RAMA UNIVERSITY

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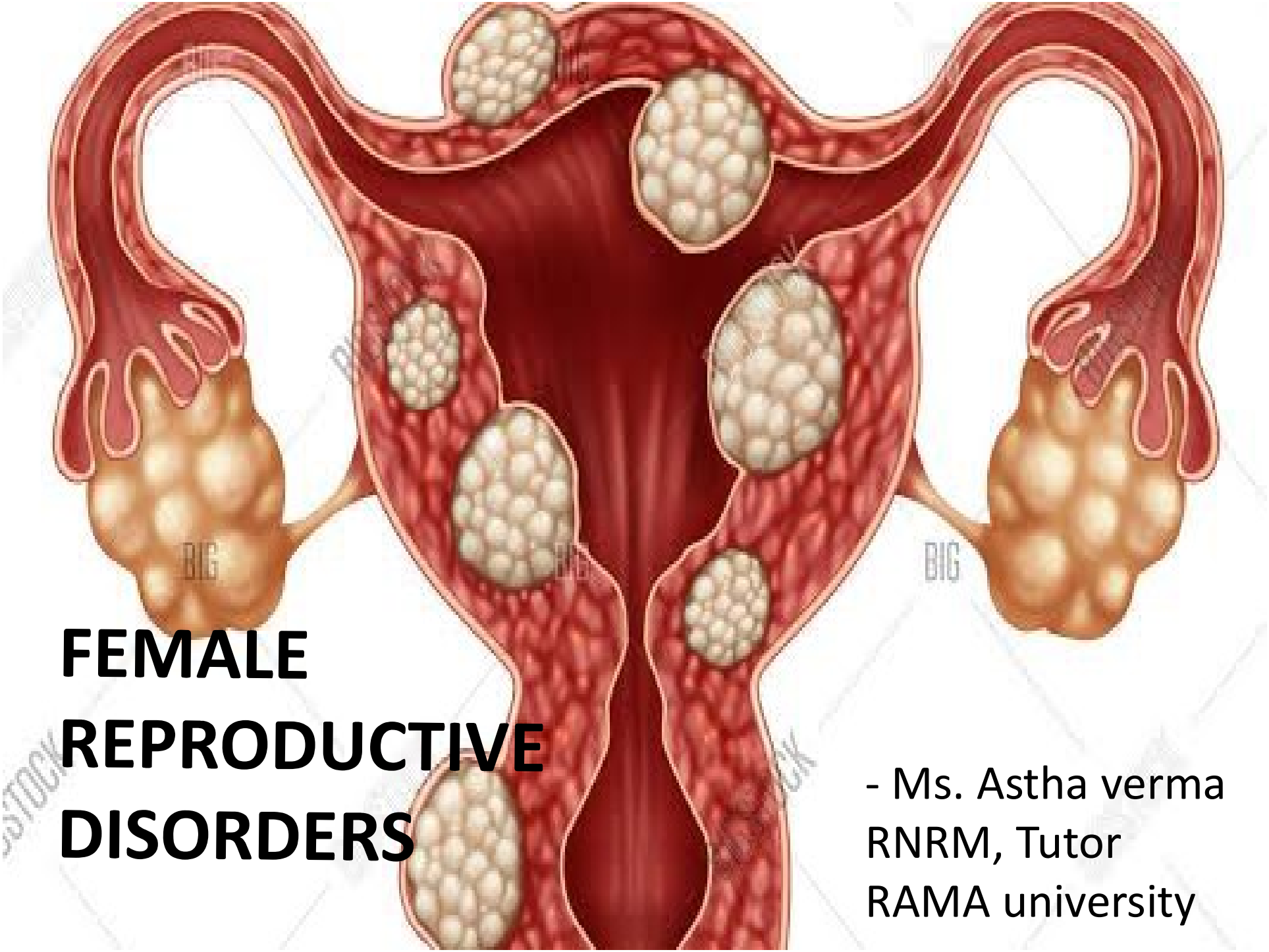
FACULTY OF NURSING



FEMALE REPRODUCTIVE DISORDERS

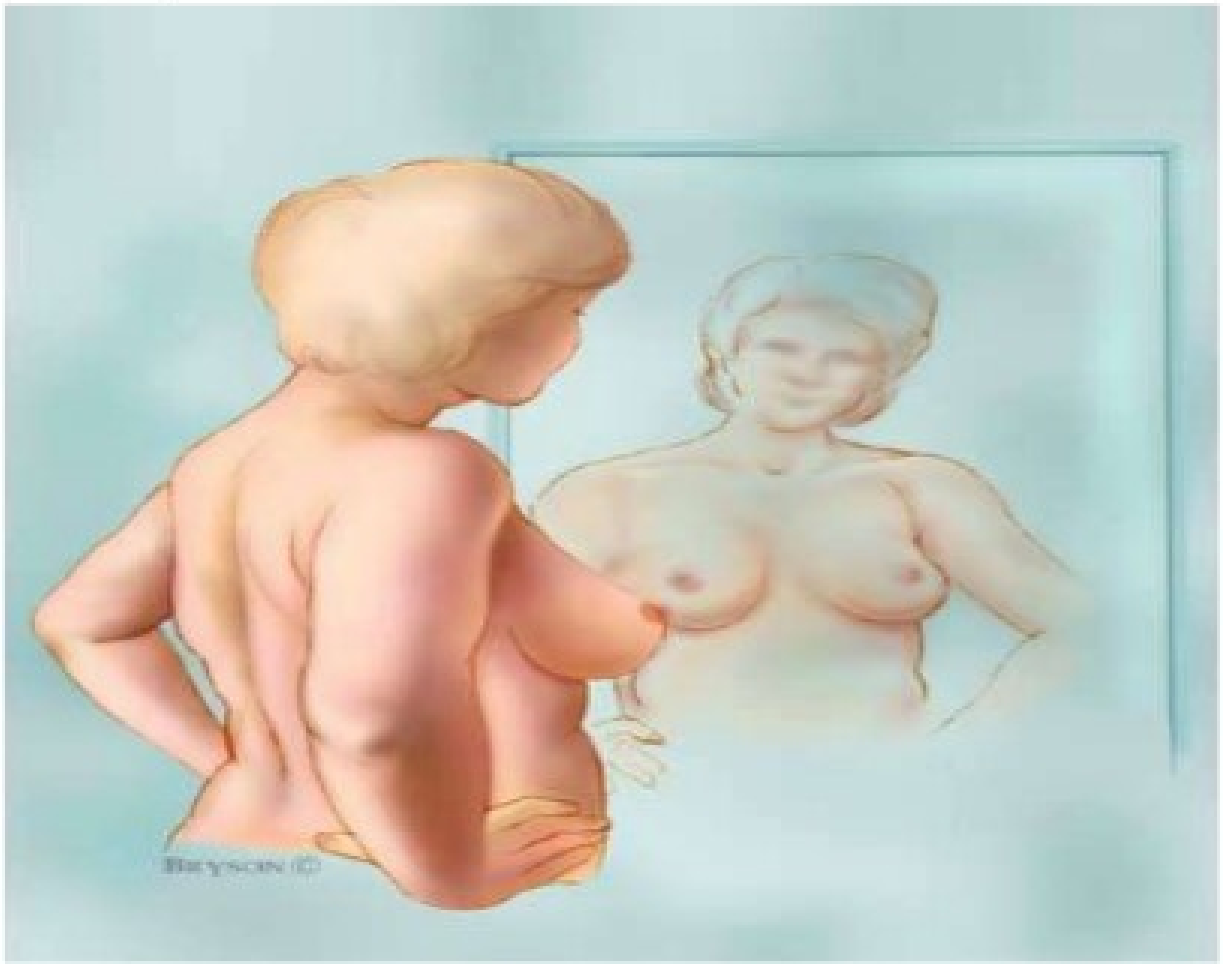
- Ms. Astha verma
RNRM, Tutor
RAMA university

• BREAST SELF EXAMINATION

How to do breast self examination

????

