

Capgras Syndrome Induced by Using Volatile Substance

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ABSTRACT:

Capgras Syndrome induced by using volatile substance

Capgras Syndrome is a psychotic disorder characterized by a delusion that a specific person or object has been replaced by an identical one (imposter). It has been reported to occur rarely in pure form, but generally accompanying schizophrenia or organic psychosis. Here, we report a case of Capgras syndrome developed after long-term use of inhalants and to draw attention to psychotic symptoms and to this uncommon psychotic phenomenon which may occur after inhalant use. In Capgras Syndrome patient's consideration of his close relatives and friends replaced by imposters is a delusion. Patient presented to our clinic with persecutory delusions and he was thinking that he had been adopted by imposters. Olanzapine, initially 10 mg/day oral, followed by augmented dose of olanzapine has been administered. Although diminished in intensity, the patient's symptoms persisted as residual symptoms.

Keywords: Capgras Syndrome, inhalants, psychotic disorder

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INTRODUCTION

Capgras Syndrome, which is rarely seen in psychiatric clinics, was first described by French psychiatrists Jean-Marie Joseph Capgras and Reboul-Lachous in 1923. It has been previously described as "illusion of doubles". In Capgras Syndrome, the patient believes that the analogies of individuals or objects have been replaced by imposters. The belief that the person around him/ her is not real person is thought to be a complete delusion (1,2). Capgras Syndrome responds to antipsychotic treatment shortly. Accompanying psychosis treatment would also provide the treatment of Capgras syndrome (3).

CASE PRESENTATION

The patient was a 33 years old, single, male, elementary school graduate, had no job/working history claimed that

about 6 years ago he was given as an adopted child to his family and that his mother and father were not their real parents. Since his real mother was a different person, he claimed that he would find his real mother. Before coming to our Outpatient Clinic, he lived in the front yard of a woman's house, which he thought was his real mother and asked her: "Why do you deny that you are my mother?" When he insisted, the woman called the law enforcement agents. The law enforcement agents told him to see a psychiatrist following his release. Therefore, the patient decided to come to our Outpatient Clinic accompanied by his family.

It was learned from the patient's life story that he had a 6-year history of this complaint and that he had not had any previous psychiatric interventions. It has been learned from the family and him that he had been abusing volatile substances for about 10 years. Routine biochemistry, drug metabolites, computerized tomography (CT) of the head,

and electroencephalography (EEG) examinations were performed to exclude any organic etiologies. All lab examinations and tests were unremarkable. Patient was drug naive and the last substance use was a month ago. Psychiatric examination revealed decreased self-care, inappropriate, blunt affect. There was an increase in psychomotor activity in addition to persecutory delusions. There was no insight into his illness, and his judgement was impaired. Due to presence of drug abuse and delusions being around a single theme, treatment with oral olanzapine 10 mg/day was started with the diagnosis of Capgras syndrome induced by volatile substance use. Patient was compliant with taking antipsychotic medication and was instructed to be observed by his family. Since there were no changes in the frequency and characteristics of the delusions after 2 weeks, the dose was increased to 20 mg/day. Symptoms of the patient began to decrease with olanzapine treatment, but the symptoms persisted as residual symptoms.

DISCUSSION

It has been reported that psychodynamic and organic factors were underlying factors in the etiology of Capgras Syndrome, where the patient believes that people around him/her are not real persons and they are replaced with impostors (3). When considered from a psychodynamic point of view; attention was drawn to the nature of the mother-child relationship. It has been argued that there were some differences in the relationship between people and in order to be able to cope with unacceptable unconscious distressing emotions, these individuals can experience division of the objects internalized during developmental stages (2). Deterioration of the ability to evaluate and make judgement is the basis of the disorder. The individual is often denied, denigrated, and the ascension of this situation to consciousness is not possible because of the anxiety of guilt feelings. The feelings of the conflicting person are transferred to the impostors and protected from the aggression and the anxiety created by the hostility (4).

It is estimated that Capgras Syndrome can develop in 25–40% due to general medical condition (5). The organic etiology of Capgras Syndrome has been reported as parietal lobe dysfunction. It has been suggested that the feelings of the cognitively familiar object cannot be remembered. In

some cases, CT of the head and the brain magnetic resonance imaging (MRI) examination revealed occipitotemporal lesions (6). Examples of general medical conditions include substance intoxication and deprivation, infection and encephalitis (hepatic encephalopathy), endocrine disorders (hypothyroidism), epilepsy, head traumas, brain tumors, delirium, dementia, lithium intoxication, and migraine (5,7-9). Jones et al. reported that they had seen Capgras Syndrome after eliminating the head trauma story in a case opposed to squamous cell carcinoma in the lung (10). Pseudohypoparathyroidism, copper intoxication, psychosis due to chloracin use, lack of vitamin B12, and psychotic episodes after ECT were reported in conjunction with Capgras Syndrome (7,11).

In the etiology of Capgras Syndrome, especially the right hemisphere, frontal and temporal lobes were emphasized and neurochemically dopamine and serotonin imbalance were mentioned. In etiopathogenesis; extreme cognitive and perceptual impairment, organic deficit, paranoid thought content, grandiosity, and the synthesis of psychodynamic factors should be taken into consideration rather than a single model (7). There is also debate about whether Capgras is a symptom or a syndrome in the literature.

Although Capgras syndrome cases induced by use of synthetic cannabinoids were reported in the literature, to the best of our knowledge no cases of Capgras Syndrome induced by use of volatile substances have been reported. In Capgras syndrome cases developed due to the use of synthetic cannabinoids, in addition to general psychosis indicators such as auditory and visual hallucinations; paranoid and grandiose delusions, blunt affects, alogia, disorganized speech and behavior as well as psychomotor agitation and retardation and suicidal thoughts were observed. In our patient, only paranoid delusions, blunt affect, and alogia were present (12-14). Psychotic symptoms due to synthetic cannabinoids are treatment resistant and persistent (15). In our case, patient had intensive volatile substance use for about 10 years and had psychotic symptoms during the last 6 years. When the use of synthetic cannabinoid is prolonged, a psychotic disorder due to a synthetic cannabinoid develops (12,16). Capgras syndrome cases induced by the use of synthetic cannabinoids have been found to have a family history of psychotic disorders in the literature (12,14,17,18). In our case, there is no psychotic burden in family history.

The knowledge of the etiology of Capgras phenomena has been identified as a clinical phenomenon, remains unclear from the earliest time, and the specific cognitive neuropsychiatric approaches developed to explain Capgras delusion are more productive than early psychodynamic approaches. And it has been suggested that Capgras's delusion is a phenomenon that develops on the basis of pathological suspicion (19). Although seen more frequently in women; comorbid schizophrenia, schizoaffective disorder, and bipolar disorder can also be seen. Incorrect identification syndromes include Fregoli syndrome, intermetamorphosis, proposagnosis otoscopy, and reduplicative paramnesia were also similar to Capgras

syndrome (3). Antipsychotics are used in the treatment and improvement in Capgras Syndrome. Pauw and Szulecka noted that paranoid and reference delusions can often be seen together and has a content of doubt and reference (20).

Capgras Syndrome due to volatile substance use was considered as the main diagnosis of the patient. Although the symptoms of the patient with the treatment are reduced, the residual symptoms were still ongoing. The intensive volatile substance use by the patient for a long time has also explained the etiology. As a result, Capgras Syndrome can occur alone or in addition to another psychotic disorder. Recovery is often achieved with antipsychotic treatment.

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