

Menstrual Disorders

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Menstruation, mensuration, moon, monthly, menses, measure and so on, are all rooted in *meno*, *mensus*, *mene*, *mensura*, meaning moon/month. Menstruation, called *maasik* in vernacular, is the uterine rhapsody with the lunar cycles, a sort of truly bloody lunacy that proclaims the presence of the reproductive capacity of the female of the human species. The red-flow at the hind-end gets ceremonially and traditionally made public by a red dot on the forehead, but more so, by a sindoor-streak in the hair line on the woman's scalp. The other synonyms are MC (Monthly Cycle), Period, and in conservative home, a *noli me tangere*, or touch-me-not or the woman in period. A wag has gone to define menstruation as "Periodic Bloodshed-in-Thighland." In a way, menstruability measures the fecundability of a woman.

The dis-ease rooted in menstrual disorders fails to proclaim the far more common, silent, order that governs the poly-hormonal cycles in a female, starting with a bang at the menarche, and petering away to a cessation at the so-called menopause. The hormones, as it were, till the uterine every time, to render it fresh for accepting the conceptus. The orchestration is supreme; the details meager. The major bonanza is to the industry that thrives on making sanitary-pads and tampons. Since many a religion sees this innocent uterine activity as a nuisance-to-be-looked-down-upon, many a gynec visit is to

prepone/postpone menstrual showdown to suit either some occasion or the nuptial night.

Liberation from the menstrual hassle arrives with menopause, which to some proclaims a message – "Men – o – pause." The last is a message suitable to both the sexes for it allows unbridled sexual activity *sans* the bother of contraception, or the fear of pregnancy. Menopause, heralding the end of feminine reproductivity is the most formidable antithesis to Darwinian dogma of fitness to survive being dependent on reproductive capacity, for the postmenopausal infertile woman outlives the fecund male by at least a decade.

The commonest menstrual disorder is dys(painful)menorrhoea, that the young girls, and sterile women are prone to. Analgesics work, but there is nothing to beat an orgasm (easily self-obtained) that relieves the pelvic congestion, heaviness and pain in a jiffy. The others are understandably – less/more/irregular. These get lumped as DUB, or Dysfunctional Uterine Bleeding. The solutions are aplenty, precisely because there is no one definitive solution to DUB. Some of the DUBs are mere variants of the normally-distributed quanta of bleeding and the duration of the menstrual cycle. Most women can get over DUB, without much physicianly intervention. Sometimes order-n-disorder lies in the eyes of the gynaec beholder.



Tourist: Whose skeleton is that?

Sardar: An old king's skeleton.

Tourist: Who's that smaller skeleton next to it?

Sardar: That was same king's skeleton when he was a child.

*I must thanks NJH member
Dr Anuradha Chavan, for this
series of jokes...Ed*



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ABSTRACT: We start with this very informative and an apt article on the theme of our issue. It sheds light right from the definition of the menstruation that it is the cyclical shedding of the inner lining of the uterus....the duration... the physiology... 3 of the commonest menstrual disorders are dealt in depth i.e. Dysfunctional Uterine Bleeding, Pre Menstrual Syndrome and Poly Cystic Ovarian Syndrome/ Disease (PCOS/ PCOD... the following articles) with a light on not only the sign and symptoms, diagnosis, treatment etc but also the newer surgical modalities.



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Menstruation is the cyclical shedding of the inner lining of the uterus that manifests as periodic bleeding from the vagina occurring throughout a woman's reproductive life. First menstruation for a girl (menarche) signals the onset of her reproductive life that usually ends with menopause (cessation of the cycles).

Duration of normal menstruation

A menstrual period generally lasts from three to seven (4-5) days. An average of about 100 ml of blood is lost in each cycle. Menstruation also ceases during pregnancy and often during lactation.

During the first years of menstruation, it may be irregular, but most women eventually establish a regular pattern. It is common for intervals to be as brief as 21 days or as long as 45. Some women never become entirely regular, but this does not affect their health and fertility. Irregularity is also common in the older woman just before menopause.

PHYSIOLOGY OF MENSTRUATION

The uterine wall is made up of two layers, a muscular layer - myometrium (comprises almost 99% of the uterine wall) and the endometrium - inner thin layer of cells, to which the foetus gets attached during pregnancy. Every month the endometrium has to be prepared to accept the embryo and when no pregnancy occurs, en-

dometrium is shed as menstrual flow.

