

Case Report



Fregoli Syndrome: A Case Report and Literature Review

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Introduction: Fregoli syndrome is a rare misidentification disorder that can disrupt behavior, endanger safety, and impair quality of life. Its occurrence in young adults is exceptionally uncommon. This report presents a case of Fregoli syndrome in a young adult without the usual underlying causes, such as schizophrenia.

Case Presentation: A 25-year-old male presented with a two-month history of persecutory delusions, believing that strangers, friends, and professors were disguising themselves to follow and harass him. His psychiatric history was unremarkable, and there was no family history of mental illness. The patient was diagnosed with Fregoli delusion and prescribed Risperidone 2 mg/day, alongside cognitive-behavioral therapy to challenge his delusions. After three months of treatment, he showed gradual improvement, with reduced intensity of delusions but occasional paranoid thoughts.

Literature Review: Seven cases of Fregoli syndrome were reviewed. Patient ages ranged from 43 to 77 years, with predominant female prevalence (71.4%). Psychiatric histories included delusional schizophrenia, paranoid schizophrenia, and unspecified psychiatric conditions. Medical histories included hypertension, myocardial infarction, Parkinson's, and diabetes mellitus. Presenting symptoms varied with delusional misidentification, auditory/visual hallucinations, suicidal ideations, delirium, and paranoia. Treatment approaches included risperidone alone or in combination with electroconvulsive therapy, aripiprazole & promazine, and more. Symptom improvement was seen in four cases, and one case achieved full resolution of symptoms.

Conclusion: Fregoli syndrome is a rare condition of multiple etiologies that can present in young patients. Risperidone, combined with cognitive behavioral therapy, may yield fruitful results.

Keywords: Fregoli delusion, Schizophrenia, Delusional misidentification syndrome, Antipsychotic, Cognitive behavioral therapy

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1. Introduction

Delusional Misidentification Syndrome (DMS) is typically classified into three main types: Capgras syndrome, Fregoli syndrome, and intermetamorphosis syndrome. In Capgras syndrome, individuals believe familiar people have been replaced by impostors who closely resemble them. The rarest of the three, intermetamorphosis syndrome, is characterized by the perception that certain individuals' identities and physical appearance have changed [1].

Fregoli syndrome was first described in 1927. It is characterized by the persistent belief that different people, often strangers, are, in fact, a single familiar individual who is changing their appearance or disguising themselves to deceive or follow the affected person. Unlike other DMSs, Fregoli syndrome involves the misperception that one individual repeatedly assumes different identities [2]. The syndrome is named after Leopoldo Fregoli, an Italian actor renowned for his ability to switch roles, costumes, and accessories

rapidly during his performances, reflecting the delusional belief of a single person constantly altering their appearance [2].

For more than 80 years, DMSs have presented significant challenges for mental health professionals. These difficulties stem from a limited understanding of their underlying causes, the absence of consistently effective treatments, and concerns regarding the potential risks associated with these conditions [2]. There has been considerable interest and ongoing debate regarding the causes and underlying mechanisms of DMSs. Researchers and clinicians have explored various explanations, ranging from psychodynamic theories to neurological and organic impairments. Some theories suggest that DMSs arise from deep-seated psychological conflicts or defense mechanisms, while others point to structural or functional abnormalities in the brain, particularly in regions associated with recognition, memory, and perception [1].

Fregoli syndrome, in particular, is often associated with neurological or psychiatric disorders, including schizophrenia, traumatic

brain injury, and dementia [1]. This report presents a rare case of Fregoli syndrome in a young adult without any of the commonly reported underlying causes. The report was developed following the CaReL guidelines, and only reliable, peer-reviewed sources were included while excluding any unreliable references or data [3,4].

2. Case Presentation

2.1. Patient Information

A 25-year-old male, with no prior psychiatric history, was brought in by his father with a two-month history of persecutory delusions. He had a persistent belief that various individuals, including friends and strangers, were disguising themselves to follow and harass him. These delusional beliefs were accompanied by marked irritability, anxiety, and sleep disturbances. He denied any previous episodes of psychosis, including hallucinations or delusions. There was no history of substance use, and his medical history was unremarkable. In addition, there was no known family history of psychiatric illness, and he denied any recent psychosocial stressors or physical abuse.

2.2. Mental State Examination

The patient was well-groomed and cooperative but alert and guarded, frequently scanning the room as if expecting pursuit. His mood was anxious and suspicious with restricted affect. Speech was normal in tone, volume, and rate. The thought process was coherent yet dominated by persecutory misidentification delusions consistent with Fregoli syndrome. No hallucinations were reported, and orientation to time, place, and person was intact. Insight was poor, as he regarded his delusions as true, and judgment was impaired accordingly. The baseline Positive and Negative Syndrome Scale score was 91.

