Capgras Syndrome and Dangerousness

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This article discusses Capgras syndrome and its association with harmful and potentially harmful behaviors. Phenomenological and psychodynamic analysis of a series of cases will highlight danger signals that may be present in Capgras patients.

Capgras syndrome, or syndrome of doubles, is manifested by the misidentification delusion in which an individual believes that other persons, generally those emotionally close to him or her, have been substituted by duplicates or impostors closely resembling the originals.[1] Since 1923 when Capgras syndrome was first described, phenomenological study has described at least eight variants of this misidentification syndrome.[2-7]

From the psychodynamic perspective, the Capgras delusion is generally characterized by marked feelings of ambivalence with a misidentification delusion toward one or more persons important to the individual, such as family members or friends.[8] The primitive ego defense mechanisms of projection, denial, and splitting constitute an important psychological component of the delusion of doubles.[7,8] Utilization of these defense mechanisms provides a way for the affected person to cope with conscious and/or unconscious hostile impulses directed toward one or more love objects, generally family members or friends, by minimizing the guilt experienced with anger and aggression directed at the real love objects.

The etiology, course, and prognosis of Capgras syndrome and its variants appear to follow an underlying mental disorder. The misidentification delusion is only a component of the total clinical picture. Capgras syndrome and its variants are often associated with paranoid schizophrenia, bipolar disorder, and schizoaffective disorder.[8] However, Capgras syndrome and its misidentification variants recently have been studied from a biological viewpoint. Organic bases have been implicated in the etiologies of misidentification delusions in a substan-

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tial percentage of patients with Capgras syndrome or its related misidentification variants.[2,9,10] Whether Capgras syndrome and its variants represent a symptom of a formal mental disorder such as paranoid schizophrenia or organic delusional disorder or whether they constitute a separate diagnostic mental disorder remains controversial. The resolution of this controversy must await further study. In summary, since its original description in 1923, the Capgras syndrome and related misidentification disorders have been studied from several perspectives.

Despite its rather extensive study from phenomenological, psychodynamic, and biological perspectives, relatively little forensic attention has been given to the issue of dangerousness in those with Capgras syndrome or its variants, except for occasional brief case reports of violent behavior in misidentification syndromes.[11-18] Nevertheless, there is evidence that patients harboring Capgras syndrome or similar misidentification delusions may at times pose significant danger to others. For example, O'Reilly and Malhotra[13] described a case of Capgras syndrome in a woman who killed another patient after she became suspicious that the other patient intended to kill her "daughter's double." In another case a patient suffering from the Capgras delusion believed his father was a robot and proceeded to decapitate him in order to search for batteries and microfilm in his father's head.[14] Patients with other misidentification delusions may also present with violent behavior. For example, in the syndrome of subjective doubles, the patient delusionally believes that impostors of himself or herself exist. Christodoulou[15] described a case of subjective doubles in which a woman attacked another patient believing that the latter was posing as the patient's double in order to steal things and incriminate the patient. Cases of violence involving the Frégoli syndrome in which the patient harbors the delusions that a person well known to the patient has changed physical appearance,[16] the syndrome of intermetamorphosis in which the patient delusionally believes that a person well known to the patient has been psychologically and physically transformed into someone else,[17] and syndrome of reverse subjective doubles in which the patient delusionally believes he or she is in the process of being replaced or has been replaced by another person[18] have also been described. The largest series of cases describing dangerous patients with delusions of misidentification was only recently reported by De Pauw and Szulecka.[19] They noted that patients suffering from multiple coexisting types of delusions of doubles may present with significant dangerous behavior, including behavior that culminated in homicide in one case.

The dearth of studies on dangerousness and the misidentification syndromes is surprising, especially when we take into account that patients harboring these delusions often view the impersonators with marked hostility and suspicion. Nevertheless, a probable example of an individual having apparent symptoms consistent with Capgras syndrome and committing dangerous behaviors has recently received national attention. In this instance, an individual who be-

lieved that his family had been replaced by clones used a toy gun to force a television newscaster to read a statement containing this delusion and other bizarre ideas on the air.[20,21] This broadcast was replayed on television news programs throughout the United States and abroad.