Menstruation cycle is result of a series of hormonal fluctuations. In order to understand what exactly happens, let's understand the hormonal changes. The hypothalamus controls all the hormones of the body. In this case hypothalamus releases a hormone-gonadotropin-releasing hormone → acts on the pituitary gland → to release hormones acting on the thyroid gland → hormones produced by the thyroid gland ultimately act on the ovary to produce oestrogen and progesterone - the female sex hormones.

Without going into intricacies, let us remember that there is more of oestrogen in the first half of the cycle whereas there is more of progesterone in the latter half. For better understanding changes occurring in the uterus are divided into three phases. The day when bleeding starts is counted as day 1. In a 28-day cycle the changes are on the basis of changes that occur in the ovaries

1. Follicular phase or phase before ovulation.
2. Ovulatory phase or the phase of ovulation
3. Postovulatory (Luteal) phase or the phase after ovulation.

On the basis of changes that take place in the linings of the uterus

1. Proliferative phase.
2. Ovulatory phase.

3. Secretory phase.
4. Menstrual phase.

The time interval between ovulation and the onset of menstruation is constantly close to 14 days for all women (normal range is 12-17 days). The mechanism of menstruation is controlled by hormones

1. Oestrogen
2. Progesterone
3. FSH
4. LH

It is also affected by

1. Other severe medical illness; infections etc
2. Ailments of genital tract
3. Emotions
4. Drugs

3 OF THE COMMONEST MENSTRUAL DISORDERS ARE:

- Dysfunctional Uterine Bleeding
- Pre menstrual Syndrome
- Poly Cystic Ovarian Syndrome/Disease (PCOS/PCOD)

DYSFUNCTIONAL UTERINE BLEEDING (DUB)

Normal menstrual flow, 3-5/ 28-30. Any vaginal bleeding that is not related to a woman's normal menstrual pattern is DUB; any abnormal uterine bleeding for which no organic cause can be demonstrated is DUB. It usually occurs due to overgrowth of endometrium caused by estrogen without adequate progesterone to stabilize growth. This is commonly seen in Anovulation is common in teenagers and women in late 30s to late 40s. DUB affects adolescent girls & premenopausal women more than others. Those with indiscriminate use of OCPs to postpone, prepone menstruation are more at risk.

COMMON PROBLEMS

1. Menorrhagia - Cyclical bleeding at normal intervals which is excessive in amount or duration. eg 6/28 or 8/28. It is usually caused by conditions affecting uterus and its vascular apparatus rather than any ovarian disturbance.
2. Polymenorrhoea - Cyclical bleeding which is normal in amount but occurs too frequently eg 4/21. It is usually because of disease or functional disturbance of the ovary. If inter-

menstrual period is < 21, most likely Anovular

3. Polymenorrhagia - Cyclical bleeding which is both excessive and too frequent eg 8/21. It usually indicates a disturbance in both ovary and uterus eg widespread inflammation of pelvis causing pelvic congestion
4. Metrorrhagia - Bleeding of any amount, which is acyclical and which occurs continuously or regularly. It usually is because of a surface lesion of genital tract eg - polyps or malignant growths with ulceration. This bleeding is also a feature of abnormal pregnancy states like abortions, ectopic pregnancy etc.

SIGNS & SYMPTOMS

- Prolonged, irregular or painful bleeding per vaginum.
- Symptoms of blood loss eg malaise, dyspnoea of exertion
- Symptoms of pathology, if any.
- DUB may or may not be preceded by a period of amenorrhoea.

CAUSES

It is important to rule out ALL organic causes of abnormal bleeding before a diagnosis of DUB is made.

CAUSES TO RULE OUT

1. PREGNANCY STATES:
 - i. Implantation Haemorrhage
 - ii. Abortion
 - iii. Hydatidiform or Vesicular Mole
 - iv. Ectopic Gestation
2. INFECTIONS:
 - i. Pelvic Inflammatory Disease
 - ii. Tuberculous Endometritis
 - iii. Senile Endometritis
3. ENDOMETRIOSIS – severe involving the ovary
4. ADENOMYOSIS – involving the myometrium
5. TUMOURS OR NEOPLASMS:
 - i. Ovarian (*Note: ovarian tumors usually do not cause menstrual irregularities in early stages unless they are estrogen-producing tumors or grow large in size*)

- ii. Cervical
 - a Cervical polyps
 - b Ca cervix
- 6. FOREIGN BODIES
 - i. IUDS retained for long
- 7. ENDOCRINE DISORDERS
 - i. Hypothyroidism
 - ii. Cirrhosis of liver
 - iii. Hyperprolactinaemia with or without galactorrhoea
- 8. PSYCHOLOGICAL UPSETS
- 9. MISCELLANEOUS
 - i. Systemic disease
 - ii. Coagulation disorders (rare causes)

DIAGNOSIS

Always first confirm that bleeding is from genital tract and not per-rectal or urethral bleeding.

