

Lack of Efficacy of Antipsychotics on Premenstrual Psychosis: A Case Report

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ABSTRACT ~ Premenstrual psychosis has been described as a psychotic condition beginning shortly before, or during menstruation, in adolescent girls and young women. In this article, we present a case that developed sudden onset psychosis a few days before menstruation which resolved completely upon menstrual bleeding. Importantly, the recovery from psychotic symptoms was independent of antipsychotic treatment.

A 30 year-old female was diagnosed with disorganized type schizophrenia ten years prior to this case study. She first suffered from auditory hallucination and persecutory delusion after her first menstrual cycle when she was in elementary school. She was treated with oral haloperidone 20 mg per day. The psychotic symptoms were frequently recurrent and her family thought the recurrence was due to poor drug compliance. The patient then started to receive long term injections of risperidone one year ago. It was discontinued because of the lack of efficacy. Aripiprazole 10 mg per day was prescribed and thereafter titrated to 20 mg per day. During the following, vivid auditory hallucination, self-talking and self-laughing were frequently noted. There was no treatment effect of aripiprazole on these psychotic symptoms.

In this case antipsychotic treatment was continuously received, including haloperidone, long term injection of risperidone and aripiprazole. However, psychotic features were still recurrent even in the presence of antipsychotic treatment. This case report suggests that cyclic psychoses associated with the menstrual cycle may be a specific entity, not included under the recognized functional psychoses. In some cases, these psychoses could be classified as a subgroup of premenstrual syndromes. Psychopharmacology Bulletin. 2012;45(1):31-34.

INTRODUCTION

Premenstrual psychosis has been described as a psychotic condition beginning shortly before, or during menstruation, in adolescent girls and young women. These experiences last for one or two weeks, subside thereafter, only to reappear in a similar form before or during one of the next cycles (Stein et al., 2003).⁵ Brockington et al. studied cyclic psychosis in 275 cases that were linked to

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menstruation and concluded that premenstrual psychosis had a biological basis rather than being a culture-dependent phenomenon (Brockington, 1998).¹ Therefore, pharmacological management of premenstrual psychosis becomes an important issue. In this article, we present a case that developed sudden onset psychosis a few days before menstruation which resolved completely upon menstrual bleeding. Importantly, the recovery from psychotic symptoms was independent of antipsychotic treatment.

CASE REPORT

A 30 year-old female was diagnosed with disorganized type schizophrenia ten years prior to this case study. She first suffered from auditory hallucination and persecutory delusion after her first menstrual cycle when she was in elementary school. These psychotic features included voice commending auditory hallucination, suspicious and delusion of being followed and always happened two to five days before menstrual bleeding. She was brought to her local medical clinic and was treated with oral haloperidone 20 mg per day. Her psychotic symptoms later resolved. She kept a fair academic performance in the following years. The psychotic symptoms were frequently recurrent and her family thought the recurrence was due to poor drug compliance. The patient then started to receive long term injections of risperidone one year ago. She recently suffered from severe auditory hallucination, especially at night, making her nervous and agitated even under the regular injection of risperidone. While she was admitted to hospital there was no delusion but mild auditory hallucination. Because of the lack of efficacy of injectable risperidone on her psychotic features, it was discontinued while she was admitted. Urinalysis revealed that the patient was pregnant. Artificial abortion was immediately performed on the family's request on 2nd of November and no antipsychotics were administered at this period. Auditory hallucination gradually disappeared in the absence of antipsychotic treatment. Her condition became relatively stable. All clinical assessments, including routine physical examination and brain computed tomography (CT) scan, were negative. In order to prevent relapse of psychotic symptoms, aripiprazole 10 mg per day was prescribed on 10th of November. However, on 21st of November, seven days before the first menstruation that was three weeks after artificial abortion, acute and sudden psychotic features included dysphoric mood, auditory hallucination, delusion of reference, poor sleep quality and hostility toward staff occurred. The next day, her condition persisted and her level of agitation was so great that physical restraint was required. During the

following several days, vivid auditory hallucination, self-talking and self-laughing were frequently noted. These psychotic symptoms completely resolved on 30th of November, two days after menstrual bleeding. During the period of severe psychosis, aripiprazole 20 mg per day was continuously administered. She was discharged from hospital in a stable condition. Unfortunately, she suffered from another episode of psychosis on 19th of December before her next menstrual period, and again the psychotic features disappeared on 26th of December, which was within two days after menstrual bleeding. She received aripiprazole 20 mg per day throughout this whole period of psychosis. According to the course of illness, she has about seven days for the spread of onset in psychosis and 28 days for the days of inter-menstrual interval. At least ten episodes based on our medical record.

DISCUSSION

Menstrual psychosis may be related to the pituitary-ovarian axis and have an association with anovulatory cycles, but there have been few hormonal studies. To confirm a case with menstrual psychosis clinically, detailed dates regarding the association of menstrual cycle and psychosis is necessary (Brockington, 2005).² Using a non-parametric statistic test, the p values on association of menstrual cycle and psychosis was less than 0.01 which was consistent with previous suggestion. It has been suggested that hormone therapy might be considered to be of some effect (Stein et al., 1993),⁶ whereas some cases can spontaneously remit without the need for any medication. (Severino and Yonkers, 1993).⁴ In our case, psychotic features appeared to be significantly pronounced during the premenstrual phase and resolved after menstruation, as the patient was asymptomatic between each menstrual period. Notably, antipsychotic treatment was continuously received in this case, including haloperidone, long term injection of risperidone (dopamine D₂ receptors antagonist) and aripiprazole (dopamine D₂ partial agonist). However, psychotic features were still recurrent even in the presence of antipsychotic treatment. These findings, which are consistent with previous suggestion, showed that there was no therapeutic effect of antipsychotics on premenstrual psychosis. Although a model of elevated dopaminergic activity has been proposed by observing eye blinking in a young woman with premenstrual psychosis (Lovestone, 1992),³ our case does not support this dopamine model. We suggest that cyclic psychoses associated with the menstrual cycle may be a specific entity, not included under the recognized functional psychoses. In some cases, these psychoses could be classified as a subgroup of premenstrual syndromes. ❀

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