YOU ARE NOT WHO YOU SEEM TO BE: A CASE OF CAPGRAS SYNDROME IN SCHIZOPHRENIA

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INTRODUCTION

Delusional misidentification syndromes (DMS) are a group of phenomena whereby patients misidentify familiar persons, objects, or themselves, believing that they have been replaced or transformed (Carabellese et al. 2014). They occur in a variety of medical and psychiatric conditions but appear to be strongly associated with schizophrenia (Horn et al. 2016).

DMS are relatively rare, occurring in about 4% of all psychiatric patients. To date, different sub-types have been described, but most authors categorize them according to four main syndromes (Table 1) (Carabellese et al. 2014). Among DMS, Capgras syndrome (CS) is the most common and consists of the delusional belief that a person or persons have been replaced by doubles or impostors (Luca et al 2013). CS is frequently related to violence (Carabelesse et al. 2014) - the hostility manifested towards "imposters" ranges from verbal or physical aggression to homicide (Barrelle & Luauté 2018).

We aim to report a case of a patient with schizophrenia who developed CS and to briefly review some of its characteristics.

CASE REPORT

A 49-year old woman was brought to the emergency department (ED) by the police for behavioral changes over the last 3 months. The patient mentioned that in the last 5 years she started to listen to voices, specially at work, that commented on her acts and made threats, but never sought medical help. In the year before she started to develop the belief that her husband had been replaced by a clone and that real one had been killed by some of the people whose voices she used to listen. She justified her belief based in a slight difference between the clone and her husband's hand fingers. Over time her behavior started to be more disruptive and noticeable to others, especially when she began to openly tell her husband that he was a clone. She started to use black clothes as a sign of mourning and said that all people in her village knew what happened to her husband because of the way they looked at her on the street. Also, she could listen "at distance" someone telling her she was now a widow. With time, the patient began to refuse to share the bed with her husband, because she refused to sleep with "an impostor".

More recently, she affirmed her sister had also been cloned and replaced by another woman. She confirmed that she managed to identify some of the voices she had been hearing as her sister-in-law and her nephew. She even broke the glass of his nephew's car because she was hearing his death threats to her and because of that she had already been previously brought to our ED but didn't have a psychiatric evaluation. After that, her symptoms continued to getting worse and she showed increasing agitation, anxiety and insomnia, that was total in most of the nights, when she would wake up her husband to ask him if he was hearing the voices. She was brought to a Psychiatry consult in the week before but she refused to take medication, and soon after that she was then brought to the ED.

The patient only had a previous history of a single depressive episode 20 years before and didn't have any drinking or smoking habits or history of recreational drug abuse. She wasn't taking any medication and her family psychiatric history was unremarkable.

On the mental state examination she was conscious, orientated and calm but with latent tension. She didn't have any speech disturbances, her humor seemed to be neutral and her affects blunted. She had persecutory and misidentification delusions and completely organized hallucinatory voices making running commentary and threats. There was total insomnia. She lacked insight for her situation.

Her work-up at admission did not reveal any relevant abnormality (analytics, brain computed tomography scan and psychological evaluation).

Because the patient refused admission, she was compulsively hospitalized and medicated with risperidone 3 mg and diazepam 5 mg twice daily. The diagnostic hypothesis was a Paranoid Schizophrenia (F20.0, according to the International Classification of Diseases, tenth revision – ICD-10), with a DMS, more specifically, a CS. A slow but progressive improvement was observed, with resolution of the persecutory ideas, auditory voices and insomnia, although delusional misidentification was not totally extinct. The suspicious towards her husband decreased substantially. Because of the risk of therapeutic drop-out, she was discharged with long-acting risperidone (37.5 mg/biweekly). After 4 months of treatment the patient stopped wearing black clothes and (with increment of risperidone to 50 mg/biweekly) she achieved complete remission of symptoms, 1 year afterwards.

Table 1. Delusional Misidentification Syndromes (adapted from Carabellese et al. 2014)

Capgras syndrome	Delusional denial of identification of familiar people and their replacement by doubles who are physically – but no psychologically - identical to the misidentified peoples
Frégoli syndrome	Delusional belief that a familiar person acquires different physical identities, while the psychological identity remains the same
Intermetamorphosis syndrome	Delusional belief that the familiar person and the stranger have not only psychological but also physical similarities and the misidentified people interchange with each other
The syndrome of subjective doubles	Delusional conviction of other people's physical transformation into the patient's own self

DISCUSSION

CS has been described in 14% of first episode psychosis and is more frequent in women, with a sex ratio of 2:1 (Ventriglio et al. 2020). The DMS and CS can occur isolated, but are most commonly associated with psychiatric disorders (mainly schizophrenia and mood disorders), focal and diffuse neurologic conditions involving the right hemisphere and frontal lobes lesions (Abreu et al. 2019). Our patient gathered all of the above features except for the neurological ones.

From a psychodynamic point of view, CS arises from an altered affective response and leads to intolerable ambivalent feelings which are neutralized by "creation" of doubles. (Luca et al. 2013). In subsequent studies, neuropsychological deficits were reported involving different cognitive domains (memory, executive functioning and visuospatial processing) (Abreu et al. 2019) and CS may develop within a right hemisphere dysfunction that causes a memory disconnection. This in turn may lead to a failure to integrate new information with representations about a significant individual stored over time. Several reports exist of cases of violent behavior in CS sufferers (Bourget & Whitehurst 2004); our patient presented with hostility directed towards the husband but didn't perpetrated any physical aggression. However, what makes this case remarkable is the impact in the patient due to the exceptional lack of familiarity of the delusional object.

Atypical antipsychotics (AA) are the most used pharmacological treatment due to their tolerance profile, but no studies have been carried out to distinguish which AA is more effective (Barrele & Luauté 2018).

CONCLUSION

CS is a rare and defying clinical situation, that can have forensic consequences and may pose several treatment challenges. A greater awareness for DMS and CS, specifically, can help to prevent some acts of violence in delusional patients and contribute to an improvement in their care.

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