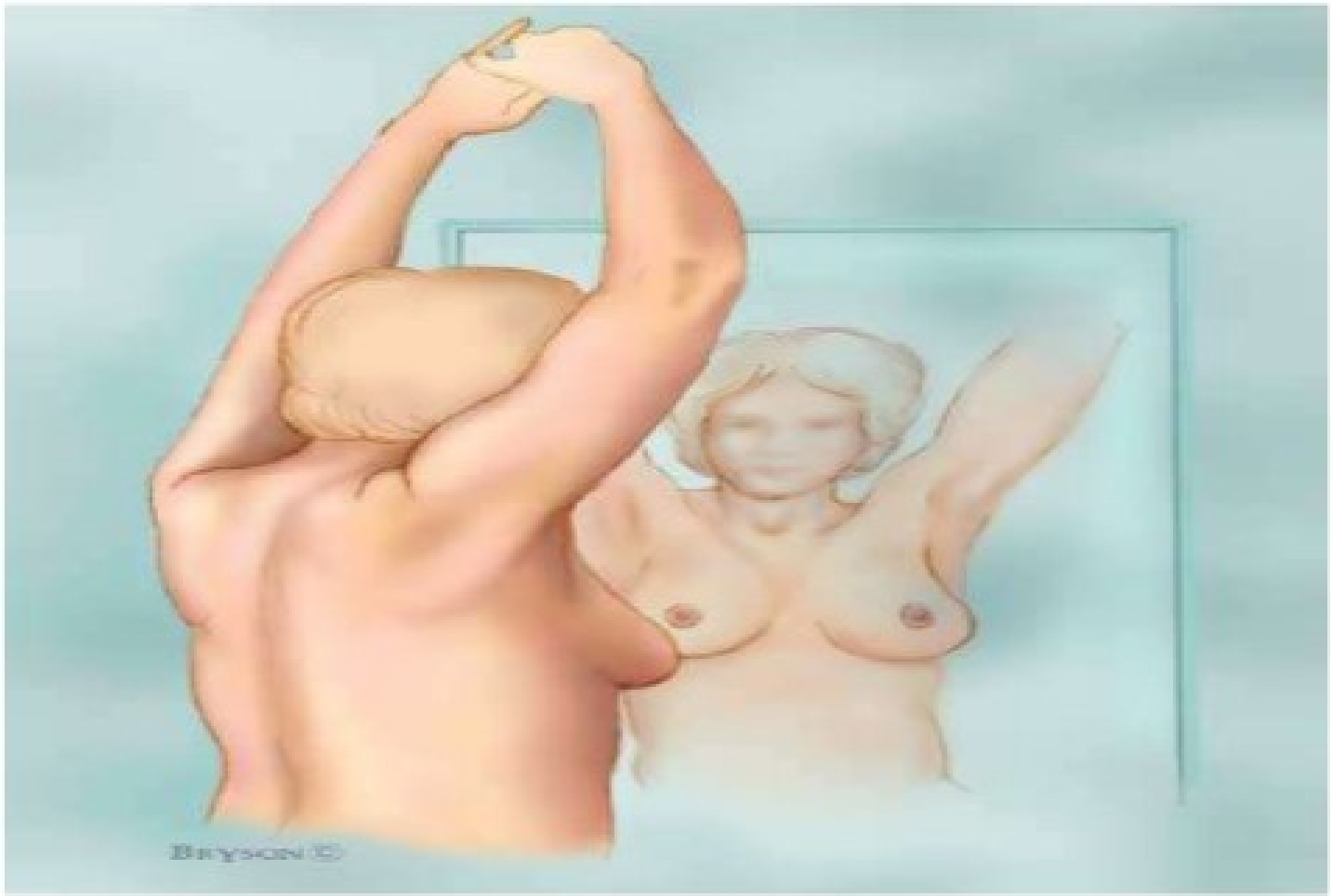
Step 1: Begin by looking at your breasts in the mirror with your shoulders straight and your arms on your hips.



1.Breasts that are their usual size, shape, and color
2.Breasts that are evenly shaped without visible distortion or swelling

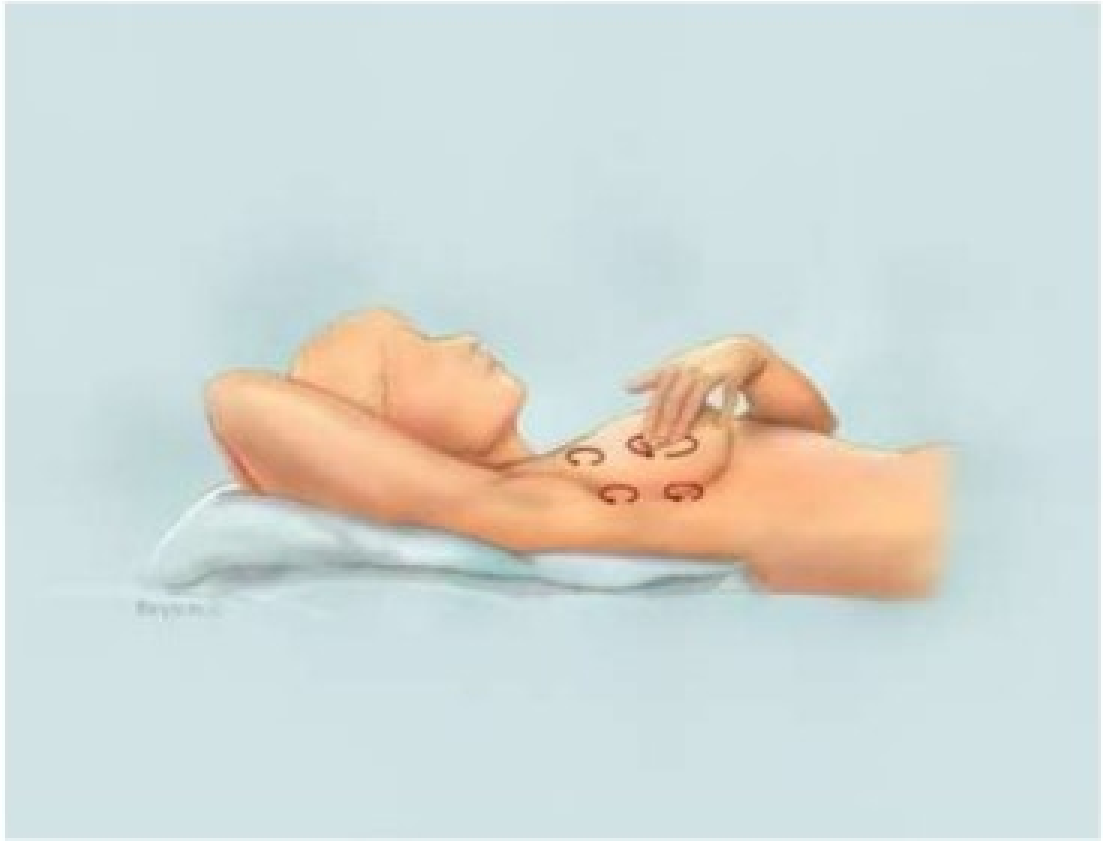
1. Dimpling, puckering, or bulging of the skin
2. A nipple that has changed position or an inverted nipple (pushed inward instead of sticking out)
3. Redness, soreness, rash, or swelling

