



## **Case Report on Paranoid Schizophrenia with Capgras Syndrome**

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### **Authors' contributions**

*This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.*

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**Case Study**

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### **ABSTRACT**

Paranoid is the most common delusion in people living with schizophrenia spectrum disorders which are present in about half of all people seeking treatment for a psychotic disorder. Schizophrenia is a persistent mental illness characterized by a wide range of symptoms, including delusions, hallucinations, disorganized speech or behavior, and cognitive impairment. Capgras syndrome is a form of the delusional belief in which a person has been replaced by an imposter. It can be seen in mental disorders as well as in central nervous system diseases in the form of neurodegenerative and non- neurodegenerative diseases. The Capgras Syndrome is not an unusual condition, but an infrequent one which is possibly often unnoticed. A 48- years- old woman was admitted in female psychiatric ward with known case of paranoid schizophrenia with capgras syndrome. In the present case, the treatment approach was mainly somatic therapy i.e. psychopharmacotherapy, Electro convulsive Therapy (ECT) and psychological therapy. Psychiatric nurses have to play an important role to identify the symptoms and they should think critically, take action immediately to provide care to such type of patients.

*Keywords: Imposter syndrome; Suspicious; Delusion; Somatic therapy.*

## 1. INTRODUCTION

In 1923, Joseph Capgras, a French psychiatrist, coined the term "Capgras syndrome" in his paper co-authored by Jean Reboul-Lachaux, based on the case of "Madame Macabre," a French woman who claimed that matching "doubles" had taken the positions of her husband and other individuals she knew. The condition was first named as "**l'illusion des sosies**" by Capgras and Reboul-Lachaux, which means "**the illusion of look-alikes.**" [1].

Nearly a century ago, the Capgras syndrome was first characterized. The belief that a person, typically a close relative, has been replaced by an impostor is characterized by recurring and transitory (varying from minutes to months) delusion. Although small physical distinctions are utilized to distinguish the genuine person from the impostor, the impostor generally possesses characteristics that are quite similar to those of the original person. Capgras syndrome is thought to be an uncommon occurrence that was first linked to psychiatric disorders such as paranoid schizophrenia and schizoaffective disorder. Capgras syndrome has lately been documented in neurological diseases such as epilepsy, cerebrovascular disease, head trauma, pituitary tumor, mainly in neurodegenerative diseases such as Alzheimer disease and Lewy body disease [1].

## 2. CASE PRESENTATION

A 48- years- old woman came to psychiatric OPD with her younger sister at 10 am with known case of paranoid schizophrenia with capgras syndrome since 25 years. Her present complaints were persecutory delusion, suspiciousness and fearfulness from last two years. She thinks Vishnu is throwing arrows with poison towards Lord Shiva and the patient. After that thought she develops tightness in her chest and difficulty in breathing, muttering to self, arguing voices heard, voices commenting on one's action, visual and auditory hallucinations present that she hears the voice of Lord Shiva and Vishnu which is irrational, aggressive, sleep disturbance, irritabilities and muttering to self that got married with Lord Shiva and Lord Shiva killed Vishnu and then both of us went to Kailash Parvat, Thought broadcasting, (she thinks other people hear and are aware about her thoughts), passivity phenomena 'made' feelings, 'made'

impulses, 'made' acts. She used to think that Lord Vishnu fixed one 'challa' in her brain and controls her feelings by their 'challa', somatic passivity. (She thinks that lord Shiva came to her body as Yogesh and doing sex with her.), delusional perception,(affective disturbance, autistic thinking, day dreaming and fantasy are present about the sexual relationship with God), associative looseness also present. She used to think that Lord Vishnu entered her body from Buddha lakes and also thinks Kalimata kills her cousin. Positive symptoms were present like delusions, hallucinations, excitement or agitation, hostility or aggressive behavior, suspiciousness, ideas of reference, possible suicidal tendencies. Negative symptoms were present like affective flattening or blunting and symptoms of capgras delusion/ syndrome also present i.e. Delusions of persecution or grandeur, references, extreme anxiety, exaggerated suspiciousness (suspicious thinking about lord Vishnu that he used to attack her and they threw poisonous arrows on her chest), aggressiveness and anger from one month. She was admitted on similar day for further evaluation.

