DEPRESSIVE DISORDERS

Premenstrual Dysphoric Disorder

PMDD

DSM-5-TR 625.4 | ICD-10-CM N94.3

Severe cyclical mood, cognitive, and physical symptoms confined to the luteal phase that remit within days of menses onset.

PREVALENCE	TYPICAL ONSET	SYMPTOM TIMING	COURSE
~1.8-5.8% of menstruators	Post-menarche; peaks in 30s	Luteal; remits with menses	Chronic until menopause

CLINICAL PICTURE

- Symptoms emerge in the final week before menses, peak in the last few days, and remit within a few days after bleeding begins.
- Affective lability, irritability, and interpersonal conflict dominate the picture and are usually more prominent than sadness.
- Patients describe becoming a different person, with post-menstrual remorse about luteal-phase behavior toward partners and children.
- Physical complaints include breast tenderness, bloating, joint or muscle pain, headache, and marked appetite and food craving changes.
- Functional consequences are concrete: missed work, relationship rupture, and crisis contacts that cluster predictably within the cycle.
- Suicidal ideation can be cyclical and intense, with roughly a third of patients reporting luteal-phase suicidal thoughts.

DIAGNOSTIC CRITERIA AT A GLANCE

- At least five symptoms in most cycles of the past year, present in the final week before menses and remitting within days after onset.
- At least one core affective symptom is required: marked lability, irritability or anger, depressed mood or hopelessness, or anxiety and tension.
- Additional symptoms may include reduced interest, poor concentration, low energy, appetite change, sleep change, feeling overwhelmed, and physical symptoms.
- Diagnosis requires prospective daily ratings across at least two symptomatic cycles; a retrospective report alone yields only a provisional diagnosis.
- Symptoms must cause significant distress or interference and must not simply be a premenstrual exacerbation of another psychiatric disorder.

NEUROBIOLOGY & PHYSIOLOGY

- Ovarian steroid levels are normal; the disorder reflects abnormal central sensitivity to normal luteal fluctuation in estradiol and progesterone.
- Allopregnanolone, a progesterone metabolite and GABA-A receptor modulator, produces paradoxical anxiogenic responses in susceptible individuals.
- Serotonergic transmission is destabilized by gonadal steroid shifts, which explains the rapid, luteal-only therapeutic response to SSRIs.
- GnRH agonist suppression of ovulation abolishes symptoms and steroid add-back reinstates them, establishing hormone sensitivity as causal.
- Cellular studies of the ESC/E(Z) gene complex show altered transcriptional response to sex steroids in patient-derived lymphoblastoid cell lines.
- Heritability estimates approach 30 to 50 percent, with luteal-phase imaging showing amygdala hyperreactivity and reduced prefrontal regulation.

PSYCHOLOGICAL MECHANISMS

- Cyclic predictability allows anticipatory dread, which amplifies symptom appraisal and can extend distress beyond the true luteal window.
- Interpersonal sensitivity and rejection appraisal sharpen premenstrually, converting minor slights into relationship-defining conflicts.
- Symptom tracking is itself therapeutic, restoring a sense of control and separating cyclical states from stable self-concept.
- Childhood trauma and chronic stress exposure increase risk, likely through stress-axis reactivity and heightened interpersonal sensitivity.
- Partner and family psychoeducation reduces attribution of luteal irritability to character, which lowers conflict escalation at home.

DIFFERENTIAL & COMORBIDITY

- Distinguish from premenstrual exacerbation of depression, bipolar disorder, or anxiety, in which symptoms persist through the follicular phase.
- Premenstrual syndrome is milder, lacks the required affective core symptom, and does not meet the same functional impairment threshold.
- Thyroid disease, perimenopause, anemia, and endometriosis can all mimic cyclical mood disturbance and somatic complaints.
- Comorbid major depression, anxiety disorders, and PTSD are common and should be treated concurrently rather than sequentially.
- Cyclic suicidality warrants explicit safety planning tied to cycle timing, including means restriction during high-risk luteal days.

Treatment EVIDENCE-BASED MANAGEMENT

PHARMACOLOGIC

- SSRIs are first line and may be dosed continuously or luteal-phase only: **sertraline 50-150 mg/day** or **fluoxetine 20 mg/day**.
- Onset occurs within 1 to 2 days rather than the weeks required in major depression, which permits intermittent symptom-onset dosing.
- Combined oral contraceptives containing **drospirenone** on a 24/4 regimen are FDA-approved and reduce luteal affective and physical symptoms.
- GnRH agonists with estrogen and progestin add-back are reserved for refractory cases given bone density loss and vasomotor effects.
- Calcium 1200 mg daily has modest supportive evidence, while NSAIDs and spironolactone address pain, headache, and fluid retention.

PSYCHOTHERAPY

- **CBT** adapted for PMDD reduces impairment and irritability, with gains that persist longer than medication effects after discontinuation.
- Prospective daily symptom charting across two cycles is simultaneously the diagnostic standard and the foundation of behavioral intervention.
- Interpersonal effectiveness and emotion regulation skills drawn from **DBT** target luteal conflict and impulsive behavior directly.
- Couples or family sessions reframe cyclical irritability as a treatable condition and build a shared plan for predictable high-risk days.
- Mindfulness-based approaches reduce reactivity to premenstrual physical sensations and to the affective shifts that accompany them.

ADJUNCT & SUPPORTIVE

- Use the **DRSP** (Daily Record of Severity of Problems) to collect the two cycles of prospective rating that the diagnosis requires.
- Aerobic exercise, reduced caffeine and alcohol intake, and consistent sleep timing produce modest but reproducible symptom reduction.
- Schedule demanding work, travel, and difficult interpersonal conversations outside the luteal window whenever that is feasible.
- Hysterectomy with bilateral oophorectomy is definitive but a last resort, undertaken only after confirmed GnRH agonist response.
- Coordinate care with gynecology when hormonal contraception, GnRH suppression, or surgical management is under active consideration.

CLINICAL PEARLS

- No prospective two-cycle chart, no diagnosis; retrospective recall overdiagnoses PMDD.
- SSRIs act within a day or two here, which makes luteal-only dosing viable.
- Symptoms crossing into the follicular phase mean exacerbation, not PMDD.

References

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NOTE

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