Below the age of 20 years the disturbance is more likely to be functional ie a DUB with a tendency to spontaneous cure.

In the active reproductive age [20-40 years] always rule out a pregnancy first.

In the premenopausal age group, after 40 years, functional disorders, DUB is common but the possibility of growth, benign or malignant must first be excluded.

After menopause, a local organic cause usually malignancies should first be suspected

and ruled out

INVESTIGATIONS

- o ROUTINE: Must include a CBC to determine the Hb level, MCHC, platelet count and BT/CT/PT.
- o ULTRASONOGRAPHY OF PELVIS: Details of ovaries, uterine size, endometrial thickness and regularity, fibroids, presence or absence of pregnancy, if suspected.
- o CERVICAL CYTOLOGY OR PAP SMEAR – Especially in erosions that bleed on touch.
- o D & C – Especially in elderly patients where the USG shows a thickened or irregular endometrium to establish a diagnosis. Material must be sent for histopathology.
- o A diagnostic D & C must be done in all patients with abnormal uterine bleeding before a hysterectomy is advised.
- o LAPAROSCOPY – done only if no diagnosis is reached with above investigations and if endometriosis or PID is clinically suspected.

MANAGEMENT

- o Always consider treating the cause, if found
- o Newer surgical modalities
 - o Endometrial ablation - Using a resectoscope with hysteroscope
 - o LASER or electro cautery
 - o Balloon

Pre Menstrual Syndrome

ABSTRACT: While taking homoeopathic history we all have observed that almost every female gives at least one PMS symptom. We, in fact ask it in great details because it helps us to decide our constitutional...but it is time to know the Long Term Effects, how to diagnose so as to label it PMS, symptoms of other conditions which can mimic PMS...to document it and not blindly treat it with drugs, but also think of involving lifestyle or dietary changes along with the treatment.

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Most women feel physical or mood changes during the days before menstruation. When these

changes affect a woman's normal life, they are known as premenstrual syndrome (PMS). PMS



can affect menstruating women of all ages and socio economic backgrounds. PMS is a "bio-psycho-social" phenomenon with a complex etiology. Certain physical and psychological symptoms recur regularly at the same phase of each menstrual cycle. PMS symptoms begin after ovulation, often intensifying as menstruation approaches. Symptoms cease with the onset of menstruation. Every woman with PMS suffers a different set of symptoms. Symptoms and their intensity vary from woman to woman, and from month to month, making each PMS sufferer unique.

Around 90 % women get advance warning of an approaching period because of physical and/or psychological changes before their period begins. For most women the symptoms are mild, but a small proportion finds their symptoms so severe they dread this time of the month. The terms 'mild' and 'severe' in respect of PMS are arbitrary, but relate to the extent of disruption to patient's home and work life that's attributable to the monthly cycle. About 1/3 of women say PMS significantly affects their life, with 5 to 10 % classifying their PMS as severe.

SYMPTOMS OF PMS

There are more than 100 recognized symptoms that may be due to PMS. Fortunately, most women experience only a handful of problems. The most common symptoms are ...

- Psychological
 - Irritability.
 - Mood swings.
 - Losing temper easily.
 - Loss of confidence
 - Loss of motivation.
 - Crying for no particular reason.
 - Aggression.
 - Poor concentration.
 - Tiredness
 - Anxiety / Depression
- Physical
 - Breast tenderness.
 - Abdominal swelling or bloating.
 - Increased appetite and Weight gain.

- Swollen ankles.
- Headaches and possibly migraine.
- Dizziness and Clumsiness
- Constipation
- Muscle/Joint pain

CAUSES OF PMS

PMS in most women is brought on by a combination of diet, stress and deficiency of minerals and vitamin. Increased use of chemicals, fertilizers and pesticides, has robbed the soil of minerals and vitamins. Modern food processing further refines and mills out necessary vitamins and minerals.

Modern-day women, with increased demands on their time, negative changes in their diet and nutrition, under increasing stress and unable to exercise properly, are struggling to balance their lives. The harsh reality → of constant physical and emotional wear and tear.

With the speed of daily life getting ever faster and increasing vitamin and mineral deficiencies in our diet, PMS in all women, esp working mothers, will only increase, with number of symptoms and severity increasing.

PATHOPHYSIOLOGY

Older theories about the causes of PMS include an estrogen excess, estrogen withdrawal, progesterone deficiency, pyridoxine (vitamin B-6) deficiency (the process of refining flour eliminates the B vitamins altogether. B6 is destroyed in cooking, canning and packaging; pregnancy and contraceptive pills also cause a B6 deficiency), alteration of glucose metabolism (cause palpitation, fainting, headache, fatigue) and fluid-electrolyte imbalances.