The purpose of this paper is to present a series of cases that highlight the issue of dangerousness as a function of the phenomenology and psychodynamics of the Capgras syndrome and its variants. To our knowledge, this study constitutes the largest series of Capgras patients that addresses the issue of dangerous behavior. We will conclude by proposing some recommendations for the assessment of dangerousness in patients suffering from misidentification syndromes.

Case 1

Mr. A is a 37-year-old white male who became delusional about the identities of his father, sister, nephew, brother, and brother-in-law. He believed that his real relatives had died and that they were clones whose bodies had been taken over by spirits. He also believed that the government was controlled by duplicates of former President Jimmy Carter, former first lady Rosalyn Carter, the United States senators, and President Ronald Reagan. He also heard voices informing him that the spirit that controlled his father's body had killed his brother and substituted a clone in his brother's place. In fact, Mr. A's brother had committed suicide several years before. Mr. A believed he had been assigned the task of God's work by destroying the wicked people who had moved into the bodies of his family and others. For this reason, Mr. A shot and killed his father and shot and seriously wounded a nephew. He intended to kill other "cloned" relatives but could not find them. While searching for his other relatives, he saw a young man across the street and thought he was an accomplice of the evil impersonators. Mr. A shot and wounded this young stranger as punishment for assisting in the murder and impersonation of his brother, an event that he delusionally believed had occurred. Mr. A was found not guilty by reason of insanity for one count of murder and two counts of attempted murder.

Mr. A had at least 10 prior psychiatric hospitalizations. His work history had been irregular, as he was repeatedly terminated from his employment. He was given a DSM-III-R[22] diagnosis of schizophrenia (paranoid type, chronic) based upon his bizarre delusions, auditory hallucinations, psychosocial impairment, and chronic course of his symptoms.

He is presently being treated in a locked forensic inpatient psychiatric facility. He has been compliant with his prescribed psychiatric treatment consisting of antipsychotic medication and psychotherapy. He no longer experiences delusions of misidentification.

Case 2

Mr. B is a 39-year-old white male who for at least two years had expressed the delusion that his mother, his uncle, and other relatives had been replaced by doubles. He believed that his true relatives had been killed for unknown reasons. He also expressed grandiose delusions that he was an extremely wealthy

man and that impostors of his relatives had stolen his money. He thought his mother was trying to bewitch and poison him. In the past, Mr. B had physically injured his mother while having similar delusional ideas. Because of his delusional belief, Mr. B attacked his mother with a kitchen knife and also destroyed furniture in the house. She was able to evade him and call the police. Mr. B was hospitalized involuntarily as a danger to others.

During Mr. B's present hospitalization, he exhibited irritable mood, insomnia, pressure of speech, agitation, distractibility, and flight of ideas. On many occasions he appeared to be responding to internal stimuli but denied hallucinations. Past medical history provided by his family indicated that Mr. B had complained of auditory hallucinations in the past. Physical examination, laboratory tests, CT scan, and EEG were within normal limits. Based on his past and present symptoms, he was given a DSM-III-R[22] diagnosis of schizoaffective disorder. He was treated with fluphenazine, lithium carbonate, and clonazepam.

During the hospitalization, Mr. B continued to express homicidal intention toward his mother. His degree of homicidal intention decreased; however, he continued to express doubts about his mother's identity. Mr. B is presently being treated in a locked psychiatric facility.

Case 3

Mr. C is a 41-year-old black male who was hospitalized involuntarily as a danger to others after he brandished a knife in front of his mother's face. Mr. C complained that his real mother had died and had been replaced by another woman who was almost identical to his real mother. Mr. C reported he could detect the impostor because her voice was different from his real mother's voice. He believed that his father had been living with the impostor, but his father did not realize the impostor's identity. Mr. C thought the impostor was trying to steal his money, and he therefore decided to threaten the fake mother with a knife.

