-Paranoid Type (Continuous Course) and she was given 10 sessions of electroconvulsive therapy. The patient was presented in this case report because she had a comorbidity consisting of Capgras syndrome, reduplicative paramnesia and intermetamorphosis and she responded favorably to electroconvulsive treatment.

Key words: Capgras syndrome, delusional misidentification, schizophrenia

ÖZET

Paranoid tip şizofreni tanısı alan bir hastada reduplikatif paramnezi, intermetamorföz ve capgras sendromu birlikteliği: Bir olgu sunumu

Sanırsal yanlış tanıma sendromları (Delusional mis-identification syndromes), ruhsal veya nörolojik bozukluklar zemininde gelişebilen ve hastanın çevresindeki nesne(ler) ya da yer(ler)in benzerleri ile değiştiği ya da değiştirildiğine ilişkin bir inancı kapsayan bir grup sanırlı bozukluğu içermektedir. Bu yazıda, Capgras Sendromu, intermetamorföz ve reduplikatif paramnezinin birlikte görüldüğü bir olgu sunulmuştur. Daha önce şizofreni tanısı alan kırk üç yaşındaki kadın hastanın yakınmalarının beş yıldır aralıksız devam etmekte olduğu saptanmıştır. Öykü ve mental durum muayenesinde, reduplikatif paramnezi, intermetamorföz ve Capgras sendromu saptanan hasta, psikometrik değerlendirmelerde, Pozitif ve Negatif Sendrom Ölçeğinden (PANSS) 100 puan (pozitif belirtiler: 26, negatif belirtiler: 20, genel psikopatoloji: 54), Mini Mental Testten ise 23 puan almıştır. Bender Gestalt testinde patoloji saptanmamıştır. Fiziksel ve nörolojik muayenede özellik saptanmayan, laboratuvar değerlendirmeleri ve görüntüleme bulguları normal olan hastanın şizofreni, paranoid tip (sürekli gidış gösteren) tanısını karşıladığı düşünülmüş ve 10 seans elektrokonvülsif tedavi uygulanmıştır. Hastamız, elektrokonvülsif tedaviye olumlu yanıt vermesi ve Capgras, reduplikatif paramnezi ve intermetamorföz sendromlarını bir arada göstermesi nedeniyle sunulmaya değer görülmüştür.

Anahtar kelimeler: Capgras sendromu, sanırsal yanlış tanıma, şizofreni

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INTRODUCTION

Delusional misidentification syndromes consist of a group of delusional disorders which contain belief of a patient that people, objects or places around him/

her are exchanged for their surrogates and can develop on the basis of other psychiatric or neurological disorders. These syndromes can be classified into subtypes such as intermetamorphosis and subjective duplets (döppelgänger) in addition to Capgras and

Fregoli delusions. Rarer syndromes such as wrong identification of a person him/herself in the mirror, delusional friend syndrome and cloned reproduction of one's self are evaluated under this topic. Capgras syndrome is a rare disorder which patient believes that he/she is replaced with a person very similar to a close relative. However, in reduplicative paramnesia, person believes that a place, person or event around him/her is copied completely. In intermetamorphosis, patient believes that people around him/her not only alter their appearances but completely replaces each other as well (1-3). In this paper, a case with comorbid Capgras syndrome, intermetamorphosis and reduplicative paramnesia was presented.

CASE

Patient was a forty-three years old, married, literate housewife with three children and was brought to our outpatient clinic by her family with symptoms of "bizarre speech, producing new words, anger towards family members". In her history it was told that her symptoms started five years ago, she was hospitalized due to delusions of being harmed by her husband and sister-in-law and reference ideas and pimozide 4 mg/day was started with diagnosis of schizophrenia. Patient did not use her medication after discharge and her symptoms have been continuing since then. It was told that her symptoms got more severe in the previous month. There was no family history of note. Patient was admitted to the ward in order to detail the diagnosis and start treatment. In her mental state examination, her self-hygiene was adequate, showed suspicious attitude and reluctant to communicate. Psychomotor activity was normal. Her mood was irritable. Amount and speed of speech were normal. When flow and content of thought were evaluated, her associations were normal but their contents were bizarre. She told that she delivered 15 children in total by five times triplet births (reduplicative paramnesia), however, only one baby was shown to her after each birth and other babies were kidnapped by her sister-in-law (persecutory delusion), sometimes aliens were replaced with these children (Capgras syndrome), sometimes they replaced

