# First episode psychosis patient with comorbid ophidiophobia treated with aripiprazole: a case report

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"Left to herself, the serpent now began To change; her elfin blood in madness ran, Her mouth foam'd, and the grass, therewith besprent, Wither'd at dew so sweet and virulent"

John Keats (1795 – 1821)

### Introduction:

First episode psychosis (FEP) can be polymorphic, patients need special consideration for evaluation and treatment; certain amount of patients may achieve full remission in a short period of time if treated earlier. Comorbidity of FEP and anxiety disorders is common; although first generation antipsychotics may also possess anxiolylic effects and reduce patients' emotional burden, atypical antipsychotics are the drug of choice for FEP patients weighing their efficacy and tolerability profile. Aripiprazole is an atypical antipsychotic. In addition to its well-known D2 partial agonistic effect as the pharmacological target to treat psychotic disorder, the anxiolytic effect of aripiprazole from its partial 5-HT 1A agonistic effect has been documented. Here we reported a FEP patient with comorbid ophidiophobia successfully treated with aripiprazole for both psychotic and phobic symptoms.

## Case Report:

Mrs. L is a 38-year-old housewife with a 4-year-old boy. She has been afraid of snakes since six years old. Her ophidiophobia first developed after watching a classic horrifying movie "Snake Revenge," where huge amount of snakes flooding out of their nests to kill humans in the end. She had screamed in the theatre, and was brought to a Chinese ritual "shuo-jing" (literally meaning to retrieve one's shock) after the movie. She would never touch a snake afterwards and her father would hide snake or snake-like figures to prevent any further stimulation. Her family didn't have similar phobia after the movie, but our patient did, and it continued into adulthood, "even the word "snake" may make me tremor. Except for ophidiophobia, She had no otherwise specified chronic physical disorder or family history of mental illness.

One year before the presentation, her beloved grandmother and father died consecutively within two weeks. Caring for two terminally ill family members for months and then dealing with the post-mortem affairs had made her totally exhausted. She soon started to suffer from unstable mood, and her child-caring ability was interfered. The patient and her family initially considered all the above as a bereavement reaction and paid little attention to them. However, delusions and auditory hallucination gradually ensued. She began to hear voices saying "snakes will bite you harshly," and was afraid that some one may hide snakes somewhere to bite her. She had even witnessed huge hallucinatory serpents or noticeed her relatives becoming snakes. She was thus taken to the psychiatric clinic; in addition to the mentioned symptoms, there was only urinary frequency under fear but complete medical work up did not reveal other acute illness or prominent neurological deficit. The Snake Fear Questionnaire (SNAQ) was rated as 28/30.

Aripiprazole 15 mg per day was prescribed and maintained for 6 months; self-discontinuation for 3 months was noted because she attempted to be pregnant again, while the psychotic symptoms prominently deteriorated that time. Except for weight gain, no other adverse effect was noted. Aripiprazole was then titrated up to 22.5 mg per day. The psychotic symptoms gradually remitted in 2 months; interestingly, her ophidiophobia also subsided; no further fear toward snake was observed in following visits, and she is calm when people talk about snake. The improvement was confirmed by a score of 8 in SNAQ. After another 6 months, her psychosis was in complete remission, and ophidiophobia didn't relapse.

#### Discussion:

For patient with first episode psychosis (FEP), special considerations should be made; atypical antipsychotics, including aripiprazole, are recommended, instead of typical antipsychotics (Robinson, Woerner, Delman, & Kane, 2005). more than 70% of first-episode patients achieve a full remission within 3 to 4 months, and the characteristics of female gender, fair pre-morbid function, and no attention impairment, are some of the predicators for better outcome in our patient; however, her ophidiophobia deteriorated to become an emotional stress and mixed up with hallucination symptoms, are usually signs of worse prognosis.

Anxiety disorders are common comorbidity of psychosis, social phobia is one of the most common comorbid disorders (39.5%) among subjects with nonaffective psychosis (Ciapparelli, et al., 2007), while the percentage of comorbid simple phobias has been reported between 2.5% to 13.6%. Phobia itself is also the most common type of anxiety disorders. Simple phobias are fears about specific objects or activities, and are believed to be triggered by horrifying experiences in childhood. Ophidiophobia has been one of the most evaluated simple phobias; for some patients, symptoms in childhood may disappear as they get older; however, in our case, childhood ophidiophobia not only persists into adulthood. but has pathoplastic effects on her psychotic symptoms.

Pharmacotherapies including antidepressants, minor tranquillizers and beta-blockers could be beneficial for phobias; while antipsychotics, especially the second generation ones, are rarely considered the first line treatment. The mechanism of antipsychotics on anxiety disorders had long been of interest; and trifluoperazine has been the first one proved by FDA for non-psychotic generalized anxiety disorder. (Gao, Muzina, Gajwani, & Calabrese, 2006). Weighing drug response rate and tolerability profile, second-generation antipsychotics, including aripiprazole, are more recommended for FEP patients.<sup>2</sup> Aripiprazole has a partial agonism at dopamine (D2) and serotonin (5-HT1A) receptors and antagonism at dopamine (D3), serotonin (5-HT2A, 5-HT2C, 5-HT7), α 1-adrenergic, and histamine (H1) receptors. Although rarely considered as a first-line treatment for phobia, its partial 5-HT 1A agonistic property is anxiolytic.

Recently, in an open-label study enrolling 16 patients with schizophrenia or schizoaffective disorder, with co-occurring social anxiety symptoms, switchover to aripiprazole from neuroleptic seems to be effective for their social anxiety, psychosis, and even quality of life (Stern, Petti, Bopp, & Tobia, 2009). This case report demonstrates a possibility of aripiprazole monotherapy for FEP patients with comorbid anxiety disorders such as phobias. Since emotional stress and more severe hallucinations both suggest poor prognosis for FEP patients, alleviating them at the same time could potentially result in a more favorable outcome. We suggest that clinicians should identify and treat phobic symptoms earlier in psychotic patients to prevent it further deteriorates psychosis.

## Reference

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