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Abstract Title: A Case Report of Menstrual Psychosis: Could this be a new sub-type of PMDD?

Presenting Authors/Affiliation: Taylor Ousley, MD, PGY-2: UAB Department of Psychiatry

Additional Authors/Affiliations: Pamela Parker, MD; Soumya Sivaraman, MD: UAB Department of Psychiatry

Introduction/Background: Menstrual psychosis is a rare occurrence that has only been described in case reports thus far in the literature. This phenomenon is characterized by a cyclical onset of psychosis that coincides with menstruation, usually starting around the onset of the menstrual cycle with resolution of psychotic symptoms when menstruation ends.[1] This subtype of psychosis is particularly important to recognize as the approach to medication management is influenced by fluctuations in hormones, which is the target of treatment.[1]

Description: Here we present a case of a 36-year-old Caucasian female with PPH of moderate-to-severe intellectual disability who was brought to the ED for overdose on her home Risperidone and admitted for observation. She was reportedly on Risperidone for many years due to behavioral disturbances related to her intellectual disability. The patient was in a state of extreme agitation when she took an overdose of Risperidone, which was only a total of 3 0.5mg tablets. The patient's mother described these periods of agitation as occurring in congruence with the patient's menstrual cycles, starting about 5 days prior to the onset of menstruation and subsiding at the end of the cycle. The patient's mother also described psychotic symptoms during this time, including laughing/talking to herself, making gestures, and scratching/hitting herself. The patient's psychotic symptoms subside towards the end of her menstrual cycle, and she has a return to her baseline. Her baseline is described as doing most of her ADLs with minor assistance, ability to have simple conversations with family, and the absence of psychotic symptoms. This repeated behavioral change with psychosis associated with the perimenstrual period started about 10-15 years ago. The mother reports that the patient has previously been on Depo-Provera birth control for 2 years in which psychotic symptoms had completely resolved. However, the patient had gained a significant amount of weight so Depo was discontinued. This apparent menstrual psychosis then returned after Depo was discontinued and patient's symptoms worsened further over the last year after the death of her father. The patient was prescribed an OCP during this hospitalization to take daily to achieve amenorrhea, and Risperidone was increased. On initial presentation, patient appeared to be responding to internal stimuli, seen laughing and talking to herself and making gestures. After an increase in Risperidone and a short period of observation, it was reported by the mother that the patient had returned to her baseline. She was discharged with plan to follow up outpatient with a psychiatrist and an OB/GYN.

Discussion and Conclusion: Menstrual psychosis has been described as having several distinct characteristics, including acute onset, brief duration with full return to patient's baseline, and the presence of psychotic symptoms exclusively associated with the timing of the menstrual cycle.[1] There have been many case reports that have been presented in the literature and it could be argued that it should have its place in the DSM-5, potentially as a subtype of Premenstrual dysphoric disorder. It is particularly important to highlight this interesting phenomenon because the management is unique to other primary psychotic disorders, as the target of treatment is managing the fluctuations of hormones,

particularly estrogen.[1] Similarly to our patient we are presenting, there have been other cases that have shown resolution of psychotic symptoms with contraceptive medication alone, which ultimately reduces fluctuations of sex steroid hormones.[2] It has been hypothesized that estrogen is protective against psychosis and that marked reductions in estrogen as seen at the start of the menstrual cycle is what precipitates the emergence of psychotic symptoms seen in menstrual psychosis.[3] This hypothesis of the protective effect of estrogen could also be part of the explanation for later onset of psychotic disorders seen in women as opposed to earlier onset in men.[3] This hypothesis has been further illustrated in life cycle studies that have shown that women are more vulnerable to either first episode psychosis or relapse of an existing psychotic disorder during periods of acute decreases in estrogen, including the postpartum period and during menopause.[4] This interesting association with estrogen and psychotic symptoms highlights the complexity and influence of hormones on the body. Furthermore, this case presentation along with other case reports of menstrual psychosis facilitates the need for further diagnostic recognition to ensure that medication management is appropriately targeted towards abating fluctuations of sex hormones.

References:

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