SHORT REPORT

Shared delusions of doubles

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Abstract

This is the first report of two partners in a folie à deux situation manifesting identical Capgras delusions. It is postulated that the Capgras syndrome developed as a result of interaction between a dominant patient with primarily paranoid psychopathology and a submissive one with primarily organic dysfunction. The submissive "neuro-organic" partner experienced a non-delusional misidentification that acquired a delusional component and developed into the Capgras syndrome as a result of elaboration by the dominant paranoid partner, who subsequently "imposed" the Capgras delusion on the submissive partner. The submissive patient, and, to a lesser extent the dominant patient, had evidence of organic cerebral dysfunction.

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Both the Capgras delusion (delusion of doubles) and folie à deux are rare conditions and their combination is even more rare. In fact, a shared Capgras delusion in the setting of folie à deux has never been reported in the medical literature. This occurrence provides the opportunity to study the step by step reciprocal reinforcement of two partners (one of them contributing her misinterpretative psychopathology, the other one her organicity) eventually to develop a shared Capgras delusion. Furthermore, it supports the view that organic participation is important in the pathogenesis of the delusional misidentification syndromes.

The Capgras syndrome[1] is the delusional negation of identity of a familiar person and the conviction that this person has been replaced by a physically identical double. It is a variant of the delusional misidentification syndromes, the other three subtypes being the syndrome of Frégoli, the syndrome of intermetamorphosis, and the syndrome of subjective doubles.[2 3] There is evidence that organic factors play a major part in the pathogenesis of these syndromes[4 5] although all Capgras cases cannot be explained on this basis.

Folie à deux, on the other hand,[6] is a rare phenomenon in which two closely associated persons share the same delusions. Four subtypes have been described. The most frequent is folie imposée, in which one partner is usually dominant and active and the other one is passive, submissive, and suggestible.

Case report

The dominant partner was a 54 year old, obsessional, stubborn and touchy, but also sociable and warm widow, mother of two children, with a family history of depression, who started being delusional in 1971, shortly after her husband's death, which she attributed to poisoning. She continued to express similar ideas, particularly in relation to her neighbours and her relatives.

The submissive partner was her daughter, a pleasant, good looking, loyal, and obedient law student of 24, with limited social interaction. She was closely associated with and dependent on her mother. She became an active participant in her mother's misinterpretative behaviour in 1988 when she started accusing her neighbours and misinterpreting the behaviour of her grandmother and aunt, always in keeping with the beliefs of her mother.

In 1989 she informed her mother that her teacher in English had the ability to change her facial characteristics. Similarly, she reported that the characteristics of a girl at school kept changing ("at times her hair is short and at other times it is long"). She was amused by these changes, by contrast with her mother who became very upset and made her discontinue her English lessons and stop seeing the girl with the hair transformations. Some months later, financial help was requested from the aunt but this was refused because of short notice. This produced further aggravation in the daughter's relationship with her aunt who complained to her mother that she did not behave "like a real relative".

In June 1991 the mother's delusions became more pronounced. She accused her neighbours of stealing various objects and decided to sue them. The daughter, who sided with her mother, as always, was sent to her aunt to ask her to appear in court as a witness. On return, she stated that the aunt

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appeared physically "different". The mother was now convinced that her sister had been replaced by a different, identical looking person and that this must have happened in 1942, during the German occupation, when the Germans put other people in the place of her relatives. The daughter agreed. The mother also started expressing doubts about the identity of her son. She said that "this boy" has been behaving irresponsibly by staying out late at night (contrary to her real son's behaviour). She examined old photographs of her son, discovering differences and together, mother and daughter, decided that the substitution of her son by his double must have happened in 1983, when he first started "misbehaving".

They gradually discovered that the double was not just one person. Almost every day, a different person appeared claiming to be the son. They all had similarities but some facial characteristics were different. Mother and daughter eventually started worrying about the fate of the real son.

At Christmas 1991 they had an open discussion with the double and asked him to leave the house. They also reported to the police the disappearance of the son, incriminating his double.

The patients were eventually admitted to hospital under a compulsory admission section after an application by 25 neighbours and an arson attempt on the neighbouring apartment.

On admission the mother expressed her conviction that she and her daughter had been admitted to hospital to be executed. She refused to be placed in a different ward to that of her daughter and warned the staff that she would not cooperate if her request was not satisfied.

Physical examination and routine laboratory tests were normal. Benton's visual retention test and Rey's copy of a complex figure test showed evidence of disturbance of visual retention and visual-spatial ability suggestive of organic cerebral dysfunction. Wechsler's adult intelligence test (WAIS) showed a verbal IQ of 86, a performance IQ of 79, and a mean IQ of 82. An EEG after sleep deprivation was normal, with the exception of rare theta and delta waves, more pronounced on the left. Brain CT was normal.

