



PREMENSTRUAL SYNDROME- AN ENIGMA TO BEFRIEND:

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ABSTRACT

Introduction: Premenstrual syndrome is a problem experienced by many females of menstrual age group. This menace pesters many women incapacitating some of them to the extent of inability to perform daily activities during the episodes. A better understanding of the prevalence, symptomatology, pathophysiology and treatment will help clinicians in helping women suffering from premenstrual syndrome in a big way. **Materials & Methods:** This is a retrospective study done by collecting and analysing data collected from patients attending out patient departments of various hospitals in and around ELURU, ANDHRA PRADESH. The data was collected using a questionnaire prepared to collect the details like age, premenstrual symptoms experienced by the patients, their lifestyle habits, treatment they have taken or are taking at present etc.,

KEYWORDS: Premenstrual syndrome, somatic symptoms, affective symptoms.

INTRODUCTION

Definition

-According to ACOG (American college of obstetrics and gynaecology) premenstrual syndrome is a clinical condition characterized by the cyclic presence of emotional and physical symptoms unrelated to any organic disease that appear during the five days before menses in each of the three prior menstrual cycles and disappear within four days of onset of menses without recurrence until at least cycle day 13.^[1]

-Premenstrual syndrome is a cyclic recurrence of distressing somatic and affective symptoms in luteal phase of menstrual cycle and in few days (1-3 days) of next follicular phase.^[2]

Prevalence

The frequency of premenstrual syndrome related symptoms is high that is 80-90%^[3,4] and 5% of them have so severe symptoms that interfere with personal and social relationships. Premenstrual syndrome is a serious problem which requires a better understanding by the clinicians. There are still some practitioners who are unsympathetic towards the affected women.^[5]

-According to swiss study, prevalence of premenstrual syndrome in adolescents is 10%.^[6]

-According to Japanese study, the prevalence of premenstrual syndrome is 53%.^[7]

-According to study in united states population, the prevalence of premenstrual syndrome is 8%.^[8]

Incidence

-Sternfeld et al (2002) reported that majority of women who seek medical help for premenstrual syndrome are around 30 years of age.

-With increasing age; the symptoms of premenstrual syndrome decrease.^[9]

Risk factors

-Excess alcohol and caffeine intake increases the risk of premenstrual syndrome.

-Any increase in the stress maybe physical or mental stress increases the risk of premenstrual syndrome.^[10,11]

-Patients who suffer with postpartum depression are likely to have greater risk for premenstrual syndrome.^[12]

-Smoking excessively causes the increase of premenstrual syndrome.^[13]

-Family history of premenstrual syndrome also has a significant role as a risk factor for premenstrual syndrome.

-Early menarche can also increase the risk of premenstrual syndrome, with increasing age risk of premenstrual syndrome decreases.

-Nulliparity is a risk factor for premenstrual syndrome.

-Premenstrual syndrome is more common with history of anxiety disorders. Premenstrual syndrome is more often in women with age late 20's and early 40's with single child.

Etiology

-Progesterone excess and estrogen excess in luteal phase causes premenstrual syndrome.

- Increased carbohydrate intolerance in luteal phase can also cause premenstrual syndrome.
- Pyridoxine (vitamin B6) deficiency can cause premenstrual syndrome.
- Calcium deficiency can cause premenstrual syndrome.
- Fluctuations in opiate concentrations thereby affecting endorphin levels can lead to premenstrual syndrome.
- Low levels of serotonin causes premenstrual syndrome, but in circulation sex hormone levels are typically normal in premenstrual syndrome.^[14]
- Disrupted homeostasis and impaired adaptation is also an important underlying condition.^[15]

Symptoms

More than 200 different symptoms are associated with premenstrual syndrome. The symptoms may vary from person to person and cycle to cycle.^[17]

Symptoms of premenstrual syndrome are of two types:

a) Physical

b) Psychological / Behavioural

a) Physical symptoms are- Weight gain

- Bloating

- Breast tenderness

- Headache

- Fatigue

- Lower backpain

- Cyclical acne

- Joint and muscle pain.

b) Psychological / Behavioural symptoms are: -

- Depression

- Anxiety

- Feeling out of control

- Mood swings

- Crying spells

- Anger

- Difficulty to concentrate

- Interpersonal conflicts

- Food cravings^[16]

- Poor sleep.^[21]

- Menstrual psychosis can occur during pre menstruation / menstruation; it includes psychosis, mutism, stupor, delusion, maniac state.^[18]

- Premenstrual dysphoric disorder is the severe form of premenstrual syndrome affecting 3-8% of menstruating women.^[19]

- Premenstrual voice syndrome / Premenstrual dysphoria / Laryngopathia premenstrualis is rarely seen. It is characterized by vocal fatigue, loss of power, faint hoarseness, loss or decrease in range and agility.^[20]

- Reed et al 2008 demonstrated that women with premenstrual syndrome have food cravings with items high in fat during luteal phase.^[22]

Diagnosis

There are no specific laboratory tests or unique physical findings to verify the diagnosis premenstrual syndrome.

Diagnostic criteria

ACOG(American college of obstetrics and gynaecology) defined diagnostic criteria for premenstrual syndrome based on Work of Mortola describes that premenstrual syndrome can be diagnosed by atleast one of the following affective and somatic symptoms during five days before menses in each of the three previous cycles.

Affective symptoms: Depression, Anger outbursts, irritability, anxiety, confusion, social withdrawal.