Step 2: Now, raise your arms and look for the same changes.



Step 3: While you're at the mirror, look for any signs of fluid coming out of one or both nipples (this could be a watery, milky, or yellow fluid or blood).

step 4: Next, feel your breasts while lying down, using your right hand to feel your left breast and then your left hand to feel your right breast



Use a firm, smooth touch with the first few finger pads of your hand, keeping the fingers flat and together. Use a circular motion, about the size of a quarterCover the entire breast from top to bottom, side to side — from your collarbone to the top of your abdomen, and from your armpit to your cleavage.

You can begin at the nipple, moving in larger and larger circles until you reach the outer edge of the breast. You can also move your fingers up and down vertically, in rows, This up-and-down approach seems to work best for most women

Finally, feel your breasts while you are standing or sitting. Many women find that the easiest way to feel their breasts is when their skin is wet and slippery, so they like to do this step in the shower. Cover your entire breast, using the same hand movements described in step 4

- **VAGINAL INFECTION**

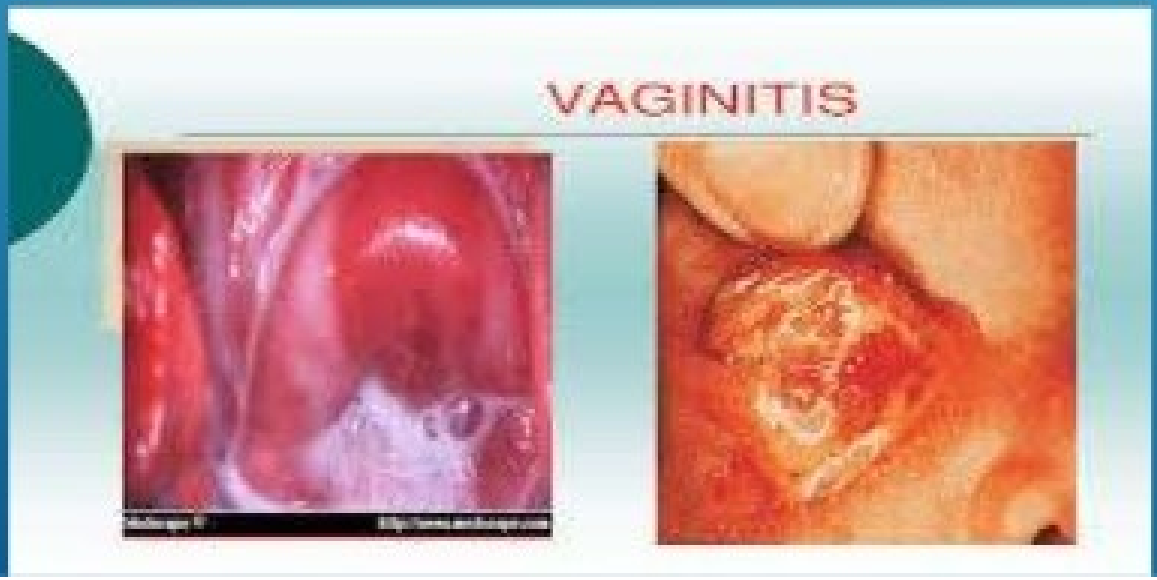
Definition:

- **vaginal infection**

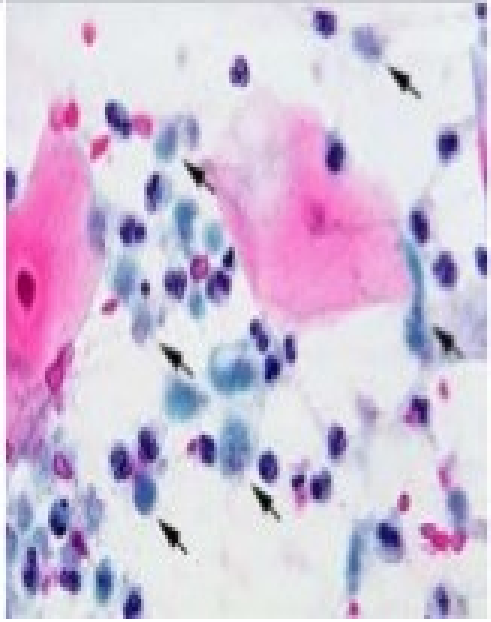
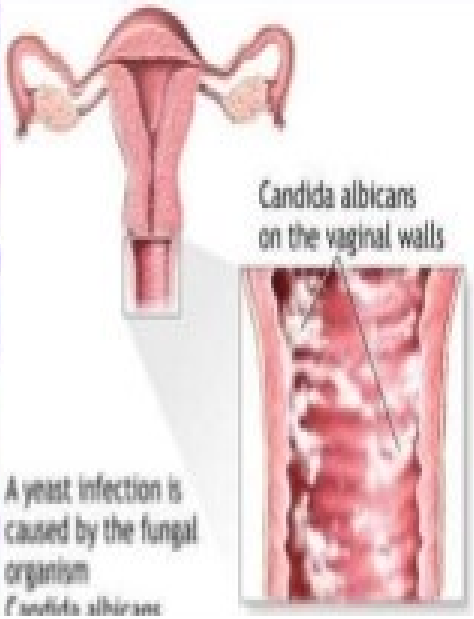
over growth of bacteria which is normally present in vagina.

vaginitis:

inflammation in the vagina



Types of vaginal infection

Types of vaginal infection	Bacterial vaginosis	Trichomoniasis vaginosis	Candidias
Causative organism	Over growth cardenerria Gonococcus	Trichomonus vaginalus (Parasitic or protozoal infection)	Fungus and candida albicans
	 Bacterial Vaginosis		 A yeast infection is caused by the fungal organism

Risk factor

1. Poor personal hygiene.

2. Obesity

3. using Too much soap

4. un controlling Diabetes

5. wearing clothes that are Too tight

6. use of feminine deodorants, douches

And scented Sanitary products.

