

Premenstrual syndrome treatment

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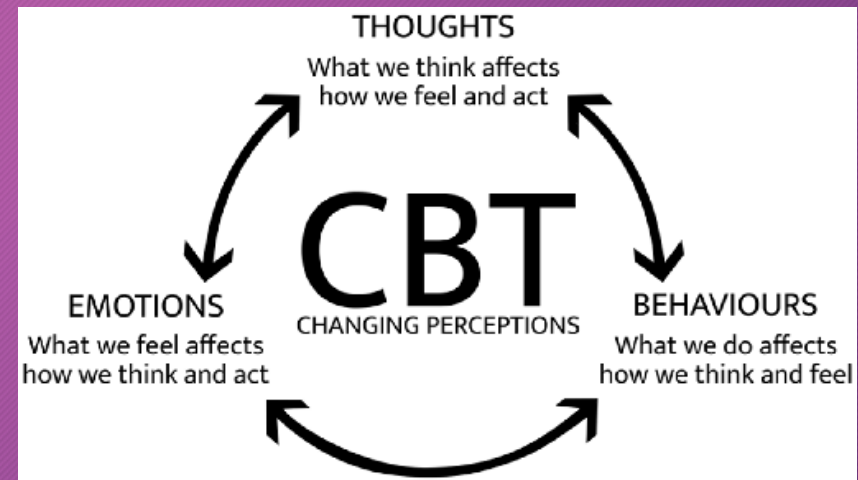


Introduction

- PMS vs PMDD (premenstrual dysphoric disorder)
- The American Psychiatric Association defines premenstrual dysphoric disorder (PMDD) as a severe form of PMS in which symptoms of anger, irritability, and internal tension are prominent.

Moderate to severe symptoms

- pharmacologic interventions
- behavioral interventions (CBT)



CBT

- Benefit of psychotherapy is that its effects are achieved through time; even when psychotherapy sessions come to an end, their effects remain. Conversely, pharmacotherapy has a very rapid effect, but it ends with the discontinuance of the drug.
- In CBT, it is assumed that individuals are not disturbed by an event itself; rather, it is the individual's perception of that incident which is harmful
- Anxiety is the most common symptom of PMS. According to the studies, group CBT is able to free target individuals from distress and confusion through planning and organizing, thus reducing anxiety
- The first step for its prevention and for the promotion of physical and mental health in these individuals is to increase their awareness by developing and spreading extensive, organized program

Pharmacologic treatment

Contraception
is considered

Oral
contraceptive

Contraception
is **not**
considered

SSRI can be
tried

Serotonergic Agents

- SSRI are effective for both PMS and PMDD
- Sertraline, citalopram, escitalopram, or fluoxetine 
- Paroxetine (associated with weight gain) 
- SSRI therapy appears to be more effective for mood symptoms than somatic symptoms
- Venlafaxine (SNRI), withdrawal symptoms that can be worse than those seen with SSRIs
- Clomipramine (TCA) more side effects (sedation, dry mouth, and weight gain)

SSRI Regimens

Continuous therapy

- Good for women with symptoms in non-premenstrual intervals
- Convenience
- Simplicity

Luteal phase therapy

- Started on day 14 of cycle
- Discontinued at the onset of menses
- Less expensive
- Fewer side effects

Symptom-onset therapy (Intermittent therapy)

- Start at the point of symptom onset
- Discontinue at first days of menses

SSRI Regimens

- Choosing the best regimen for patient
- Start dose : 10 mg citalopram (or equivalent)
- Maximum dose:
 - For continuous regimen: 40 mg citalopram (or equivalent)
 - For intermittent regimen: 30 mg citalopram (or equivalent)



SSRI Dose Equivalency

SSRI	Dose
Fluoxetine	20 mg
Paroxetine	20 mg
Citalopram	20 mg
Escitalopram	10 mg
Sertraline	50 mg
Fluvoxamine	50 mg

SSRI side effects

- Common side effects: nausea, headache, insomnia and decreased libido
- Sexual side effects
- Discontinuation symptoms (especially for venlafaxine)

Response to SSRI

- 60 to 70 percent of symptomatic women respond to an SSRI, but 30 to 40 percent of women do not respond
- Increasing the dose
- **Switch** from luteal therapy to continuous and vice versa
- No response: trial of second and then third SSRI and evaluation of other conditions
- Optimum duration: not fully understood. One year is mostly recommended.