Somatic symptoms: Breast tenderness, abdominal bloating, headache, swelling of extremities.

-A variety of instruments are developed for evaluating premenstrual syndrome. These include

1. COPE (The Calendar Of Premenstrual Experience).

2. PRISM (The Prospective Record Of the Impact and Severity of Menstruation).

3. VAS (Visual Analogue Scales).^[23]

-To qualify as premenstrual syndrome the symptoms intensity must increase atleast to 30% in six days prior to menstruation.

-A new classification from ISPM(DInternational Society for Premenstrual Disorders) was given which provides accurate diagnosis and effective management.

Treatment

-In a case of suspected premenstrual syndrome, a premenstrual symptom diary for several consecutive months is maintained so that cycle to cycle variability can be examined.

Name: _____ Month: _____

Each day, rate the severity of your symptoms: 1 = no symptoms; 2 = mild symptoms; 3 = moderate symptoms; 4 = severe symptoms.

[illegible]

-medical treatment with diuretics (spironolactone) or NSAIDS or Oral contraceptive pills. Oral contraceptive

pills reduce only physical symptoms by making the cycle anovulatory but donot reduce emotional symptoms.^[27]

2. When mood symptoms predominate and significantly impair function:

-SSRI's (Selective Serotonin Reuptake Inhibitors) are the treatment of choice.

-These include:

Fluoxetine 20mg.^[25]

Sertraline 50mg.^[32,33]

Intermittent Citalopram.^[34]

-Side effects of SSRI'S – insomnia, drowsiness, fatigue, nausea, nervousness, headache, mild tremor, sexual dysfunction.

3. No response for 1. and 2.:

-GnRH agonists (Gonadotropin Releasing Hormone agonists) are given.^[32] These are given only with a gynaecologist consultation.

-Side effects of GnRH agonists- These GnRH agonists have many side effects due to their hypoestrogenic effects that include atrophic vaginitis, urinary tract symptoms, decrease in skin collagen. If GnRH agonists are used more than 6months they cause osteoporosis. So in that case, add back therapy with estrogen / progesterone is given. But add back therapy can also cause recurrence of premenstrual syndrome.

Other types of treatment for premenstrual syndrome are- Traditional chinese medicine (TCM) is used in the treatment of various gynaecological disorders like premenstrual syndrome.^[28]

Mindfulness intervention was developed to reduce symptom severity.^[29]

Placebo- In 25-50% cases there is high response rate.^[30,31]

Objective

My objective is to make people understand the symptoms and seriousness of the premenstrual syndrome.

Methods

A self assessed questionnaire is created for investigating and detecting premenstrual syndrome.

Aim of the questionnaire is:

- To find how aware are you with premenstrual syndrome and its treatment.
- To increase awareness in premenstrual syndrome and its treatment.

Questionnaire

1. Name of the patient?

2. Age of the patient?

- 10-20 years
- 20-30 years
- 30-40 years
- 40-50 years

e) more than 50 years.

3. Occupation?

4. Height and Weight?

5. General health

a) Healthy

b) Suffering from acute illness

c) Suffering from chronic illness

6. Activity per week?

a) Sedentary

b) Moderate

c) Severe

7. Menstrual cycle?

a) Regular

b) Irregular

8. Symptoms?

a) Breast tenderness

b) Acne

c) Abdominal discomfort and bloating

d) Increased sweating

e) Food cravings

f) Fatigue

g) Headache

h) Disturbed sleep / Insomnia

i) Depressed mood

j) Angry outbursts

k) Anxiety, tension

l) Mood swings

m) Social withdrawl

n) All the above

9. when symptoms occur?

a) 7-14 days before menstruation

b) 1-7 days before menstruation

c) Right before or during menstruation

10. How long are you suffering from?

11. Family history?

RESULTS AND DISCUSSION

300 females in their menstrual age group were questioned from a locality Shantinagar, Eluru, Andhra Pradesh.

Different observations that have been made are as follows:

1. Incidence in various age groups:

10-20years – 45%

20-30years – 18%

30-40years – 13%

40-50years – 24%

Maximum incidence of premenstrual syndrome is seen in 10-20 years of age group followed by 40-50 years age group.

2. Activity per week: Sedentary – 55%

Moderate – 30%

Severe – 15%

Maximum incidence of premenstrual syndrome is seen in females who have a sedentary lifestyle.

3. Regularity of Menstrual cycle: As women with regular menstrual cycles go through more number of cycles when compared to women with irregular menstrual

cycles they experience more episodes of pre menstrual syndrome.

4. Symptoms: Breast tenderness – 70%

Acne – 65%

Abdominal discomfort and bloating – 69%

Increased sweating – 38%

Food cravings – 28%

Fatigue – 30%

Headache – 58%

Disturbed sleep / insomnia – 45%

Depressed mood – 40%

Anger outbursts – 62%

Anxiety and tension – 47%

Mood swings – 54%

Social withdrawal – 32 %

5. When, the symptoms are appreciated: 7-14 days before menstruation – 10%

1-7 days before menstruation – 70%

Right before or during menstruation – 20%

Majority of the patients experience symptoms 1-7 days before menstruation.

CONCLUSION

Premenstrual syndrome is by and large; a stressful period experienced by many women of menstrual age group, proposed to be resulting from changes in the hormonal milieu during the luteal phase. Clinicians should have a keen eye to look out for premenstrual syndrome in their patients and a better understanding of different aspects like diet, exercise, correction of comorbidities, different treatment options to help the distressed patients to the best extent.

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