2.3. Medical and Neurological Workup

The patient underwent a thorough medical and neurological workup to rule out secondary causes of psychosis or DMS. All baseline laboratory investigations (complete blood count, liver and renal function tests, thyroid profile, serum electrolytes, random blood sugar, and HbA1c) were normal. His magnetic resonance imaging (MRI) showed no abnormal findings. All this supported a primary psychiatric disease hypothesis, ruling out an organic origin from the outset.

2.4. Diagnosis

Based on the history, mental status examination, and investigations, the patient was diagnosed with Fregoli syndrome.

2.5. Treatment

The patient was initiated on a low dose of antipsychotic medication, specifically risperidone at 2 mg per day for 12 weeks, to address his delusional thoughts. In parallel, cognitive-behavioral therapy (CBT) was commenced. The patient completed 12 weekly CBT sessions (\approx 50 minutes each) with a licensed clinical psychologist trained in CBT for psychosis. The program combined psychoeducation on the nature of delusions, cognitive restructuring to challenge misinterpretations of identity and persecution, and behavioral experiments with reality-testing exercises to reduce conviction in delusional beliefs.

To promote treatment adherence, the patient attended regular psychiatric follow-up appointments and received strong support from family members. Family psychoeducation sessions were conducted to enhance understanding of the patient's condition, reduce levels of expressed emotion, and foster a collaborative and supportive caregiving environment.

2.6. Follow-up

After 12 weeks of treatment, the patient achieved partial remission, characterized by reduced conviction and frequency of delusional beliefs. Positive and Negative Syndrome Scale total score improved from 91 at baseline to 68, indicating moderate symptomatic improvement. Clinically, he developed uncertainty about his persecutory delusions, resumed university attendance, and began socializing. No extrapyramidal or metabolic side effects were observed. The patient was advised to continue Risperidone at 2 mg/day for a minimum of 6 months post-remission, with plans to reassess for dose tapering after 9–12 months, provided there is sustained recovery. CBT sessions were recommended to continue biweekly for another three months to consolidate gains and monitor for relapse indicators. The treatment plan also includes monthly psychiatric reviews and continued family involvement.

3. Discussion

The current understanding of Fregoli syndrome is primarily based on reported cases and therefore remains insufficient. It has been suggested that DMSs may be secondary to brain damage, including infarctions, traumatic injuries, or other types of brain lesions [5]. A recent meta-analysis by Dias et al. showed that among patients who underwent neuroimaging, it was particularly notable that right-sided lesions were common. Also, there was an overrepresentation of patients with lesions in the frontal lobe. It also showed that nearly half of all patients with Fregoli syndrome are found to have a secondary cause of psychosis [2]. This suggests that clinicians should maintain a high level of suspicion for a neurological rather than a primary psychiatric cause when evaluating patients with Fregoli syndrome. As a result, appropriate neuroimaging investigations, such as MRI, should be considered to identify any underlying neurological abnormalities.

In a recent study that examined brain connectivity related to delusions of misidentification, it was found that the majority of the patients had lesions in brain areas functionally connected to the right frontal cortex. This finding was specific to misidentification delusions when compared to other neurological syndromes [6]. This highlights the critical importance of the right frontal regions. Seven cases of Fregoli syndrome have been reported (Table 1) [1,5,7–11]. Four demonstrated abnormal brain MRI findings, including atrophy and infarctions [1,7,8,10]. In contrast, the MRI in the present case was unremarkable.

Dysfunction in the right hemisphere and frontal lobe is linked to the distortion of familiarity, as well as to deficits in reality testing and memory integration. These cognitive impairments are likely to result in misleading and incorrect interpretations, potentially giving rise to Fregoli syndrome and other misidentification delusions [12]. Additionally, DMSs can be a manifestation of an underlying psychiatric condition, with schizophrenia being the most commonly associated disorder. Prior psychiatric history was remarkable in four of the reviewed cases, as two of them were previously diagnosed with schizophrenia, and two cases had experienced hallucinations [1,5,8,11]. Contrary to the reviewed cases and the majority of the literature, the present case had no previous head injuries or underlying neurological issues and no history of psychiatric illnesses, and his age of presentation is much younger than the reviewed cases, adding another angle of uncertainty to this disorder.

A wide range of presenting symptoms of Fregoli syndrome have been reported, for example: psychotic symptoms (such as delusions, disorganized thoughts, and paranoia), cognitive disturbances (such as delirium and poor insight), mood symptoms (such Abbas et al. Judi Clin. J | 2025;1(2):122-125

Table 1. Baseline characteristics of Fregoli syndrome cases.