During Mr. C's last hospitalization, he had manifested agitation, irritable mood, insomnia, racing thoughts, and pressure of speech. For the past several years, Mr. C's mood disturbance prevented him from gainful employment. The patient's delusions were noted only in association with his mood disturbance. During the present hospitalization, physical examination and laboratory tests were within normal limits. Mr. C was given a DSM-III-R[22] diagnosis of bipolar disorder, manic.

Mr. C was treated with haloperidol, and his aggressive ideation and feelings toward his mother diminished considerably. Nevertheless, he continued to believe that his mother was an impostor. He was transferred to another facility before lithium carbonate could be initiated.

Case 4

Mr. D is a 41-year-old white male who suffered from a fixed delusion that his parents were replaced by identical copies when he was a baby. Mr. D believed that these parental duplicates had killed his

real parents and that they also harbored evil intentions toward him, although they were oftentimes subtle in their malice toward him. On several occasions, Mr. D became angry, verbally abusive, and physically assaultive toward the alleged impersonated parents and required involuntary hospitalization. The present involuntary hospitalization was precipitated after Mr. D struck both parents with his fists, tried to choke his mother, and threatened to throw them from a upper story window as a result of believing the duplicate parents were stealing non-existent large sums of money from him.

During the present hospitalization, Mr. D manifested agitation, insomnia, and irritable mood. His physical examination and laboratory tests were within normal limits. Mr. D was given a DSM-III-R[22] diagnosis of schizoaffective disorder.

Mr. D was treated with fluphenazine and lithium carbonate. He became significantly less hostile toward his parents and less preoccupied with their identities. Nevertheless, he continued to harbor ideas of misidentification about his parents.

Discussion

Our series of cases of individuals with Capgras syndrome who have committed dangerous behaviors are highlighted in Table 1. The first four cases were described above. Cases five and six were clinically evaluated by one of the authors (J.A.S.). Cases seven and eight have been previously reported in the literature by the authors.[7,12]

Although statistically significant conclusions can not be derived from such a limited series, there are some clinically relevant patterns. Both phenomenological and psychodynamic aspects will be discussed.

Demographic and Phenomenological Aspects Of the eight patients with misidentification delusions, six were male and two were female. Even though Capgras syndrome has been reported more frequently in females,[8] the higher proportion of males to females in our series may indicate that males suffering from Capgras syndrome may be at greater risk for engaging in behaviors harmful to others. Ethnic representation consisted of three whites, three hispanics, one black, and one oriental. Such ethnic diversity is not unusual for the multiethnic population where these individuals lived. In all eight cases there was no suggestion of organic contribution by either physical illness or substance usage.

Two patients entered treatment via the criminal justice system. In Case 1, there were charges involving one count of murder and two counts of attempted murder. In Case 7, there was one count of attempted murder. In both these cases, not guilty by reason of insanity verdicts were adjudicated with subsequent inpatient psychiatric commitment. In the other six cases, each patient was hospitalized involuntarily as a danger to others as a result of a mental disorder.

In seven of the eight cases, the misidentified victim lived with the delusional person. In case one, the patient had intermittently lived with his family. Although he was not living with them at

Table 1
Dangerous Behavior and Selected Patient Variables

Case No.	Age/Sex	Diagnosis	Misidentified Persons	Lived with Them?	Chronic Capgras Delusion?	Dangerous Behavior
1	37/M	Paranoid schizophrenia	Father, nephew, brother, sister, brother-in-law, Presidents Reagan and Carter, Rosalyn Carter, U.S. Senators	Sometimes	No	Shot and killed father; shot and wounded nephew and stranger
2	39/M	Schizoaffective disorder	Mother, uncle	Yes	Yes	Pointed knife at mother; destroyed furniture
3	41/M	Bipolar disorder	Mother	Yes	Yes	Held knife to mother's throat
4	41/M	Schizoaffective disorder	Mother, father	Yes	Yes	Punched parents; choked mother; threatened to throw parents from upper floor window
5	39/F	Paranoid schizophrenia	Husband, son, daughter	Yes	Yes	Verbally threatened to stab husband with scissors
6	20/M	Bipolar disorder	Mother, father, sister	Yes	Yes	Threatened to physically harm family
7	32/M	Paranoid schizophrenia	Mother	Yes	No	Physically injured mother with ax
8	24/F	Atypical psychosis	Son, self	Yes	No	Held knife; threatened to burn and stab son

the time of the homicidal behavior, he frequently visited the family home and was visiting there on the day of the crime.

