

## Dysmenorrhea

### Definition

Dysmenorrhea is Painful menstruation is called dysmenorrhea.

### Types:

1. Primary dysmenorrhea.
  - There is no identifiable pelvic pathology.
  - May also be because of hormonal, obstructive and psychological factors.
2. Secondary dysmenorrhea.
  - Presence of pelvic pathology.
  - Caused by lesion, such as endometriosis, pelvic infection, congenital abnormality, uterine fibroids, or ovarian cyst.

Clinical manifestations:

1. Nausea.
2. Vomiting.
3. Diarrhea.
4. Headache.
5. Tiredness.
6. Nervousness.
7. Characteristics of pain-
  - ✓ Recurrent.
  - ✓ Crampy.
  - ✓ Colicky or dull.
  - ✓ Usually in lower mid-abdominal region,
8. Usually self-limiting without complications.

Diagnostic evaluation:

1. Chlamydia and gonorrhea tests-may show infection.
2. Pelvic ultrasound-may detect tumor, endometriosis, and cysts.
3. Serum or urine pregnancy test- to rule out ectopic pregnancy.

Definition of primary dysmenorrhoea: The pain is uterine in origin directly due to menstruation without evidence of pelvic pathology.

### Causes of primary dysmenorrhea:-

- i. Behavioral and psychological factors.
  - Tension & anxiety during adolescence.
  - Unhappiness at home or at work.
  - Fear or loss of employment.

- Anxiety over examination.
- ii. Hormonal imbalance & excessive prostaglandin.

### **Clinical Features of primary dysmenorrhea-**

#### **Symptoms:**

1. Teenage girl's maximum between the ages of 16-24 years.
2. Pain –
  - Site – pain is felt in the hypogastrium.(a region of the abdomen located below the umbilical region).
  - Onset – pain begins a few hours before or just with the onset of menstruation.
  - Duration – The severity of pain usually lasts for few hours rarely lasts longer than 12 hours, may extend to 24 hours but rarely persists beyond 48 hours.
  - Character – spasmodic and colicky in nature.
  - Radiation – inner and front aspect of thigh.
  - Relief – when flow is properly established.
- Systemic –
  - Nausea.
  - Vomiting.
  - Headache.
  - Diarrhea.
  - Pallor.
  - Cold sweats.
  - Fainting.
- Abdominal or pelvic examination does not reveal any abnormal findings.

#### **Signs:**

1. Physically healthy.
2. No general and local abnormality.

#### **Investigation –**

1. Ultrasonography.
2. Laparoscopy.

#### **Treatment:**

##### **A. General treatment:**

- ✓ Reassurance to the patient.
- ✓ Improvement of environment.
- ✓ Education about hygiene during menstruation.
- ✓ Psychotherapy to remove anxiety and tension.

- ✓ Marriage-if unmarried advice to have marriage.
  - ✓ Advice to have child.
  - ✓ Regular exercise and improvement of general condition.
- B. Mild pain:
- ✓ Hot bath and hot compression over the lower abdomen.
  - ✓ Bowel should be kept empty.
  - ✓ Analgesic- paracetamol, aspirin may be prescribed.
  - ✓ Anti-spasmodic- hyoscine-N-butyl bromide
- C. Hormonal therapy:
- ✓ Combined oral pill: 1 pill is taken nightly on each of the 5-25<sup>th</sup> day of cycle – 6 months.
- D. Surgical treatment:
- ✓ Dilation of the cervix

Definition of secondary dysmenorrhoea:

Secondary dysmenorrhoea is normally considered to be menstruation-associated pain occurring in the presence of pelvic pathology.

Common causes of secondary dysmenorrhoea:

1. Functional –
  - ✓ Over anxiety.
  - ✓ Emotional.
2. Chronic pelvic infection.
3. Pelvic adhesion.(bands of scar-like tissue).
4. Uterine fibroid.
5. Endometrial polyp.
6. PID.
7. Cervical stenosis.

Clinical features:

- Age-occurs in older, married women.
- The pain is dull.
- Cramping pain in your lower abdomen that can be intense.
- Pain that radiates to your lower back and thighs.
- Dizziness.
- Loose stools.

