

Premenstrual Dysphoric Disorder

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Key points:

- Symptoms: irritability, stress, mood swings
- Etiology: Hormonal change at the time of menstruation
- Pathology: Progesterone bind to the neurotransmitter binding site in the GABA receptor membrane & indirectly inhibit the function of GABA centrally
- Treatment: Selective serotonin reuptake inhibitors (SSRIs)

Most women of reproductive age have some physical discipline or dysphoria in weeks before menstruation. Symptoms are mild often, but it can be severe enough to substantially disturb the daily activities of women¹. There symptoms resemble those of effective disorders. Previous studies reveal that 5-8% of women have moderate to severe symptoms that are associated with slight distress or functional impairment. The etiologies show that there are some brains related changes during menstrual cycle. The symptoms include irritability, tension, depressed mood and mood swings. These symptoms are very distressing but some other changes which are somatic include breast tenderness and bloating and these are also creating problems for women.¹ The WHO intermediate classification of disease ICD includes premenstrual tension (PMT). But this description doesn't give detail of clinical diagnostic and drug labeling. Also, there is no specific criteria for the severity of syndrome.²

The symptoms for diagnosis of this disorder are following

1. Premenstrual irritability,
2. Concentration difficulty,
3. Appetite change, overeating, food cravings,
4. Decreased interest in ordinary activities,
5. Easily fatigued, having reduced energy,
6. Feeling overwhelmed or out of control,

7. Bloating, breast tenderness, weight gain, or joint/muscle pain,
8. Sleeping too much or not getting enough sleep.

These symptoms should occur in the luteal phase and must be severe enough to deteriorate daily functions (work, school, social life).³ Premenstrual syndrome symptoms are triggered by severe hormonal events after ovulation. These symptoms can start in early mid or late luteal phase. Although evidence for any hormonal abnormality is not yet established but these symptoms of premenstrual Syndrome is related to production of progesterone from the ovary. The two main neurotransmitters are related to these symptoms are GABAergic and seretogenic systems. Progesterone produced in the ovary by the corpus leuteum and some amount in the brain bind to the neurotransmitter binding site in the GABA receptor membrane which create changes in its configuration and deactivate indirectly inhibit the function of GABA centrally. By exactly similar mechanism the progesterone in some normal contraceptive also decreases the levels of serotonin.⁴

Before pharmacological treatment is considered, the history of women should be investigated for other disorders like depression, anxiety, and hypothyroidism.⁴ After established PMS we can give pharmacological treatment. Many treatments regimes have been given to PMS patient which are clinically evident these include serotonin receptor inhibitors (SRIs) which show benefit to almost 60-90% of women. Other

CNS acting drug can be given but these are not much effective.⁵

References

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