Current research provides some evidence supporting the following etiologies:

* Serotonin deficiency is postulated because patients who are most affected by PMS have differences in serotonin levels. The symptoms of PMS can respond to selective serotonin reuptake inhibitors (SSRIs), which are medications that increase the amount of circulating serotonin.

* Magnesium and calcium deficiencies are postulated as nutritional causes of PMS. Stud-

ies evaluating supplementation show improvement in physical and emotional symptoms.

* Women with PMS often have an exaggerated response to normal hormonal changes. Although their levels of estrogen and progesterone may be similar to women without PMS, rapid shifts in levels of these hormones promote pronounced emotional and physical responses.

* Excess fluid swells the nerve tissue and membranes surrounding the brain. This leads to torturous migraine headaches often described as "vise-like" headache.

* Magnesium deficiency causes a very specific depletion of brain dopamine and B6 plays a synergistic role in mineral utilization across cell membranes, increasing the effectiveness of magnesium.

Binge eating and subsequent weight gain is not a matter of self control. It's PMS.

LONG TERM EFFECTS

Weight gain of 2-3 kgs is common, which is difficult for any woman to lose during the symptom free period of her cycle. Magnesium deficiency is also the primary cause of dysmenorrhea, which usually start a day or two prior to or at the beginning of menstruation. Increasing magnesium intake by a minimum of 300 to 400 mg. daily is the only way to break the negative self-perpetuating cycle that causes the "sweet tooth" which leads to weight gain. Long term weight reduction and control is much more likely to be effected by the management of PMS than dieting. Vitamin B6 reduces blood estrogen and increases progesterone. Therefore, B6 deficiency will cause decreased liver metabolism of estrogen, causing an excess of estrogen resulting in "estrogen dominance."

DIAGNOSIS

To diagnose PMS, we must confirm a pattern of symptoms.

A WOMAN'S SYMPTOMS MUST:

- Be present at least five days before her period for three consecutive menstrual cycles
- End within four days after her period starts

- Interfere with some of her normal activities
- True positive method of diagnosis → recording the symptoms and the dates of cycle on a chart for a 3-month period.
- Symptoms scattered about the chart with no discernable pattern indicate that factors other than PMS are affecting the woman. Symptoms clustered before menstruation indicate PMS, however, most women know intuitively when they have PMS.

DIFFERENTIAL DIAGNOSIS

Symptoms of other conditions can mimic PMS. *Premenstrual Dysphoric Disorder (PMDD)* is a severe type of PMS. PMDD affects a small percentage of women with PMS.

MANAGEMENT

SELF HELP - Lifestyle and dietary changes help a great deal in relieving some PMS symptoms.

1. *Aerobic Exercise* - For many women, aerobic exercise lessens PMS symptoms.
2. *Relaxation* - Finding ways to relax and reduce stress can help women who have PMS.
3. *Dietary Changes* - Simple changes in the diet may help relieve the symptoms of PMS.
4. *Dietary Supplements* - Dietary supplements help lessen the symptoms of PMS in many women, eg Vit B6.
5. *Talk with others*-Talking with others about what one is going through, can help. Sharing ones feelings may even help the family to be supportive.

MEDICATIONS - Women with severe PMS may not feel relief with lifestyle or dietary changes alone. If these changes don't reduce symptoms, medicines are indicated.

TO CONCLUDE, many women with PMS find relief with exercise and lifestyle changes. Others may find dietary supplements or medicines to be helpful. Every woman with PMS needs different combinations to find relief. Simple changes may help improve the well-being, all month long.

(And Homoeopathy is the single most important therapy for PMS.... tried and tested as the current issue will prove beyond doubt -Editor)



PMS Chart from www.usteves.com - Eve's HealthLine

Key: Mild - (+); Moderate (++); Severe (+++) (See Homoeopathically modified chart on pg 27 & 33)

Symptoms	Before Treatment						After Treatment					
	1	2	3	4	5	6	1	2	3	4	5	6
Anger												
Anxiety												
Depression												
Decreased self-esteem												
Impulsive behavior												
Irritability												
Lethargy												
Malaise												
Mood swings												
Sleep disturbances												
Fatigue												
Food cravings												
G. I. Complaints												
Headache												
Joint and/or back pain												
Low energy												
Muscle Pain												
Overeating												
Weakness												
Weight gain												
Bloating												
Breast swelling												
Oedema												

Name: _____ Age: _____ MC: / ; PMS -