Treatment:

1. Reassurance of the patient.
2. Analgesic may be given.
3. Anti-inflammatory drugs may be given.

4. Antibiotic may be given if required.
5. Heat therapy.
6. Low dose combined pill.

Difference between primary and secondary dysmenorrhoea:

<b>Points</b>	<b>Primary dysmenorrhoea</b>	<b>Secondary dysmenorrhoea</b>
1. Definition	Primary dysmenorrhoea is one where there is no identifiable pelvic pathology.	Secondary dysmenorrhoea may be defined as menstruation associated pain occurring in the presence of pelvic pathology.
2. Age	Mostly adolescents	Elderly.
3. Cause	Idiopathic (may be related to behavioral and psychological factors, or hormonal imbalance).	Pelvic lesions at various sites (e.g. endometriosis, chronic pelvic infection or fibroid uterus).
4. Character of pain	<ul style="list-style-type: none"> <li>• Site- Mainly in the hypogastrium.</li> <li>• Onset- Few hours before and after the onset of menstruation.</li> <li>• Duration- Usually lasts for few hours, may extend to 24 hours but rarely persists beyond 48 hours.</li> <li>• Character- Spasmodic in type.</li> <li>• Radiation- Inner and front aspects of the thighs.</li> </ul>	<ul style="list-style-type: none"> <li>• Site- Back and in front.</li> <li>• Onset- Usually appears 3-5 days prior to the period and relieves with the start of bleeding.</li> <li>• Duration- Depends on the pathology producing pain.</li> <li>• Character- May be spasmodic.</li> <li>• Radiation- Absent.</li> </ul>
5. Systemic discomforts	Nausea, vomiting, fatigue, diarrhoea, headache) Present.	Absent.
6. Treatment	Conservative.	Treatment according to cause.

## Menorrhagia

Definition of menorrhagia:

Menorrhagia is the medical term for menstrual periods with abnormally heavy or prolonged bleeding.

OR

It may be define as cyclical bleeding which is excessive in amount or duration or both.

Menstrual flow more than >80ml/cycle

Causes of menorrhagia:

1. Pelvic pathology
  - ✓ Fibroid uterus.
  - ✓ Adenomyosis.
  - ✓ Pelvic inflammatory disease.
  - ✓ Intra-uterine contraceptive device (IUCD).
  - ✓ Chronic tubo-ovarian mass.
2. Systemic pathology-
  - ✓ Liver failure.
  - ✓ Congestive cardiac failure.
  - ✓ Severe hypertension.
3. Endocrine causes-
  - ✓ Hypothyroidism.
  - ✓ Hyperthyroidism.
4. Blood disorder-
  - ✓ Idiopathic-thrombocytopenic purpura.
  - ✓ Lekaemia.
5. Emotional upset.

Management of menorrhagia:

- A. History-
  - ✓ Amount of menstrual flow.
  - ✓ Length of menstrual cycle and menstrual period.
  - ✓ Length and amount of episodes of inter-menstrual bleeding.
  - ✓ Last menstrual period and normal menstrual period.
  - ✓ Age of menarche.
  - ✓ Any change in general health.
- B. Physical examination-
  - ✓ On per abdominal examination-any mss.
  - ✓ On rectovagina examination-to identify lateral and posterior spread or the presence of a barrel shaped cervix.

### C. Investigation-

#### ✓ General-

- Blood for TC, DC, ESR, HB%.
- Platelet count.
- Hormones – T3, T4, TSH, FSH.
- Serum creatinine.
- USG of lower abdomen and pelvis.

#### ✓ Special –

- Diagnostic dilatation and curettage.
- Hysteroscopy.
- Cytological examination.
- Endometrial biopsy.

### D. Treatment-

#### ✓ Medical treatment-

- Non-steroidal anti-inflammatory drugs.
- Oral contraceptive pills

#### ✓ Surgical treatment-

- Dilation and curettage. (is a procedure to remove tissue from inside your uterus.)
- Myomectomy.
- Hysterectomy.

## Metrorrhagia

Definition of metrorrhagia:

Metrorrhagia is an acyclical bleeding having no menstrual pattern which occurs irregularly or continuously.

OR

Metrorrhagia is defined as irregular, acyclic bleeding from the uterus.

Causes of metrorrhagia:

1. Dysfunctional uterine bleeding.
2. Submucous fibroid.
3. Uterine polyp.
4. Carcinoma cervix.
5. Endometrial carcinoma.
6. Mucous polyp of cervix.
7. Infections-chlamydial.
8. Cervical endometriosis.
9. Ovular bleeding.

Treatment of metrorrhagia:

1. Treatment is directed to the underlying pathology.
2. Malignancy is to be excluded prior to any definitive treatment.

## Menopause

Definition of menopause:

Menopause means permanent cessation of menstruation at the end of reproductive life due to loss of ovarian follicular activity.

OR

Menopause usually occurs between the ages of 45 and 52 years.