In five of the eight cases, there was a history of a chronic, unremitting misidentification delusion, despite treatment with psychotropic medication. In the other three cases, there was a history of remission of the Capgras delusion with psychotropic drug usage. In two of these three cases, serious violations of the penal code were committed that led to entry into the criminal justice system. Even so, criminal charges could also have been easily brought against most of the six other patients.

In summary, even with this limited sample, there were few identifiable factors that were strongly associated with the execution of dangerous behavior, with the exception of male delusional individuals being at higher risk. Also, the misidentified victim(s) shared the same residence in all but one instance in our series of cases. Even the patient in Case 1, who did not live with the misidentified victims at the time of the dan-

gerous behavior, had periodically lived with his family and continued to maintain substantial contact with them. An explanation for this finding is the more time a chronically delusional person spends with those whom he perceives with hostility and suspicion, the more opportunity he or she will have to act in concert with the misidentification delusion.

Our limited series has generally consistent findings with a recently published report of four cases of misidentification delusions associated with violence by De Pauw and Szulecka.[19] In that study, three of the four cases were male, a male/female ratio identical to ours. In their study, one of the patient's misidentification syndrome arose from organic illness, and two others had physical illnesses that may have played significant roles in their delusional thinking and/or violent behavior, whereas there was no known significant organic contribution in our cases. In all four of their cases, the patients displayed chronic delusional thinking. However, in one of their cases, the misidentification delusion was not uncovered until the patient physically assaulted another patient seven years after he was hospitalized for committing homicide, although this homicide was not connected to a misidentification delusion. In contrast, chronicity of the delusion was not universally present in our series. Similar to our series in which almost all of the patients lived with their misidentified objects, three of their four patients lived with their misidentified objects and attacked them.

Psychodynamic Aspects Psychodynamic explanations may help in understanding the symptom of doubles and its frequent association with violence. In Capgras syndrome, one or more important persons in the patient's life, usually family members or friends, are misidentified as impostors. A likely explanation for this phenomenon would be that an affected individual develops strong uncontrollable anger toward one or more important persons in his or her life. Because the anger is unacceptable, he or she uses the ego defense mechanism of denial. When the defense of denial is inadequate, the unacceptable and uncontrollable hostility threatens to reenter the consciousness, and the affected person's ego is incapable of handling this strong affect. In a defensive maneuver, the patient resorts to splitting as a defense. He or she protects the good objects or fantasized good perceptions of relatives or friends by concluding that the bad objects or impostors have substituted themselves in place of the good objects, thereby warranting his or her anger. By means of projection, in which the individual attributes to another person an impulse the individual has repressed in himself or herself, the afflicted person projects his or her own anger onto the impostors. As the delusional individual's own anger increases, it becomes projected onto the misidentified persons with the delusional individual now perceiving the misidentified objects as increasingly dangerous toward himself or herself. At this point, the delusional patient has utilized the primitive defense mechanism of projective identification. In projective identification, an individual attributes a dissociated impulse to another person and simultane-

ously continues to experience the impulse, as if in reaction to the other person expressing it. Projective identification causes the affected individual to fear the other person who is experienced as under the control of that impulse and, hence, to feel the need to control the other person.[23] As the individual's own impulses and feelings increase, the other person's impulses and feelings are perceived to have increased with the delusional individual remaining unaware because of denial of his or her own impulses and feelings.

In most individuals with Capgras syndrome, the above-mentioned ego defense mechanisms are sufficient to contain the individual's anger, but in some, these are not sufficient to do so. When unable to contain their anger, affected individuals can severely attack and even try to kill the bad objects whom they believe to be dangerous impostors. Individuals with Capgras syndrome are thereby able to severely attack one or more significant persons in their lives whom they would virtually never be able to attack if they still perceived these important persons as whole objects, or as the actual person in their lives, and not split-off bad objects or impostors.