Author/year	Age (years)	Sex	Medical history	Psychiatric history	Family psychiatric history	Presenting symptoms	Brain MRI	Treatment	Outcome	Follow-up (years)
Moriyama et al./2007 [<u>1</u>]	68	F	Cerebrovascular accident	Delusional schizophrenia	N/A	Delusional misidenti- fications	RI	Risperidone	Resolved	N/A
Hentati et al./2022 [<u>5</u>]	50	F	Hypertension	Irritability, misidentifica- tions, auditory & visual hallucinations	Unremarkable	Delirium, Auditory hallucinations	Normal	Risperidone	Improved symptoms	2
Salviati et al/2014 [<u>7]</u>	61	F	DMt2, PN & Retinopathy	Unremarkable	Unremarkable	Disorientation, Rapid speech, Delusions & Paranoia	CSE	Aripiprazole & Promazine	No improve- ment	N/A
Hanan/2022 [8]	55	M	Unremarkable	Paranoid schizophrenia	N/A	Paranoia, Halluci- natory behavior & irritability	Right-side DBA in the frontal lobe	N/A	N/A	N/A
Kumar/2018 [9]	43	F	Unremarkable	Unspecified	Depression	Delusional thoughts	N/A	Risperidone, bilateral modified ECTs & trihexyphenidyl	Improved symptoms	N/A
Ferreira et al./2017 [<u>10</u>]	77	F	Hypertension, Myo- cardial infarction, Vascular dementia & Chronic kidney disease	Unremarkable	Unremarkable	Euthymic mood, Fregoli delusion, Auditory hallucina- tions, Anxiety & Poor insight	GA & CSI	Quetiapine, Aripiprazole & Zotepine	Improved symptoms	4
Ogata et al., 2025 [<u>11</u>]	50	М	Parkinson's disease & dopamine dysreg- ulation syndrome	Auditory hallucinations and persecutory delusions	Unremarkable	Inability to walk, delusions, self-doubt, and accusatory audi- tory hallucinations, Despondency, reduced food intake, self-ha- tred, and suicidal ideation	N/A	Quetiapine	Improved symptoms	0.8

M:Male, F:Female, N/A:Not applicable, GA:General Atrophy, CSI:Cortical Sequelar Infarctions, DMt2:Diabetes Mellitus type 2, PN:Peripherial Neuropathy, CSE:Chronic Subcortical Encephalopathy, DBA:Diffuse Brain Atrophy, ECT:Electroconvulsive Therapy, RI:Regional Infarction

as anxiety and suicidal ideations), and neurological impairment (such as inability to walk) [1,7,8-11]. Assaultive behavior has been reported in association with Fregoli delusion; for instance, one patient fatally strangled his cellmate during an episode of misidentification [8].

Several treatment approaches for DMSs have been described. However, there is limited published evidence on the effectiveness of atypical antipsychotics or antidepressants in managing DMSs [10]. This indicates that the currently available treatments may not be entirely effective for these patients. Typical and atypical antipsychotics, anticholinergics, and electroconvulsive therapy are among the treatments utilized. Risperidone was the most utilized drug in the reviewed cases, and it was the drug of choice in the current patient [1,5,9].

Salviati et al. reported a case of Fregoli syndrome in a patient triggered by an acute pneumonia associated with urinary infection, where antipsychotic treatment was ineffective until the infection resolved [7]. This suggests that such delusions may arise as a result of infections rather than being solely linked to neurological or psychiatric conditions. CBT was not utilized in any of the reviewed cases. However, it may help by challenging cognitive distortions and assisting patients in recognizing and questioning misinterpretations related to identity misrecognition [13]. It can also enhance reality testing by strengthening their ability to distinguish between reality and delusional perceptions. Additionally, CBT can aid in managing associated symptoms such as anxiety or paranoia, providing strategies to cope with distress linked to the delusion [13]. More research is essential to solidify the efficacy of its uses. Fregoli syndrome can significantly impact personal, professional, and social life, causing familial conflicts and distress for both the patient and their loved ones. Therefore, greater efforts are needed to understand DMS phenomena, develop effective treatments, and establish long-term management strategies.

One limitation of the present report is the unavailability of the MRI image, which could have strengthened its rigor. Another limitation is the relatively short follow-up period.

4. Conclusion

Fregoli syndrome is a rare condition of multiple etiologies that can present in young patients. Risperidone, combined with cognitive behavioral therapy, may yield fruitful results.

Declarations

Conflicts of interest: The authors have no conflicts of interest to disclose.

Ethical approval: Not applicable.

Consent for participation: Not applicable.

Consent for publication: Written informed consent for publication was obtained from the patient's father.

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Use of AI: ChatGPT-4.5 was used to assist with language refinement and improve the overall clarity of the manuscript. All content was thoroughly reviewed and approved by the authors, who bear full responsibility for the final version.

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