- ✚ Pre-menopause-Refers to the period prior to the menopause.
- ✚ Post-menopause-Refers to the period after menopause.
- ✚ Peri-menopause-Refers to the period around menopause (40-55 years).
- ✚ Pre-mature menopause-If the menopause occurs below the age of 40, it is said to be premature menopause.
- ✚ Delayed menopause-If the menopause fails to occur even beyond 55 years, it is called delayed menopause.

Types of menopause:

1. Physiological menopause: Physiological menopause is that which comes naturally due to progressive decrease in ovarian oestrogen production.
2. Pathological menopause-
  - Premature menopause: Rare form of menopause which occurs before the age of 40 years.  
Causes:
    - Constitutional.
    - Abnormal karyotype (the fetus has unusual chromosomes).
    - Hypothyroidism.
  - Late menopause-When menstruation continues beyond 55 years.  
Cause:
    - Constitutional.
    - Uterine leiomyomas (growths that appear in the uterus).
    - Diabetes mellitus
  - Artificial menopause-result from cessation of menstruation during the reproductive life either by surgical removal of ovaries or destruction of ovarian function by application of radiation.

## Clinical features of menopause:

### Symptoms-

1. Vasomotor symptom-
  - Hot flush-hot flush is characterized by sudden feeling of heat followed by profuse sweating.
  - Palpitations
  - Fatigue.
  - Weakness.
  - Insomnia.
2. Genital and urogenital symptoms-
  - Urinary incontinence.
  - Dysuria(difficult urination).
  - Recurrent UTI.
  - Vaginal dryness.
3. Sexual dysfunction-
  - Decreased sexual desire.
4. Psychological –
  - Anxiety.
  - Headache.
  - Insomnia.
  - Irritability.
  - Depression.
  - Dementia.
  - Mood swing.
  - Inability to concentration.
5. Skeletal disease-
  - Osteoporosis
  - Bone pain.
  - Fractures.
6. Cardiovascular and cerebrovascular effects-
  - Ischemic heart disease.
  - Coronary artery disease.
  - Stroke.

### Signs-

1. Ovary –Become shrink and wrinkled and white.
2. Fallopian tube-Feature of atrophy. Muscle becomes thinner.
3. Vagina-Narrow due to gradual loss of elasticity. Epithelium becomes thin.
4. Vulva-Labia become flatten. Pubic hair scanty.
5. Breast-fat is reabsorbed and glands atrophy. Nipple increase in size.



6. Muscle-Loss of muscle tone.

Diagnosis:

1. Cessation of menstruation consecutive 12 months.
2. Appearances of menopausal symptoms.
3. Serum FSH (follicle-stimulating hormone) and LH (luteinizing hormone)  $> 40\text{IU/ml}$  (three values at weeks interval required).

Treatment:

1. Non-hormonal treatment-
  - ✓ Nutritious diet-Balanced with calcium and protein is helpful.
  - ✓ Supplementary calcium-Daily intake of 1-1.5gm can reduce osteoporosis and fracture.
  - ✓ Exercise-Weight bearing exercise, walking, jogging.
  - ✓ Vitamin D-Supplementation of vitamin D3 (400-800/UI/day) along with calcium can reduce osteoporosis and fractures.
  - ✓ Avoidance of smoking and alcohol, spicy food, coffe etc.
2. Hormonal therapy-
  - ✓ Oral Oestrogen regimen.
  - ✓ Combined oestrogen and progesterone preparation.
  - ✓ Oestrogen and cyclic progesterone-For a woman with intact uterus oestrogen is given continuously for 25 days and progesterone is added for last 12-14 days to prevent endometrial hyperplasia and carcinoma.
  - ✓ Continuous oestrogen and progesterone therapy-Continuous oestrogen and progesterone therapy can prevent endometrial hyperplasia.

Complication of menopause:

1. Short term(0-5years)-
  - ✓ Vasomotor symptoms eg.hot flushes, night sweats.
  - ✓ Psychological symptoms eg. Irritability,mood swings, poor memory, depression.
  - ✓ Hair changes.
  - ✓ Bcrease sexual desire.
2. Intermediate (3-10years)-
  - ✓ Vaginal dryness.
  - ✓ Urinary incontinence.
  - ✓ Urgency.
  - ✓ Dysuria.
  - ✓ Recurrent UTI.
3. Long term( $>10$ years)-
  - ✓ Osteoporosis.
  - ✓ Fractures.
  - ✓ Cardiovascular disease

## Inflammatory of gynecologic disorder

There are many different gynecological inflammations and infections that require the clinical care of a physician or another healthcare professional. It is very important for a woman to seek medical care to determine the type of infection present and the appropriate treatment.