7. Excessive use of antibiotics & Hormonal Contraceptive.

8. Stress.

9. change in sexual Partners.

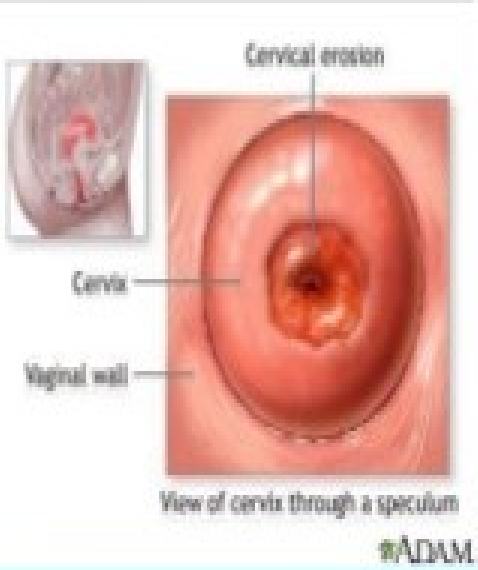
10. unprotected sex with Someone infection with an STO.

11. pregnancy, recent child birth, or menopause.

Symptoms & signs

In addition to itching, burning, and redness of the vagina, other symptoms include.

Vaginal discharge	Bacterial vaginosis	Trichomoniasis	Candidias
Consistency	Thin	Frothy	Thick Cottage cheese
1. Color	Gray, white	Yellow	White
1. Oder	Fishy Oder	Fishy Oder	No Oder

Vaginal discharge	Bacterial vaginosis	Trichomoniasis	Candidias
• Dysuria& dyspareunia	Mainly absent or mild	Present and severe	Present
• Other S&S		strawberry shape of the cervix 	discharge stick to the wall of the vagina cervix blood by trial to remove it.

Diagnosis of vaginal infection

Diagnostic criteria	normal	Bacterial vaginosis	Trichomoniasis	Candidias
• history	• none	• Discharge, bad Oder. Like a fishy(possible worse after intercourse) discharges are thin and gray white	• Frothy discharge- bad Oder like fishy- pain during urination(dysuria) Yellow, green, discharge.	• Itching during. Discharge clumpy white without Oder cottage cheese
• Clinical examinant of discharge				
• color	None	Gray, white	Yellow, green	Clumpy, white

Complication :

1. Pelvic inflammation disease.
2. HIV infection.
3. Persistent discomfort.
4. Infertility..

During pregnancy:

1. Risk of miscarriage.
2. Preterm birth.
3. Preterm rupture of membranes.
4. Low birth weight.
5. Post abortion endometrities

- ***Treatment***

2) Trichomonas /Bacterial, vaginosis,

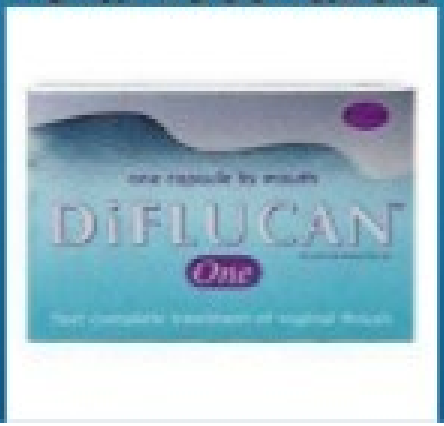
Metronidazole

2gm in single dose

- During the 1st trimester of pregnancy this drug is avoided instead of" Detadine"or trichofuran 'vaginal. Pass arces.
- The Partner should be screened treated and barrier contraceptive recommended. for at least one week from starting of medication Course of (treatment

2) candidiasis

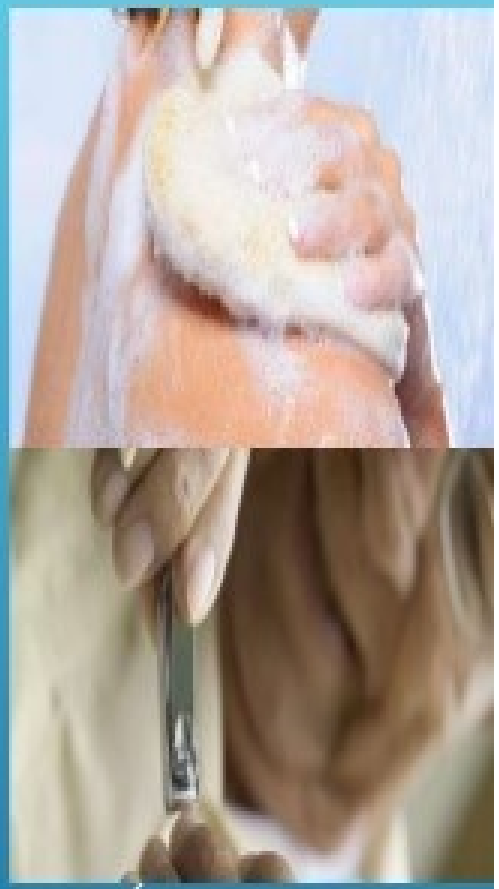
- Oral fluconazole (deflucan) 150 mg tablets single dose is effective.



Nursing management:

- Primary level, Health promotion disease prevention.

1. Avoid over the counter medication.



2. Maintain good personal hygiene.

3. Wear underpants with cotton crotch, and avoid nylon.

4. Avoid tight, fitting clothing.

5. Eat well balanced diet.

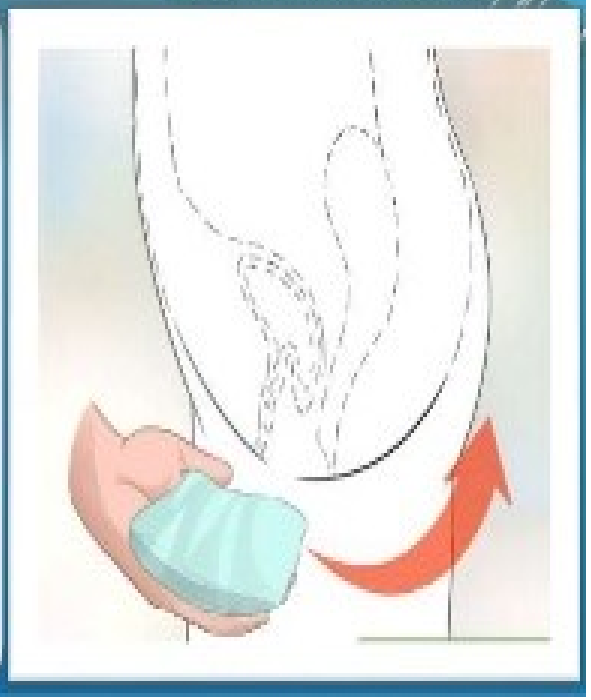
6. Get a plenty of rest.