Precipitating factors for her psychiatric illness were loss of love object, according to the family history, she lost her brother, and mother and love failure at the age of 23 years and before eight month ago, she again lost love object i.e. her father died due to heart attack. Her parents had special emotional attachment towards her and perpetuating factors were also present that was again loss of love object i.e. death of father before eight months.

Past psychiatric history revealed that total five episodes were present for her psychiatric illness. First episode was in 1995, her chief complaints were sleeplessness and suspiciousness towards her cousin brother. She has taken treatment from psychiatrist. Second episode was in 2002, she was received somatic therapy i.e. ECT only one time and she was on antipsychotic drugs Tab. Olanzapine 10 mg OD for same symptoms. Third episode was in 2007, she developed auditory and visual hallucination and delusion. She was referred to a private psychiatrist for treatment. She received somatic therapy two times (ECT) and started antipsychotics drugs and antianxiety drug Tab. Olanzapine 10 mg OD and Tab. Clonazepam 0.5 SOS respectively. Fourth episode was in 2019. She was admitted to the psychiatric ward for the first time with symptoms

of self-muttering, suspicious, auditory and visual hallucination and delusion, and sleep disruption. That time she was on antipsychotics drugs Tab. Olanzapine 10 mg OD, Tab. Clonazepam 0.5 SOS, Tab. Mirtazapine 7.5 mg HS and she received somatic therapy i.e. ECT 3 times. Fifth or current episodes—Current episode was started in 2020. She was admitted in female psychiatric ward, with chief complaints of disturbance in sleeping pattern, chest pain, anorexia, muttering to self, auditory and visual hallucination and delusion since one month. Psychiatrist prescribed antipsychotics drugs i.e. Tab. Olanzapine 10 mg OD and Tab. Amisulpride 200 mg BD, antianxiety drug i.e. Tab. Clonazepam 0.5 SOS, Antidepressant drug i.e. Tab. Mirtazapine 7.5 mg HS and somatic therapy (ECT) has given 2 times.

The mental status assessment revealed thin body built, conscious, dressed appropriately according to weather and culture, hygiene maintained, normal psychomotor activity, eye contact was maintained and sustained. Patient was cooperative and established rapport. Speech was impaired (reaction time delayed (thought block)). Mood and affect was impaired, unpleasurable affect and mood was impaired,

mood swings also present. Form of thought was not understood (she has conflict that any person came, she thinks he is lord Shiva). Content of thought is impaired (She told her half body is lord Shiva and Kali Mata.) Delusion of control, delusion of grandiosity, bizarre delusion, delusion of religious, somatic delusion, persecutory delusion and Capgras delusion was present. Flight of ideas and incoherence, loosening of association was present, first degree auditory, visual hallucination and somatic passivity was present. In cognitive function attention, concentration, recent and remote memories were impaired. Grade III insight was present (i.e. awareness of being sick attributed to external or physical factor).

On physical examination no any abnormality found in physical examination except her body built was obese. General examination showed that Weight: 45 kg B.P: 112/ 70 mm of Hg Temperature: 98° F, Pulse Rate: 80 beat per minute and respiration rate: 20 beats per minute. Pharmacological treatment was given to patient i.e. Tab. Tab. Olanzapine 10, Tab. Amisulpride 200mg, Tab. Clonazepam 0.5mg, Tab. Mirtazapine 15 mg and Cap. Atrin 300 mg.

**Table 1. Routine investigations done for patient**

Investigations	Patient value	Normal values	Inference
Renal function test	3- 5 mEq/L	4.31 mEq/L	Normal
1. Potassium (k+) – serum	0.7-1.5mg%	1mg %	Normal
2. Creatine – serum	18-40mg%	19 mg%	Normal
3. Urea – serum	136-145mEq/L	141 mEq/L	Normal
4. Sodium (Na+)			
Liver function test	3- 5gm%	4.4 gm%	Normal
1. Albumin	0.3 – 1mg%	0.4 mg%	Normal
2. Bilirubin – Total	6 – 8 gm%	4.31 gm%	Normal
3. Protein – Serum	0 -35 I.U./L	27 I.U/L	Normal
4. AST (GOT)	0 -40I.U./L	9 I.U/L	Normal
ALT (SGPT)			
Complete blood count	13-15.5gm%	9.1 gm%	Decreased Hb level
1. Hb%	4.5-6	4.1millions/cumm	Normal
2. Total RBC count	millions/cumm	3.4 lacs/ cumm	Normal
3. Total platelet count	1.5 to 4 lacs/cumm 4000- 11000/cumm	8000/cumm	Normal
Total WBC count	4 to10 %	4%	Normal
1. Monocytes	40-60%	52%	Normal
2. Granulocytes	17-48%	16%	Normal
3. Lymphocytes	0-5%	0.3%	Normal
4. Eosinophils	0-2%	0.2%	Normal
5. Basophils			