Other misidentification variants of Capgras syndrome have similar psychodynamics. The use of ego defense mechanisms in Capgras variants is thought to be similar to those of Capgras syndrome. The utilization of denial, splitting, and projection may allow for such individuals suffering from Capgras variants to focus uncontrollable anger and rage at others or themselves, depending upon the location of the split-off bad object projections. As with Capgras syndrome, if the ego defenses are unsuccessful in containing the degree of the individual's anger, a dangerous situation may easily develop, thereby allowing for the uninhibited expression of anger and physical violence toward the misidentified objects. If the misidentified objects are viewed as sufficiently bad, the individual's normal impediments against violence may be removed, and the likelihood of violent action will be increased since the anger appears to be justified from the delusional perspective.

Clinical Assessment of Dangerousness In the clinical assessment of dangerousness in individuals with Capgras syndrome or its misidentification variants, a claim cannot be made for high accuracy in the prediction of future violent behavior. Nevertheless, many factors play a significant role in increasing the probability that an affected individual will act in a physically violent manner in the future.

Given the psychodynamics of Capgras syndrome or its variants, the affected individual is already operating at a tenuous, unstable psychological equilibrium. The primitive ego defense mechanisms of denial, splitting, and projection barely serve to contain the individual's anger. The misidentified person has become a totally bad object, who therefore is believed to warrant hateful feelings and rage. The slightest perceived provocation that the misidentified persons are in some way harming the affected individual may serve as a necessary and sufficient psychosocial stressor that may upset this delicate equilibrium. In Cases 3 and 4, a per-

ceived theft of the delusional individual's money was the trigger for assaultive behavior. Yet in both cases, there was a history of chronicity to the delusion of substitution. The unremitting delusional state reflects the unstable psychological balance in which the Capgras individual lives and seemingly places him or her at increased risk for assaultive behavior when confronted with minimal environmental stress.

In Cases 1, 7, and 8, where the delusion of doubles was not known to be chronic, its appearance greatly increased the chance that violent behavior would ensue, as the dangerous behavior was related to the specific delusional content in each case. Nevertheless, the existence of a delusion of doubles most likely places an affected individual at increased risk for engaging in behaviors that may be physically harmful to others, because of the likely psychodynamics and the crucial proximal position of the object of unacceptable violent feelings. Thus, the nature of the delusional content needs careful evaluation when considering all factors in deciding whether involuntary hospitalization is indicated prior to the commission of dangerous acts. The delusion of doubles itself probably represents a danger signal warranting further evaluation. Even if the delusion of doubles is chronic and "stable," any minute stressor, including additional delusional stressors, need to be taken into account, as illustrated in Cases 3 and 4. These two cases demonstrate the occurrence of violent behavior in the presence of a chronic delusion of duplication.

Finally, a major contribution to assaultive behavior lies in the content of the delusion itself. Capgras syndrome and its misidentification variants frequently contain the belief that an individual's family or friends have been substituted by "evil" duplicates. Given that family and friends are generally accessible to the delusional individual and in fact, in our limited series, almost invariably lived with the delusional individual, the probability of harmful behaviors directed at the misidentified family or friends increases. However, as in Case 1, we can not exclude danger to unknown third parties, especially when the Capgras delusion is unable to contain a delusional person's uncontrollable anger and rage. Unknown third parties who were not previously misidentified may nevertheless be integrated into the Capgras patient's delusional system and, as a result, may become at risk to be physically assaulted.[13]

In summary, in the assessment of individuals with Capgras syndrome or its misidentification variants, consideration needs to be given to its psychodynamics and delusional content, as well as whether the misidentified persons live with or are easily accessible to the delusional individual. Given its possible frequent association with physical harm, our limited series suggests erring on the side of aggressive clinical and clinicolegal interventions to reduce the danger of the Capgras individual's physically harming others. Even though studies have displayed equivocal results at best in the prognostication of future harmful behavior,[24-26] misidentification syndromes present with a specific combination of psychodynamics and environ-

mental variables that heighten the danger presented by these delusional individuals. Clinicians need to be alert to these danger signals of potential serious physical violence against the persons believed to be impostors.

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