7. The right way (method) to clean vagina is form front to back

+ avoid using too much soap.

8. control diabetic.

9. Avoid intercourse with infected person



- **Secondary level.**

Early detection & early management; early detection.

1. Screening for infection persons.

2. Vaginal examiner for persons are high risk.

3. Screening for means with infection

- **Management;**

1. Medication taken on time and avoid in pregnancy.

2. Increase fluid intake.

3. In case of increase discharge use pad and frequent check in case of excessive discharge.

4. Wear underpants with a cotton crotch and avoid nylon

5. Avoid tight, fitting clothing.

6. Eat a well balance diet.

7. Use the right method of

Cleaning vagina(from front to back)

8. Change the underpants daily with regular and clean it with warm water and iron it.

9. eat a yogurt daily. (Decrease a risk for Candida infection)

10. Use an odorless nappy with regulatory every 4 hours.

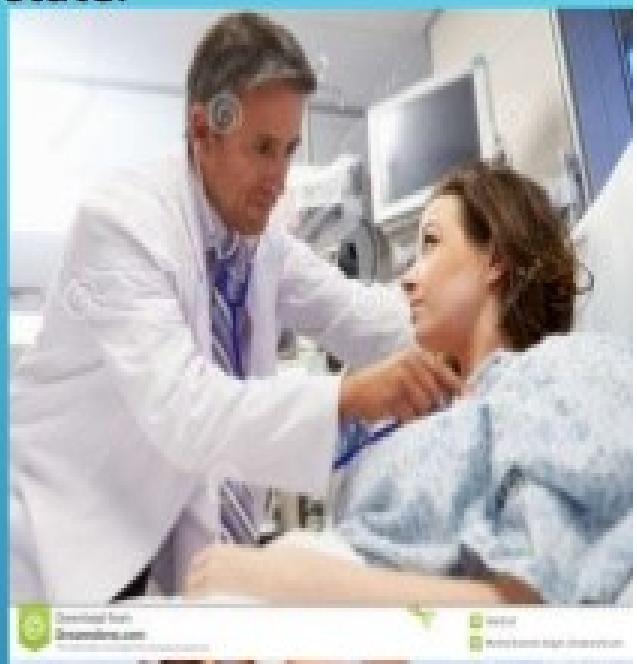
- **Tertiary prevention.**

1. Correction and prevention of deterioration of disease state.
2. Appropriate methods of clean during infection.
3. In the case of trichomonas and bacterial vaginitis,

The husband should be treated also.

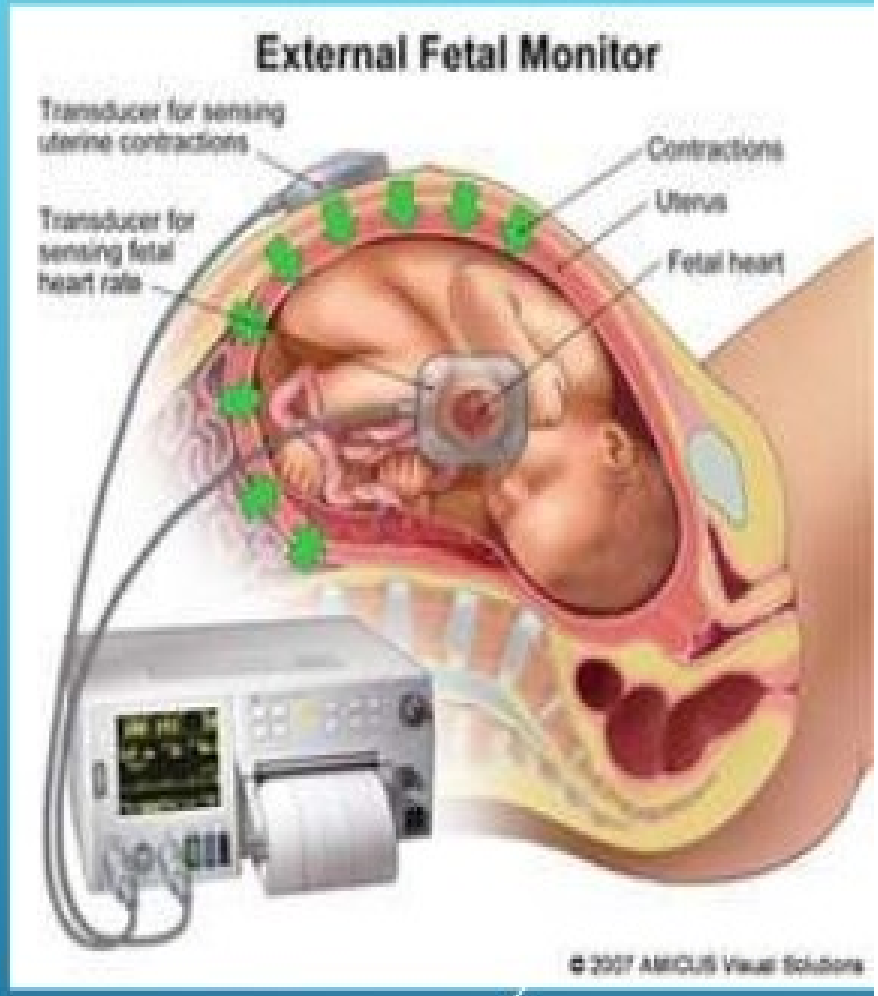
4. Follow up.
5. Periodic checkup.
6. Teach patient appropriate

method for clean to avoid recurrent.



7. Pregnancy-o u\s for baby.

- Monitor fetal wellbeing.
- Monitor fetal heart rate.
- Monitor fetal breathing.