each other (intermetamorphosis), she only had five children at home due to these reasons, her husband was actually one of quadruplets (reduplicative paramnesia), her husband's brothers sometimes replace him and had sexual intercourse with her (intermetamorphosis), they made "lekert" by this way (neologism; lekert: using a woman by having involuntary sexual relationship with her). She had delusions about being harmed by her husband and sister-in-law. She had no insight of her disease. In psychometric evaluation, she scored 100 from Positive and Negative Syndrome Scale (PANSS) (positive symptoms: 26, negative symptoms: 20, general psychopathology: 54) and 23 from Mini Mental State examination. Bender Gestalt test was normal. No significant finding was present in physical and neurological examination. Biochemical and hematological values, thyroid function tests, vitamin B12 levels, electrocardiography (ECG), electroencephalography (EEG), posteroanterior lung X-ray and cranial magnetic resonance imaging (MRI) findings were within normal limits. Toxicological examination was normal. After history, examination and test results, paranoid type schizophrenia (continuous course) was diagnosed according to DSM-IV-TR criteria. Ten sessions of electroconvulsive therapy was performed due to rejection of eating and treatment. Her treatment was continued with amisulpiride 800 mg/day. Her evaluation at time of discharge was found as 48 points from PANSS (positive symptoms: 10, negative symptoms: 15, general psychopathology: 23).

DISCUSSION

A case which Capgras syndrome, intermetamorphosis and reduplicative paramnesia was observed concomitantly is reported in this paper. She was thought to meet Capgras, intermetamorphosis and reduplicative paramnesia syndrome criteria due to claiming multiple children and husbands, replacement of them with aliens and cross-replacement with each other. Most prevalent delusional misidentification syndrome is Capgras syndrome. Intermetamorphosis and reduplicative paramnesia are seen less frequently. It was reported that most of these syndromes are seen with right hemisphere

lesions and organic etiology can be found 25-50% of cases with Capgras syndrome (2,4). It was proposed that right hemisphere is responsible from directing attention towards outer environment and pursuit. This feature may cause misinterpretation of outer signs when right hemisphere is damaged and thus occurrence of delusional misidentification syndromes (1,5). In our case, no underlying organic pathology was found by physical and neurological examination and imaging techniques. This finding can be explained by absence of detailed neuropsychological and neurophysiologic evaluation. It can be said that case series evaluated deeper and more detailed are needed in order to clarify the relationship between disorders of right hemisphere functions and delusional misidentification syndromes.

Etiology of Capgras syndrome is still being discussed. First, it was proposed that prosopagnosia (face recognition disorder) is the basis of Capgras syndrome alone or with psychotic disorder but recent studies emphasized that prosopagnosia is not mandatory for the diagnosis (1-4). Moreover, patients with prosopagnosia do not try to explain their impairment with delusional thought processes and while patients with Capgras syndrome are searching for differences between their relatives and their replacements, prosopagnosic patients try to classify faces around them according to similarities (1-4).

It is known that visual system contains an anatomic tract connected with visual cortex and a functional tract which is connected with limbic system and attributes

affective component to peripheral vision (1). Pathology in delusional misidentification process such as seen in Capgras syndrome seems to be related with meanings attributed to visions rather than these visions themselves (1). According to this statement, delusional misidentification syndromes occur due to disconnection between visual structures and limbic system. In this case, although conscious face recognition is intact, awareness and feeling of intimacy mediated by limbic system are deficient (1). In our case, normal findings from Bender Gestalt test which evaluates visual motor functions about not having an affective component may support these statements.

Many patients with reduplicative paramnesia are aware of inconsistency between what they see and what they claim but pass over this lightly by simple explanations (5). Our case tried to explain this inconsistency by her delusions. This difference may be due to psychotic state of the patient.

Perceiving people, places and objects which were engaged emotionally as aliens is an experience which everyone might have had temporarily in daily life. For this reason, misperception can be proposed as a spectrum which *déjàvu* is on one end and delusional misidentification syndromes are on the other end (6). It can be proposed that these patients should be identified and evaluated earlier to determine under what conditions these over-valued thoughts, obsessions and/or delusions emerge and cause pathology on this spectrum.

REFERENCES

1. Edelstyn NMJ, Oyeboode F, Booker E, Humphreys GW. Facial processing and the delusional misidentification syndromes. *Cogn Neuropsychiatry* 1998; 3:299-314.
2. Bez Y, Nurmedov S. Reduplicative paramnesia in a case with corpus callosum lesion. *New Symposium Journal* 2007; 45:174-176.
3. Özten E, Tufan AE, Yaluğ İ, Cerit C, Işık S. Sanırsal yanlış tanıma: Capgras sendromlu bir olgu sunumu. *Klinik Psikiyatri Dergisi* 2006; 9:45-48. (Article in Turkish)
4. Spier SA. Capgras' syndrome and the delusions of misidentification. *Psychiatr Ann* 1992; 22:279-285.
5. Ellis HD, Young AW. Accounting for delusional misidentifications. *Br J Psychiatry* 1990; 157:239-248.
6. Sno HN. A continuum of misidentification symptoms. *Psychopathology* 1994; 27:144-147.