



**Dysmenorrhea , And
Premenstrual syndrome
(PMS)**

Dysmenorrhea, or painful menstruation, is one of the most common gynecologic problems.

For clinical purposes, dysmenorrhea is divided into two broad categories:

primary and secondary

**Primary dysmenorrhea (PD) or called
spasmodic dysmenorrhea**

Refers to the presence of recurrent, cramps, lower abdominal pain that occurs during menses in the absence of demonstrable pelvic disease

Risk factors :-

- 1-body mass index less than 20.
- 2-menarche before age 12.
- 3-longer cycles/duration of bleeding,
- 4- irregular or heavy menstrual flow.
- 5- premenstrual symptoms.
- 6-history of sexual assault,
- 7-heavy smoking

Pathogenesis :-

- 1- Abnormal uterine activity**
- 2- Hormonal factors**
- 3- Psychological element**

Clinical manifestations :-

PD only occurs during ovulatory cycles. The pain characteristically begins just before or with the onset of menstrual bleeding and gradually diminishes over 12 to 72 hours. The cramps are intermittently intense and usually confined to the lower abdomen (suprapubic). Pain is strongest in the midline, although in some women back and thigh pain may also be severe. Patients will often illustrate the pain by opening and closing their fist, closely mimicking the underlying uterine activity. Nausea, diarrhea, fatigue, headache, and a general sense of malaise accompany the pain.

Approach to the patient :-

History :-

Physical examination :-

Laboratory tests and imaging :

1-Sonography

2- CA 125

3- Test for chlamydia

Treatment :-

A -Nonpharmacological interventions:-

- 1- Heat
- 2-Dietary, vitamin, and herbal treatments
- 3-Exercise

B-Pharmacologic interventions

- 1- Nonsteroidal antiinflammatory agents
- 2-Hormonal contraceptives
- 3-Tocolytics

C- Complementary or alternative medicine

D- Surgical interruption of pelvic nerve pathways

E- Other

Secondary dysmenorrhea :-

is the occurrence of painful menstruation in the presence of a pelvic pathology, such as endometriosis, adenomyosis, uterine leiomyomata, or chronic pelvic inflammatory disease .

Presentation :-

The onset of pain is often 1-2 weeks prior to menstruation, and continues for few days after cessation of bleeding . The pain is more severe prior to menses.

Pathogenesis :- The mechanism is also PGf2 alpha and myomaterial contractions due to mass. adhesion, or obstruction to the menstrual flow.

Major causes of secondary dysmenorrhea

Gynecological disorders:-

- 1-Endometriosis.**
- 2-Adenomyosis.**
- 3-Uterine leiomyomata**
- 4- Uterine polyps.**
- 5- Ovarian cysts.**
- 6-Pelvic inflammatory disease.**
- 7- Pelvic adhesions.**
- 8-Congenital obstructive müllerian malformations.**
- 9-Cervical stenosis .**
- 10- IUCD.**

Non gynaecological disorders:-

1. Inflammatory bowel disease.
2. Irritable bowel syndrome.
3. Psychogenic disorders.

Diagnosis :-

By history, physical examination , and investigations like pelvic U\S , laparoscopy , hystrosalpingiography , hysteroscopy, and microbiological cultures from the cervix and pelvic cavity .

Treatment of Secondary dysmenorrhea :-

- 1-Identify the underlying cause and treat it .
- 2-Use supportive treatment , analgesia , or hormonal treatment in a similar manner to that of primary dysmenorrhea.
- 3-GnRH analogue (in cases of endometriosis).
- 4-Surgical options to deal with the underlying pathology .
- 5-Laparoscopical laser or electrocautery division of the uterosacral nerve .
- 6-Hysterectomy and bilateral salpingo-oophorectomy (with hormonal replacement) and this is done when she has complete her family.

The premenstrual syndrome (PMS)

is characterized by the presence of both physical and behavioral symptoms that occur repetitively in the second half of the menstrual cycle and interfere with some aspects of the woman's life. The American Psychiatric Association DSM-IV defines premenstrual dysphoric disorder (PMDD) as a severe form of PMS in which symptoms of anger, irritability, and internal tension are prominent .

Pathogenesis :-

1-Ovarian steroids

2-Neurotransmitters

3-Vitamins and minerals

4-Psychosocial factors and stress

Symptoms of premenstrual syndrome

Broad classification of symptoms :-

somatic.

Behavioral.

Psychological.

1-somatic symptoms :-.

*Fatigue

*Pain: headache , backache , cramps.

*Autonomic reaction: dizziness , hot flashes, faintness, cold sweating ,nausea, vomiting, and palpitation.

*Water retention (cause edema): bloating , breast tenderness , weight gain. Skin disorders (edema , acne).

2- Behavioral symptoms :-

* Mood changes: avoid social communication, lowered work performance, food cravings, stay home, insomnia

* Poor concentration: forgetfulness, confusion, increase incidence of accidents, lowered judgment.

3-Psycological symptoms :-

* Negative effect: anxiety/tension, depression, crying easily, irritability, restlessness.

Diagnosis o premenstrual syndrome



A-Diagnostic criteria :-

- 1- At least 5 of the above specific symptoms should be present , and they should impair some facet of the woman's life .
- 2- Cyclicity of symptoms must be confirmed by menstrual calendar (symptoms should occur in the luteal phase and remitting after the onset of menstrual flow.
- 3- Increase the severity of symptoms with time.
- 4- Symptoms should be present in 3 consecutive cycles.
- 5- The absence of hormone or drug ingestion and the exclusion of other diagnoses like psychiatric disorders

B-Gonadotrophin analogue test:-

GnRH analogue test may be of benefit in clarifying the diagnosis

Treatment of premenstrual syndrome

There are 3 major modalities of treatment in PMS:-

- I- Non pharmacological treatment.**
- II- pharmacological treatment.**
- III- Surgical treatment.**

I- Non pharmacological treatment

1- **General measures** including healthy life style, regular exercise and relaxation techniques

2- **Essential fatty acids**: evening primrose oil which contains polyunsaturated fatty acids.

3- **Vitamins and minerals**:

II- pharmacological treatment -

1- **Diuretics**: indicated for women with water retention (Spironolactone 100 mg\ day)

2- **Selective serotonin reuptake inhibitors (SSRIs)** like fluoxetine, paroxetine, citalopram, and antidepressant like alprazolam.

Fluoxetine : 20-60 mg\day for 2-3 months, or intermittently for 7-14 days in luteal phase to minimize side effects (like loss of libido, fatigue, GIT disturbance).

Venlafaxine, a drug that selectively inhibits the reuptake of both serotonin and norepinephrine, is also more effective (50 to 200 mg/day) than placebo.

Alprazolam = Benzodiazepine(anxiolytic) 0.25 mg

3- Hormonal treatment: For ovulation suppression.

A- Estrogen

B- Oral contraceptives

C-GnRH agonist

D- Danazol

>

III- Surgical treatment

indication of bilateral oophorectomy, and hysterectomy :-

- 1-Failure of all other treatment options (i.e surgery is the last choice).
- 2-Unbearable side effects.
- 3-Coexisting pathology in the uterus or the ovary.

The surgery followed by long term hormonal replacement therapy (HRT).

THANK YOU