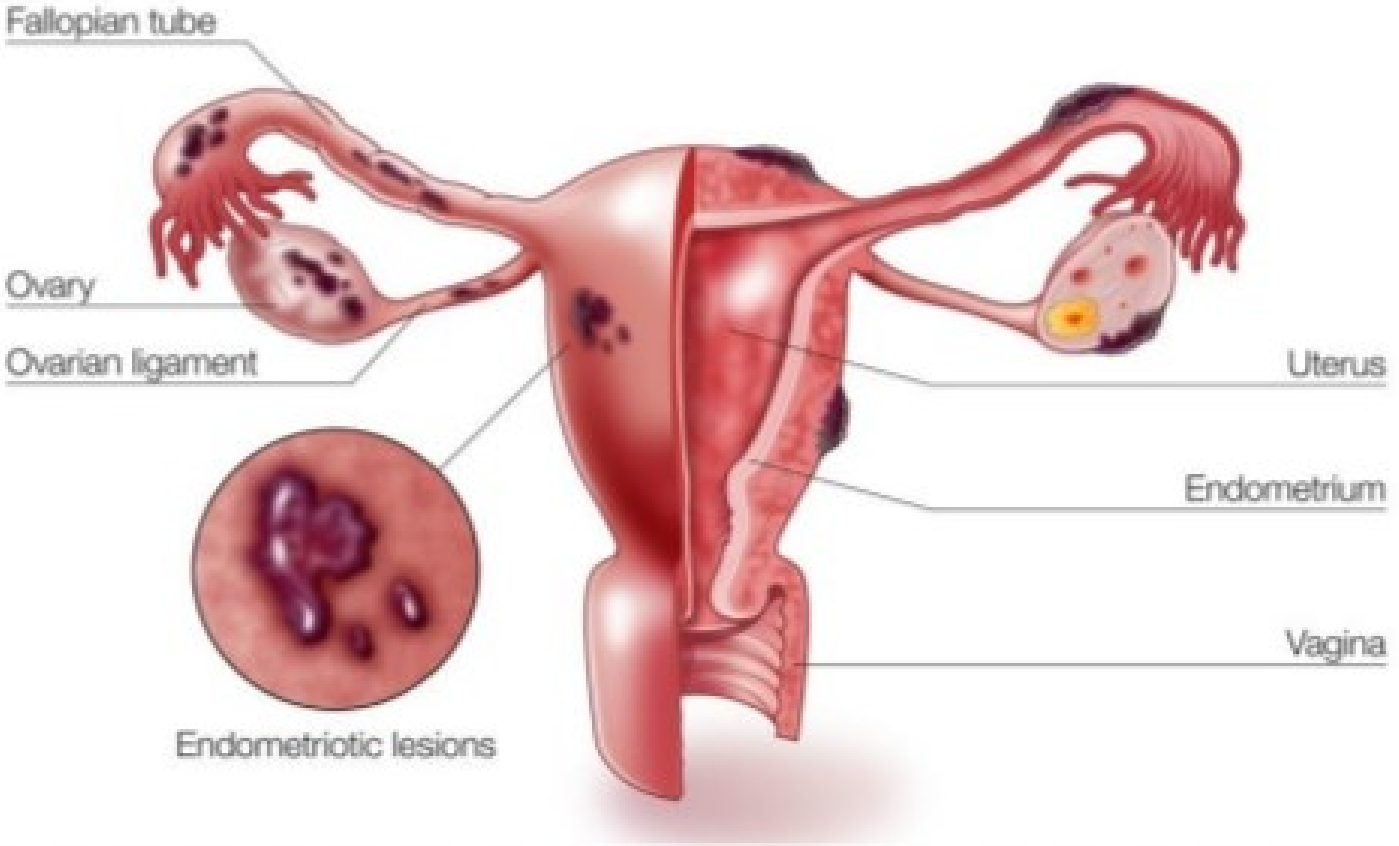
- **ENDOMETRIOSIS**

INTRODUCTION

Endometriosis is a condition in which cells similar to those in the endometrium, the layer of tissue that normally covers the inside of the uterus, grows outside of it. Most often this is on the ovaries, fallopian tubes, and tissue around the uterus and ovaries; however, in rare cases it may also occur in other parts of the body.

DEFINITION

The presence of functioning endometrium (glands & Stroma) in sites other than uterine mucosa is called endometriosis.



RISK FACTORS

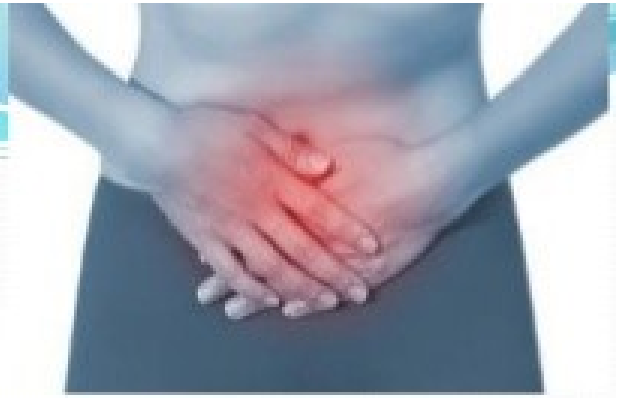
Genetics- Genetic predisposition plays a role.

- Daughters or sisters of women with endometriosis are at higher risk of developing endometriosis themselves.
- Low progesterone levels may be genetic, and may contribute to a hormone imbalance.
- There is an about six-fold increased incidence in women with an affected first-degree relative.
- It has been proposed that endometriosis results from a series of multiple hits within target genes, in a mechanism similar to the development of cancer. In this case, the initial mutation may be either somatic or heritable.

Environmental toxins- Some factors associated with endometriosis include:

- not having given birth (nulliparity)
- prolonged exposure to estrogen; for example, in late menopause or early menarche
- obstruction of menstrual outflow; for example, in Müllerian anomalies

PATHOPHYSIOLOGY



In endometriosis

Under the influence of hormones

Endometrial tissue that is located outside
The uterus, thickens, breaks down and bleeds
Each month.

This blood cannot exit the body

The blood becomes trapped

Form cysts

Scar tissue and adhesions

Infertility

irritate the surrounding
Tissue

Pain

CLINICAL MANIFESTATIONS

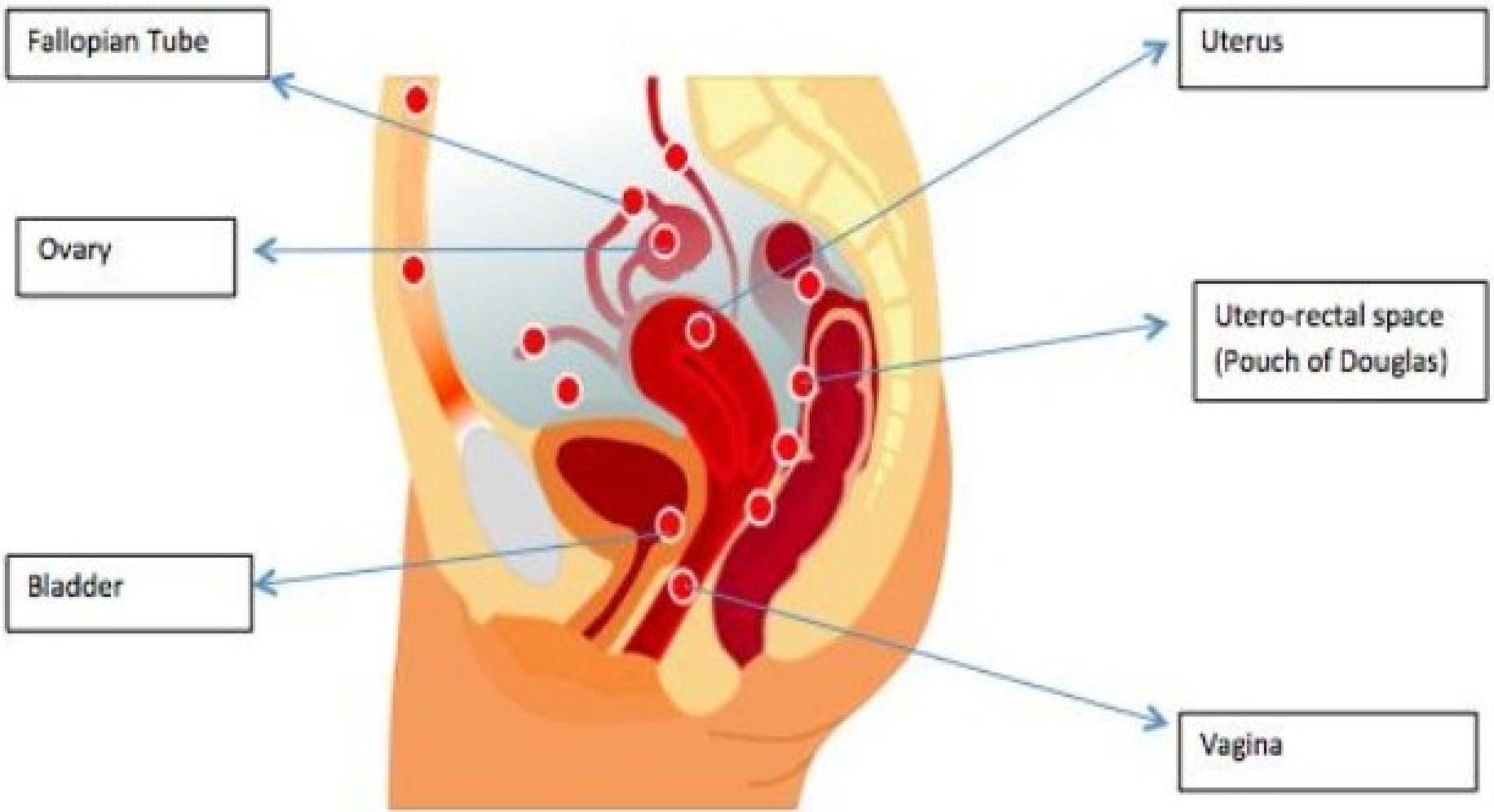
- Dysmenorrhea – painful, sometimes disabling cramps during the menstrual period; pain may get worse over time (progressive pain), also lower back pains linked to the pelvis
- Chronic pelvic pain – typically accompanied by lower back pain or abdominal pain
- Dyspareunia – painful sex
- Dysuria – urinary urgency, frequency, and sometimes painful voiding