### 3. DISCUSSION

Since the early 19<sup>th</sup> century, schizophrenia has been recognized as a psychiatric disorder. It was described in 1878 by Emil Kraepelin as dementia praecox, or the premature deterioration of the brain [2]. The word 'Schizophrenia' was coined in 1908 by the Swiss psychiatrist Eugen Bleuler. It is derived from the Greek words schizo (split) and phrenia (mind) [3]. There are mainly four types of schizophrenia i.e. simple, paranoid, hebephrenic and catatonic [4].

Schizophrenia is a persistent, serious mental illness that alters thinking, communication, behavior, feelings, perception of individual [5]. Paranoid schizophrenia is the most common form of schizophrenia [6].

Episodes of Capgras syndrome can be caused by schizophrenia, especially delusional hallucinatory schizophrenia. Schizophrenia also affects and may induce delusion in one's sense of truth. In rare cases, Capgras syndrome may also be caused by a brain injury which causes cerebral lesions [7].

Capgras delusion is a diverse maladaptive syndrome that presents in a wide variety of psychological and neurological conditions with varying trends based on the specific aetiology [8].

Capgras syndrome is a delusional state in which an individual feels that generally a family member or acquaintance, believes that they're being substituted by an imposter. It is significantly unusual [9].

Capgras syndrome was introduced by French psychiatrist Joseph Capgras in 1922. The patient said that identical impostors had taken the places of her husband and some of her friends. This disorder is seen more frequently in women than in men [10].

In adult inpatients diagnosed with schizophrenia, the incidence of Capgras Syndrome increased by 15%. According to this figure, the prevalence of Capgras Syndrome in the general population is 0.12% [11].

One of the retrospective study was done in which 920 in-patient's file evaluated over five years in that total 12 patients fulfilled the criteria for Capgras syndrome. The rudimentary occurrence

of Capgras syndrome in this population during five year period was 1.3% in which 1.8% for females, 0.9% for males). 50 % patients were Schizophrenic and only two patients had organic disorder primary Capgras syndrome [12].

Capgras syndrome is based on single case studies and small series of cases from diagnostically diverse populations. A group of 31 patients with paranoid schizophrenia and Capgras syndrome are profiled in this article. The phenomenology of Capgras syndrome, as well as the possibility of a connection between Capgras syndrome and other delusional misidentification syndromes [13]. Capgras syndrome is present in Lewy body disease which is a neurodegenerative disease in which visual hallucinations are often present [14].

Capgras syndrome occurs equally in functional and organic psychosis, so it's important to check for organic factors in any patient with Capgras syndrome [15]. Bilateral frontal and temporal lobe atrophy seen in patients with Capgras syndrome [16]. Patients with Capgras delusion can experience difficulties integrating information between the two cortical particularly abnormalities of the right hemisphere [17].

### 4. OUTCOME

The patient was hospitalized for three weeks, and nursing care, as well as psychotropic drugs and ECT was given. The patient was released from the hospital in good health, and weekly follow-up were conducted in the psychiatric OPD.

### 5. CONCLUSION

Capgras' delusion is an interesting psychopathological phenomenon that occurs in an ample series of functional and organic disorders. Most of patient gives good response to antipsychotic drugs irrespective of their cause of illness but the psychiatrist must be careful of their risk of aggression and homicide.

### CONSENT

Patient and patients relative was informed and taken written consent from patient's relative before initiation of case report.

## ETHICAL APPROVAL

As per international standard or university standard written ethical approval has been collected and preserved by the author(s).

## DISCLAIMER

The products used for this research are commonly and predominantly use products in our area of research and country. There is absolutely no conflict of interest between the authors and producers of the products because we do not intend to use these products as an avenue for any litigation but for the advancement of knowledge. Also, the research was not funded by the producing company rather it was funded by personal efforts of the authors.

## COMPETING INTERESTS

Authors have declared that no competing interests exist.

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