The daughter was anxious on admission and kept close to her mother. She expressed ideas of persecution and delusions of doubles, identical in content to those of her mother. Physical examination and routine laboratory tests were normal. Benton's visual retention test and Rey's copy of a complex figure test showed pronounced disturbances of visual retention and visual-spatial ability, indicative of organic cerebral dysfunction. More specifically, there was a difference of 3 points below the expected score in Benton's test (form C), 6 points below the expected score on form D, and a score of 13 in Rey's test (normal range for the patient's age group: 18–34). The WAIS showed a difference of 36 points between verbal and performance IQ (verbal 108, performance 72, mean 92), which is again a probable indicator of neuro-organic dysfunction. The age graded subtest scores were as follows: information 13, comprehension 12, arithmetic 9, similarities 10, digit span 11, vocabulary 14, digit symbols 7, picture completion 3, block design 7, picture arrangement 5, object assembly 4. The patient had a particularly low score in the arithmetic subtest of the verbal scale which tests immediate recall, concentration, attention, and conceptional manipulation. All scores in the performance scale were low, particularly the picture completion subtest, which is a test of visual recognition. The subscale distribution showed deterioration of the intellectual abilities of the patient, which could not be attributed to functional disturbance, as the subscales that are sensitive to functional disturbance (comprehension, picture arrangement) were within the normal range. The Rorschach test did not show disturbance in reality testing. A drug induced sleep EEG and an EEG after sleep deprivation showed abundant paroxysmal bursts of slow waves, within the theta and delta range, as well as spike like formations, with definite left preponderance more pronounced in the frontal-temporal area. Brain CT was normal. The patients were on neuroleptic treatment when the psychological tests and EEGs were carried out, but the abnormalities detected were qualitatively and quantitatively different from those that might be attributed to the influence of neuroleptics. Both patients were treated with neuroleptics and carbamazepine. To secure their cooperation they were originally admitted to hospital in the same ward but after three months the daughter was transferred to the day hospital.

Originally the patients refused to see any of their relatives except the mother's sister, identified as a "friend", and their attitude towards the son was reserved and at times hostile, but two months after onset of treatment they became more tolerant of him and agreed that the mother's sister might indeed be more than a mere "friend".

Shortly after separation from her mother, the daughter's indifference gave way to her expressed wish to resume her law studies. Both patients agreed to see the son but they showed no positive feelings when he visited them.

Six months after admission, both patients agreed to have the son live with them. When asked who he was, the mother expressed doubts about his identity but she was not as adamant as before. The daughter differentiated herself from the mother for the first time by stating that he was indeed her brother. She also "explained" that she had to side with her mother because, otherwise, like her brother, she would have been thrown out of the house. On discharge, neither of the patients had obtained full insight but they agreed to continue with their medication.

On follow up, one year after discharge, the patients were free from delusions and continued their "a deux" existence.

Discussion

The coexistence of the Capgras syndrome with folie à deux is very rare. To our knowledge, only two such cases have appeared in the medical literature, but in one of them[7] the patients really manifested not the Capgras delusion but the syndrome of subjective doubles[8] and in the other case, as pointed out by the authors themselves[9] the submissive partner did not really maintain his mother's Capgras delusion. It seems therefore that the case we have described is the only report of shared Capgras delusions in a folie à deux setting. This underlines the rarity of the combination, which is not surprising in view of the rarity of its constituents.

The folie à deux psychopathology, in the case we have described, was clearly initiated by the paranoid dominant partner, the mother. Her submissive daughter resisted for a while but eventually adopted her mother's delusions fully. Thus this case has many characteristics of the "folie imposée" type.[10 11]

With respect to the development of the Capgras delusion, on the other hand, it was the daughter who initially took the lead. It was she who started misidentifying first (English teacher). Her misidentifications, however, were non-delusional. They became delusional under the influence of the paranoid mother. The daughter adopted them and both mother and daughter elaborated on them further.

It is important to note that it was the partner with the neuroorganic dysfunction who contributed the misidentification, and it was the patient with the paranoid component who provided the delusional elaboration of it. Thus it was their interaction that produced the delusional misidentification. It is possible that independently, neither of them would have manifested the syndrome of Capgras. The daughter would probably have manifested a non-delusional misidentification, in keeping with her organic dysfunction, and the mother would have continued to express her paranoid delusions, in keeping with her paranoid psychosis.

It is interesting to note that the mother did not elaborate on the daughter's misidentifications right from the beginning. When the daughter first reported the changes in the appearance of the English teacher, the mother reacted with increased suspicion but did not develop the delusion of doubles at this stage. This is not solely because a maturation process is necessary for the manifestation of the syndrome in its fully developed form but also because the emotional attitude of the patient towards the teacher was neutral. It was later, in association with persons closely related to her emotionally (sister, son), that she developed the syndrome. This is in keeping with previous clinical findings[4] and provides some support for the psychodynamic hypotheses that consider the syndrome as a solution to the problem of the patient's ambivalence towards the misidentified person.[3] Ambivalence, however, can function only as a precipitant and neuro-organic factors are aetiologically more relevant.

It is important to note that for both our patients there was evidence of cerebral organic dysfunction, revealed by Benton's and Rey's tests in the case of the mother and by Benton's, Rey's, and the WAIS tests, as well as by the EEGs in the case of the daughter. This is in keeping with many relevant publications reviewed by one of us,[4] which consider the syndrome of Capgras as resulting from delusional elaboration of experiences produced by cerebral dysfunction.

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