



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

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Introduction

- 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

Illustration

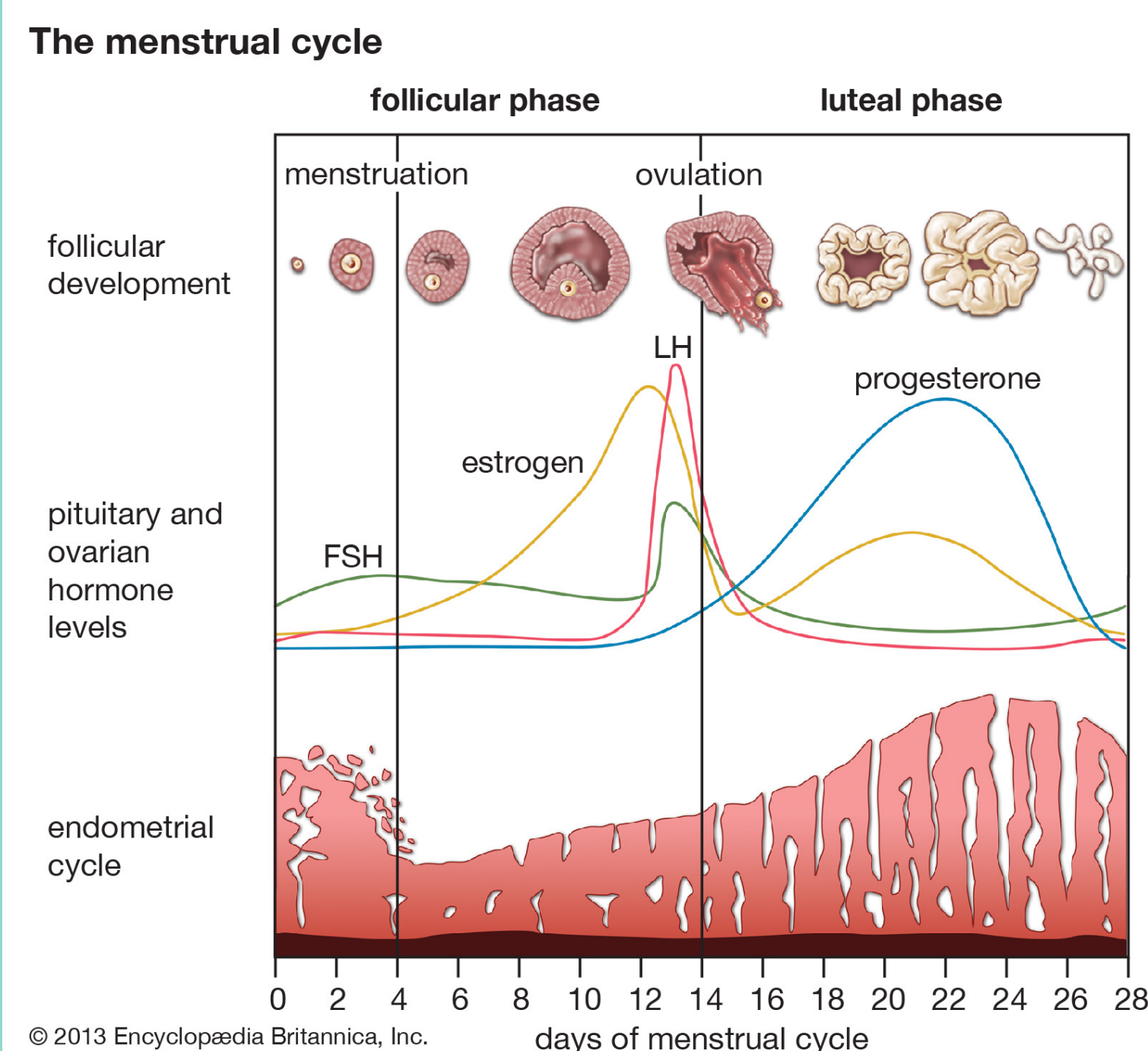


Figure 1: This representation of the menstrual cycle and coinciding fluctuations of hormones illustrates the low level of estrogen preceding and for most of the duration of menstruation.⁵

Case Presentation

HPI:

- 36 yo F with mod-to-severe intellectual disability (ID) presented after overdose (OD) on Risperidone. Pt was in a state of extreme agitation when she took an OD of her previously prescribed Risperidone. On initial presentation, pt appeared to be responding to internal stimuli, seen laughing and talking to herself.

PPH:

- Previously prescribed Risperidone due to behavioral disturbances related to her ID.
- Previous agitation/psychosis described as occurring in congruence with menstrual cycles, starting about 5 days prior to onset of menstruation and subsiding at end of cycle.
- Psychotic symptoms described as laughing/talking to herself, making gestures, and scratching/hitting herself.
- Baseline described as doing most of her ADLs with minor assistance, ability to have simple conversations with family, and the absence of psychotic symptoms.
- Previously on Depo-Provera for 2 years in which psychotic symptoms completely resolved. However, it was discontinued due to significant weight gain, with subsequent return of psychotic symptoms once again coinciding with menstruation.

Hospital course:

- Pt was prescribed an OCP to take daily to achieve amenorrhea, and Risperidone was increased. After increase in Risperidone and a short period of observation, pt's mother reported she had returned to her baseline. She was discharged with plan to follow up outpatient with a psychiatrist and an OB/GYN.

Discussion

- 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
- 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
- Like our case presentation, 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

Conclusion

- This 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.
- It could be argued that menstrual psychosis should have its place in the DSM-5, potentially as a subtype of Premenstrual dysphoric disorder.

References

1. Brockington I. (2005). Menstrual psychosis. *World psychiatry: official journal of the World Psychiatric Association (WPA)*, 4(1), 9–17.
2. Felthous AR, Robinson DB, Conroy RW. Prevention of recurrent menstrual psychosis by an oral contraceptive. *Am J Psychiatry*. 1980 Feb;137(2):245-6. doi: 10.1176/ajp.137.2.245. PMID: 6101529.
3. Reilly TJ, Sagnay de la Bastida VC, Joyce DW, Cullen AE, McGuire P. Exacerbation of Psychosis During the Perimenstrual Phase of the Menstrual Cycle: Systematic Review and Meta-analysis. *Schizophr Bull*. 2020 Jan 4;46(1):78-90. doi: 10.1093/schbul/sbz030. PMID: 31071226; PMCID: PMC6942155.
4. Kulkarni J, de Castella A, Fitzgerald PB, Gurvich CT, Bailey M, Bartholomeusz C, Burger H. Estrogen in severe mental illness: a potential new treatment approach. *Arch Gen Psychiatry*. 2008 Aug;65(8):955-60. doi: 10.1001/archpsyc.65.8.955. PMID: 18678800.
5. "Menstruation." *Encyclopædia Britannica*, Encyclopædia Britannica, Inc., <https://www.britannica.com/science/menstruation>.