- Infertility -About a third of women with infertility have endometriosis.

Among women with endometriosis about 40% are infertile. The pathogenesis of infertility is dependent on the stage of disease: in early stage disease, it is hypothesised that this is secondary to an inflammatory response that impairs various aspects of conception, whereas in later stage disease distorted pelvic anatomy and adhesions contribute to impaired fertilisation.

- Others- diarrhea or constipation , chronic fatigue, nausea and vomiting, headaches, low-grade fevers, heavy and/or irregular periods, and hypoglycemia

POSSIBLE LOCATIONS OF ENDOMETRIOSIS



DIAGNOSTIC TESTS

- A health history and a physical examination
- Visual analogue scale (VAS); VAS and numerical rating scale (NRS) were the best adapted pain scales for pain measurement in endometriosis.
- Vaginal Ultrasound
- Laparoscopy
- Immunohistochemistry-Immunohistochemistry has been found to be useful in diagnosing endometriosis as stromal cells have a peculiar surface antigen, CD10.

Staging-

- Surgically, endometriosis can be staged I–IV by the revised classification of the American Society of Reproductive Medicine from 1997.
- Stage I (Minimal)Findings restricted to only superficial lesions and possibly a few filmy adhesions
- Stage II (Mild)In addition, some deep lesions are present in the cul-de-sac
- Stage III (Moderate)As above, plus the presence of endometriomas on the ovary and more adhesions.
- Stage IV (Severe) As above, plus large endometriomas, extensive adhesions.

MEDICAL MANAGEMENT

- Hormonal birth control therapy
- Progestogens
- Danazol(Danocrine) and Gestrinone (Dimetrose, Nemestran) ,suppressive steroids inhibit the growth of endometriosis but their use remains limited as they may cause masculinizing side effects such as excessive hair growth and voice changes.
- Gonadotropin-releasing hormone (GnRH) modulators
- Aromatase inhibitors

OTHER MEDICATIONS-

- NSAIDs (Anti-inflammatory)-They are commonly used in conjunction with other therapy. For more severe cases narcotic prescription drugs may be used. NSAID injections can be helpful for severe pain or if stomach pain prevents oral NSAID use.

Examples of NSAIDs include ibuprofen and naproxen.

- Opioids: Morphine sulphate
- Pentoxifylline, an immunomodulating agent,
- Angiogenesis inhibitors

SURGICAL MANAGEMENT

- Conservative treatment consists of the excision of the endometrium, adhesions, resection of endometriomas, and restoration of normal pelvic anatomy as much as is possible.

- A hysterectomy (removal of the uterus) can be used to treat endometriosis in women who do not wish to conceive.

- For women with extreme pain, a presacral neurectomy may be very rarely performed where the nerves to the uterus are cut. However, this technique is almost never used due to the high incidence of associated complications including presacral hematoma and irreversible problems with urination and constipation

TREATMENT OF INFERTILITY

- Surgery is more effective than medicinal intervention for addressing infertility associated with endometriosis. Surgery attempts to remove endometrial tissue and preserve the ovaries without damaging normal tissue. In-vitro fertilization (IVF) procedures are effective in improving fertility in many women with endometriosis.

- During fertility treatment, the ultralong pretreatment with GnRH-agonist has a higher chance of resulting in pregnancy for women with endometriosis, compared to the short pretreatment.

COMPLICATIONS

- Internal scarring, adhesions, pelvic cysts, chocolate cysts of ovaries, ruptured cysts, and bowel and ureter obstruction resulting from pelvic adhesions.
- Endometriosis-associated infertility can be related to scar formation and anatomical distortions due to the endometriosis.
- Ovarian endometriosis may complicate pregnancy by decidualization, abscess and/or rupture.
- Thoracic endometriosis is associated with recurrent pneumothoraces at times of a menstrual period, termed catamenial pneumothorax.

•PELVIC INFLAMMATORY DISEASE

DEFINITION--

- Pelvic inflammatory disease(PID) is an inflammatory condition of the pelvic cavity that may involve the uterus ,fallopian tubes, ovaries, pelvic peritoneum, or pelvis vascular system.
- Infecetion which may be acute , subacute, recurrent,or chronic and localized or widespread, is usually caused by—
  - Bacteria.
  - Virus.
  - fungus or parasites.

Contd....

- Organism most commonly associated are..
    1. GONORRHEAL.
    2. CHLAMYDIAL.
    3. MYCOPLASMA.

CAUSE'S

- The exact cause is not determined.

I. It is presumed that organisms usually enter the body through the vagina, and move upword through the cervical canal, colonize the endocervix, and move upward into uterus.

- This all usually occurs after-
    I. Childbirth.
    II. Abortion.
    III. Surgical procedures.
    IV. Sexually transmitted.
    V. IUD insertion.
    VI. Endometrial biopsy.

RISK FACTOR'S--

- Early age at first intercourse.
- Multiple sexual partner's.
- Frequent intercourse.
- Sex with a partner with an STD.
- History of STD and previous pelvic infection.