OCP

- In women who desire contraception
- Avoidance of multiphasic formulation
- Drospirenone-containing OCPs
- 4-day free is better than 7-day free
- Start with 3 mg drospirenone (DRSP)/20 mcg ethinyl estradiol for three months

OCP

- Not enough response ➡ increase the dose to 3 mg drospirenone (DRSP)/30 mcg ethinyl estradiol
- Not enough response ➡ switch to continuous pills
- Risk of mood worsening
- Side effects: VTE

نام	استروژن	پروژسترون	نسل پروژسترون	ترکیب قرص
ال دی	0.03 میلی گرم اتینیل استرادیول	0.15 میلی گرم لئونورژسترل	نسل 2	21 تایی
اچ دی	0.05 میلی گرم اتینیل استرادیول	0.25 میلی گرم لئونورژسترل	نسل 2	21 تایی
تری فازیک	نارنجی=0.03 میلی گرم اتینیل استرادیول زرد = 0.04 میلی گرم اتینیل استرادیول سفید = 0.03 میلی گرم اتینیل استرادیول	نارنجی = 0.05 mg لئونورژسترل زرد = 0.075 mg لئونورژسترل سفید= 0.125 mg لئونورژسترل	نسل 2	21 تایی (1-6 و 7-11 و 12-21)
یاسمین، کنتراسمین، روکین، دروسپیل، دروسبلین،	0.03 میلی گرم اتینیل استرادیول	3 میلی گرم دروسپیرنون	نسل 4	21 تایی

نام	استروژن	پروژسترون	نسل پروژسترون	ترکیب قرص
دزوسپتیو، دایسینل، مارولین، دزولست	0.03 میلی گرم اتینیل استرادیول	0.15 میلی گرم دزوژسترل	نسل 3	21 تایی
یاز، روجا، دروسبلا	0.02 میلی گرم اتینیل استرادیول	3 میلی گرم دروسپیرنون	نسل 4	یاز 28 تایی، دروسبلا 24 تایی
سیپروترون کمپاند، دیان، اتیسترون، کلایرت، دافنه، ساییل	0.035 میلی گرم اتینیل استرادیول	2 میلی گرم سیپروترون	نسل 3	21 تایی
بلارا، دالیا	0.03 میلی گرم اتینیل استرادیول	2 میلی گرم کلرمدینون استات	نسل 4	21 تایی
اووسپت اف ای	0.03 میلی گرم اتینیل استرادیول	0.15 میلی گرم لونورژسترل	نسل 2	21 تایی + 7 قرص آهن 24 میلی گرم
داینوژیل آی اچ	0.03 میلی گرم اتینیل استرادیول	2 میلی گرم داینوژست	نسل 4	21 تایی

Mild symptoms

- Exercise and relaxation techniques
- Exercise may be particularly helpful for physical symptoms
- It is possible that some of the effects of either exercise or relaxation may be the result of attention and placebo effects.

EXERCISE

❑Types of exercise:

- aerobic exercise programmes
- yoga regimens ✓
- Pilates regimens
- water aerobics programmes
- stretching and resistance exercise programmes

❑RISK OF BIAS in studies

Mild symptoms

- Vitex agnus castus (chasteberry)
- More effective than placebo for PMS symptoms
- Effect on PMDD is less certain
- However, the review and meta-analysis suggests that vitex is well-tolerated and more effective than placebo for a number of PMS symptoms
- Vitex did show some benefit in one of the PMDD trials.
- The most common dosing studied is 20 to 40 mg of vitex extract





- 80-90 میلی گرم عصاره ویتکس در هر میلی لیتر قطره
- حدود 3 میلی گرم عصاره اکوبین در هر قرص

Vitamins and minerals

- Most of the studies in this field have a high risk of bias and good results in placebo arm.
- Calcium and Vitamin D:
 - Previous reports have suggested that disturbances in calcium regulation may underlie the pathophysiologic characteristics of PMS
 - If PMS is a consequence of deficiency in circulating levels of calcium and vitamin D, high dietary intakes of vitamin D and perhaps calcium may directly prevent the manifestation of PMS symptoms associated with these deficiencies.



Vitamins and minerals

- Magnesium:
- magnesium replacement therapy may be beneficial to patients with low red cell magnesium
- Small studies showed that daily magnesium supplement (200 mg) may improve fluid retention and mood.

Vitamins and minerals

- Small studies are in favor of B6 (pyridoxine) and vitamin E.
- They were effective in somatic and psychiatric symptoms.



OTHER THERAPIES

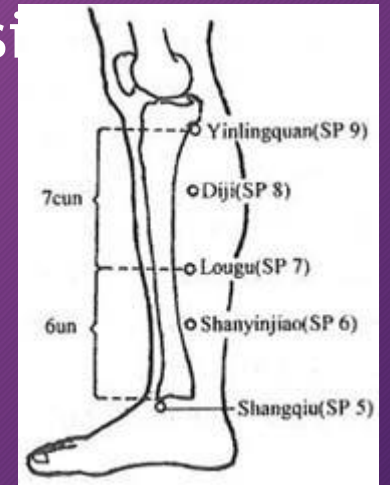
- GnRh agonists: in women with no response to SSRI or OCP
- Combination with add-back estrogen-progestin(continuous not cyclic)
- Medical oophorectomy
- Both for PMS and PMDD
- Leuproline 3.75 mg monthly

OTHER THERAPIES

❑ Acupuncture

- Data are limited
- Systematic review of three trials of acupuncture versus sham acupuncture suggests that it may improve both mood and physical symptoms
- sp6 lr3 and rn4 acupuncture were mostly used

❑ Surgery : as the last option



- Thanks for your attention!!!