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# Brothers on Big Brother: A Case of Folie à Deux in Monozygotic Twin Males

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#### Abstract

Folie à deux is a psychiatric condition characterized by a shared delusion among two or more people who are in a close relationship. The incidence of shared delusional disorder is reported to be low. Shared delusional disorder is more common among genetically related individuals, especially twin sisters, and those with a prolonged dependent relationship. This case describes the hospitalization and course of monozygotic twin males with a shared delusional disorder. It highlights a rare condition with the interplay of genetic heritability and environmental factors. Even when separated for a short period of time, the secondarily affected twin was able to have marginally more insight into their delusions and recognized the importance of compliance with medication during hospitalization.

Keywords: Folie à deux • Delusion disorder • Induced psychosis

#### Introduction

Folie à deux (a French term literally meaning "madness for two") is a rare mental disorder that was first described in 1877 by Lasegue and Falret, and it is characterized by one individual developing a delusion with a second individual subsequently developing this same delusion [1]. In the 1940's, Gralnick further described four subtypes of folie à deux: folie imposée, folie simultanée, folie communiquée and folie induite [1]. Folie imposée is when an individual with psychosis transfers the delusion to an individual without psychosis [1]. Folie simultanée, unlike the other subtypes, does not involve transmission of psychosis, but entails two individuals developing psychosis simultaneously [1]. Folie communiquée is when the recipient of the delusion experiences it after an extended period of resistance and continues to display the delusion despite separation from the inducer [1]. Lastly, folie induite occurs when and individual with pre-existing psychosis [1].

Literature indicates that persecutory and grandiose delusions are the most commonly encountered in shared delusional disorder, and in the vast majority of cases, delusions are identical in the dyads [2]. The incidence of shared delusional disorder is 1.7% to 2.6% of psychiatric hospital admissions [1]. The etiology for the development of the condition is unknown; however, genetic susceptibility and family history are considered strong factors, as well as female gender, low IQ, histrionic behavior, social isolation and life events [3]. Folie à deux appears to be more common among genetically related individuals and those with a prolonged dependent relationship [4]. Harmon and Rames described 16 case reports of folie à deux in monozygotic twins, and of those 16, 12 of those cases involved twin sisters [4]. One aspect that makes this case report unusual is that the patients were monozygotic twin males. Another area of interest for the case report is that one of the brothers agreed to treatment, while the other did not agree to treatment, which emphasizes how a shared delusion can be weakened between affected individuals if they are separated from each other. The case report aims to highlight this presentation of folie à deux with monozygotic twin males as well as the course of treatment.

### **Case Presentation**

Two 37-year-old male monozygotic twins were involuntarily admitted on an emergency detention order to an inpatient psychiatric facility with shared persecutory and paranoid delusions after making threats of violence towards a local police department. Twin A described his delusions occurring over the course of the last 20 years, whereas Twin B discussed the onset of his similar persecutory and paranoid delusions occurring approximately two years prior to hospitalization. Additionally, Twin B had less social isolation than Twin A, including being able to successfully complete college and receive a degree.

Upon admission, Twin A and Twin B were placed on separate units. Routine labs (complete blood count, comprehensive metabolic panel, thyroid stimulating hormone, fasting lipid panel, and urine drug screen) and physical exams of both patients were essentially unremarkable. Mental status exams revealed perseveration on paranoid, persecutory delusions with poor insight for both Twin A and Twin B. Twin A demonstrated defensive and resistive behavior with an angry affect, whereas Twin B demonstrated cooperative behavior with a tense affect (Figure 1).





Both twins were prescribed an antipsychotic medication, risperidone. Twin A refused to take medication throughout the duration of his admission, whereas Twin B was adherent with medication during hospitalization. Both twins had unchanged, fixed delusions after five days of an inpatient stay; however, they were no longer having thoughts of wanting to harm law

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enforcement agencies as the emergency detention orders for both patients came to expiration. Due to lack of further safety concerns, the twins were subsequently discharged.

#### Discussion

Folie à deux is categorized as Induced delusional disorder in the ICD-10 (F24). This condition is not a separate diagnosis in the DSM 5; rather, it is best classified as "Other specified schizophrenia spectrum and other psychotic disorder" as Delusional symptoms in partner of individual with delusional disorder (298.8) [5]. It was previously referred to as "Shared Psychotic Disorder" in DSM-IV-Tr. Diagnostic criteria for shared psychotic disorder in the DSM IV are as follows: a delusion develops in an individual in close relationship with another individual with an established delusion; the delusion developed in the second individual must be similar in content to that of the first individual; and symptoms cannot be attributed to other psychotic disorder, substance use, or a medical condition [6].

This case highlights the presentation and hospital course of a rare condition of shared delusional disorder in male twins. The onset of the manifestation of delusions between the twins indicates an element of reactivity in their development in the secondarily impacted twin. When separated, even for a short hospitalization period, the secondarily impacted twin was amenable to taking medication, in contrast to Twin A, who refused medication. As Twin A's delusions were longer standing than Twin B's by several years, this case illustrates how length of the delusions' presence may impact a patient's amenability to medication and impact treatment approach.

Folie à deux cases are typically seen among individuals with a longstanding relationship, most commonly among married couples and twin sisters [4]. This case is unique in presenting in two male brothers. Furthermore, social isolation tends to be a predisposing factor; however, while Twin A was more socially withdrawn, Twin B inherited the delusions despite having other social interactions, such as attending college. Along with these distinctive factors, this case also demonstrates common factors seen in folie à deux, such as the familial aspect, albeit with male gender, and the two presenting individuals living together [7].

## Conclusion

Of the Gralnick subtypes previously described, the two individual's presentation would be most consistent with folie imposée. The twins only had a brief period of separation with the expiration of the emergency detention orders. Thus, it is unclear whether a longer period of time would have allowed for resolution of the delusions in Twin B or if the delusions would have persisted, aligning with aspects of folie communiquée. This case presentation serves to expand further knowledge on folie à deux, including patient demographics and relationships, as well as the importance of prompt separation for treatment of the disorder.

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