Gynecological inflammations and infections can originate in either the lower or upper reproductive tract. Common infections include:

- ❖ Lower reproductive tract-
  - Vulvitis.
  - Vaginitis.
- ❖ Upper reproductive tract-
  - Cervicitis.
  - Pelvic inflammatory disease (PID).

## Vulvitis

Definition of vulvitis:

Vulvitis specifically refers to inflammation of the vulval area.

OR

Vulvitis is inflammation of the vulva.

Pathphysiology and etiology:

A. Causative factors-

1. Infection-

- Trichomonas.
- Bacteria.
- Fungi
- Herpes simplex' virus (HSV).
- Human papilloma virus (HPV).

2. Irritants-

- Urine, feces, vaginal discharge.
- Chemicals –such as laundry detergents, vaginal sprays, perfumes, some soaps and bubble bath.

3. Carcinoma.

4. Chronic dermatological conditions, such as psoriasis or eczema.

B. Predisposing factors-

- Illnesses, such as diabetes mellitus and dermatologic disorders.

- Atrophy due to menopause.

What are the symptoms of vulvitis?

1. Extreme and constant itching.
2. A burning sensation in the vulvar area.
3. Vaginal discharge.
4. Dyspareunia.
5. Small cracks on the skin of the vulva.
6. Redness and swelling on the vulva and labia.(lips of the vagina).
7. Blisters on the vulva.
8. Scaly, thick whitish patches on the vulva.

Diagnostic evaluation:

1. Vulvar smears and cultures-may show infectious organism.
2. Biopsy of vulvar tissue- may be necessary to rule out malignancy and choric dermatologic conditions.

Nursing management of vulvitis:

A. Nursing assessment-

1. Question patient about medical history, symptoms, sexual activity.
2. Determine use of chemical- containing products on undergarments or directly on vulva.
3. Examine the genitalia and lymph nodes.

B. Nursing diagnosis-

1. Acute pain related to vulvar inflammation.

C. Nursing interventions-

1. Relieving pain-
  - Administer prescribe medication.
  - Instruct use of sitz baths, sitting in or over warm water for 15to 20 minutes, three to four times daily.

D. Patient education and health maintenance-

- Teach patient hygienic principles-
  - Wipe from front to back after voiding.
  - Use cotton with warm water and bland soap for cleansing, and pat dry.
- Teach patient to avoid chemical irritants, such as sprays, perfumed, new laundry detergents and bubble bath.
- Educate about STD prevention and encourage screening.

E. Nursing evaluation-

- Verbalizes increased comfort level and control of symptoms.

# Vaginitis

Definition of vaginitis:

Vaginitis is inflammation of the vagina caused by infectious pathogens.

Pathophysiology and etiology:

1. May be caused by sexually transmitted organisms.
2. Normal vaginal secretions because of estrogen secretion.
3. Such conditions as diabetes, pregnancy, coitus and menopause alter normal vaginal environment.

Types of vaginitis:

1. Bacterial vaginosis.
2. Yeast infections.
3. Trichomonas vaginalis.
4. Candida albicans.
5. Non-infectious vaginitis.

Clinical feature of vaginitis:

1. Asymptomatic.
2. Vaginal itching, irritation, burning.
3. Odor, increased or unusual vaginal discharge.
4. Dyspareunia.
5. Pelvic pain.
6. Dysuria.
7. Light vaginal bleeding.

Nursing management of vaginitis:

A. Nursing Assessment

1. Obtain a health history including questions specific to the condition-
  - Nature of discharge-
    - Cheese like.
    - Frothy.
    - Pus-like.
    - Thick or thin.
    - Dysuria.
    - Itching.
    - Dyspareunia.
  - Menstrual history.
  - Disease history-
    - Diabetes mellitus.

- Previous vaginal infections.
  - Obstetric history.
  - Vaginal hygiene-
    - Deodorants.
    - Sprays.
    - Ointments.
  - 2. Perform physical examination including a vaginal examination.
- B. Nursing diagnosis-
1. Acute and chronic pain related to vaginal irritation.
  2. Impaired tissue integrity related to vaginal infection.
- C. Nursing intervention-
- Relieving pain-
    - Instruct patient to discontinue use of irritating agents, such as bubble baths and vaginal douches.
    - Suggest patient take cool baths or sitz baths.
    - Encourage patient to wear loose cotton undergarments.
    - Provide emotional support.
  - Restoring tissue integrity-
    - Teach patient to clean perineum and pat dry before applying medication.
    - Demonstrate application of prescribed medication.
- D. Evaluation-
1. Verbalizes relief pain.
  2. Vaginal mucosa pink, with normal amount and color of secretion.