Pathophysiology-

- In PID organisms usually ascends from lower tract to upper side , this commonly occurs during pregnancy, becuse there is increased blood supply to the organs.
- These post partum and post abortion infectiontend to be unilateral.
- Infection can cause perihepatic inflammation when the organisms invades the peritoneum.
- In gonorrheal infection, the gonococci pass through the cervical canal into the uterus especially during menstruation, when the environment is favourable.

Clinical manifestation-

- Vaginal discharge.
- Lower abdominal, pelvic pain and tenderness that occurs after menses.
- Pain usually increase during voiding or defecation.
- Others are –fever, general malaise, anorexia.
- Nausea , headache, possibly vomiting.
- Symptoms may be actue or severe.

DIAGNOSIS-

- History taking.
- Physical examination of gyanecological importance(it reveals tenderness on palpation and movement of cervix and uterus)
- Blood culture.
- Sonography.

MANAGEMENT-

- Patient's with mild infection are treated in out patient department but hospitalization may be necessary in some cases.
- Bed rest.
- Intravenous fluids.
- Broad spectrum iv antibiotic are started.
- If patient has abdominal distension than nasogastric intubation and suction are intiated.
- Treatment of sexual partner is also needed.

NURSING MANAGEMENT-

- Monitoring vital signs.
- Maintaing bed rest and fowler's position during hospital stay.
- Note amount and characterstics of vaginal discharge.
- Health education regarding safe sex and on personal hygiene.

- **OVARIAN CANCER**

OVARIAN CANCER

- Ovarian cancer is very distressing disease to patients and health care provider because of its silent feature it came in diagnosis usually in later stages.
- It causes more death then any other cancer of female reproductive system disorder.About 75% cases detected in later stage.
- Malignant neoplasma of ovary can occur at any age, including infancy and childhood.
- Most frequent in women between 55 to 65 years of age.
- Higher incidence in industrialised countries excepts JAPAN.

Cusative factors:--

- Exact etiology is not know but several risk factors are there to dispose women to ovarian cancer these are following:--
  - Hereditary
  - Endocrine
  - Industrialized exposure
  - Women having BRCA-1 GENE mutation have higher chances.
  - Exposure to talk , asbestos, diet high in meat and animal fats and high milk consumption all these linked to ovarian cancer.
  - Nulliparity,infertility, anovulation.

PATHOPHYSIOLOGY:--

- The four main type of ovarian cancer are:--
  1. Epithelium; serous, mucinous.
  2. Germ cell:
  3. Gonadal stroma
  4. Mesenchyma.

  They are having two pattern of metastasis; lymphatic and direct. Primary lymphatic drainage of the ovary is thought the retroperitoneal nodes surroundin the renalilium. Secondry drainage is through the inguinal lymphatics.ovarian cancer directly metastasizes to the abdominal cavity.

CLINICAL MANIFESTATION

Usually it is asymptomatics.

- In later stage
- Pelvic discomfort, lower back pain, breast tenderness
- Weight change , abdominal pain, gastroesophageal reflux.
- Nausea vomiting, constipation and urinary frequency.
- Increase in abdominal girth.
- Bowel and bladder dysfunction, dysparenuia
- Menstrual irregularties.
- Ascites , abnormal uterine bleeding.

Diagnosis:--

- Clinical history.
- Physical examination.
- USG & TVS.
- MRI.
- CT SCAN.
- Laparotomy
- Tumor marker.
- CA 125.
- Screeing for BRCA 1,2

TREATMENT:--

SURGERY;-- surgery is the primary therapeutic approach and usually involves TAH BSO.Ascites fluids or washing are submitted for cytology.

- All the tissue of pelvis are carefully observed and sent for cytology.

ADJUVANT THERAPY:--

- STAGE 1ST :--CHEMOTHERAPHY.
- STAGE 2ND :--INSTILLATION OF RADIOACTIVE PHOSPHORUS into the peritoneal cavity or combined chemotheraphy.
- STAGE 3RD :--SURGICAL REMOVAL OF TUMOR.

PHARAMOCOLIGICAL MX.

- CHEMOTHERAPHY:--
- cyclophosphomide
- cisplatin
- carbop lastin
- PACLITAXEL

NURSING AMNAGEMENT--

- Emotional support to the patient.
- Comfort measures.
- Imaprting information.
- Pre operative management—
  - Bowel preparation.
  - Interavenous fluid support.
  - Pre operative medicines.

•ABNORMAL UTERINE BLEEDING

Menorrhagia

MENORRHAGIA {Syn: Hypermenorrhoea)

Definition

- Menorrhagia is defined as cyclic bleeding at normal intervals; the bleeding is either excessive in amount (> 80 ml) or duration (> 7 days) or both.
- The term menotaxis is often used to denote prolonged bleeding.

Causes

- Menorrhagia is a symptom of some underlying pathology — organic or functional.

1. Organic

a.Pelvic:

- Pelvic pathology

Due to congestion, increased surface area or hyperplasia of the endometrium.

- Fibroid uterus
- Adenomyosis
- Pelvic endometriosis
- IUCD *inutero*
- Chronic tubo-ovarian mass
- Tubercular endometritis (early cases)
- Retroverted uterus — due to congestion
- Granulosa cell tumour of the ovary

B.Systemic

- Liver dysfunction — failure to conjugate and thereby inactivates the oestrogens.
- Congestive cardiac failure
- Severe hypertension

c.Endocrinal

- Hypothyroidism
- Hyperthyroidism

d.Haematological

- Idiopathic thrombocytopenic purpura
- Leukaemia
- von Willebrand's disease
- Platelet deficiency

e.Emotional upset

2. Functional

- Due to disturbed hypothalamo-pituitary-ovarian-endometrial axis.

Common causes of menorrhagia

- Dysfunctional uterine bleeding
- Fibroid uterus
- Adenomyosis
- Chronic tubo-ovarian mass

DIAGNOSIS :

- Long duration of flow,
- passage of big clots,
- use of increased number of thick sanitary pads,
- pallor and low level of haemoglobin give an idea about the correct diagnosis and magnitude of menorrhagia.

TREATMENT:

The definitive treatment is appropriate to the cause for menorrhagia.

METRORRHAGIA

Definition :

- Metrorrhagia is defined as irregular, acyclic bleeding from the uterus.
- Amount of bleeding is variable.
- Then again, irregular bleeding in the form of contact bleeding or intermenstrual bleeding in an otherwise normal cycle is also included in metrorrhagia.
- In fact, it is mostly related to surface lesion in the uterus .

Menometrorrhagia is the term applied when the bleeding is so irregular and excessive that the menses (periods)

Causes of acyclic bleeding

- DUB — usually during adolescence, following childbirth and abortion and preceding menopause
- Submucous fibroid
- Uterine polyp
- Carcinoma cervix and endometrial carcinoma

Treatment

- Treatment is directed to the underlying pathology.
- **Malignancy is to be excluded prior to any definitive treatment.**

- **AMENORRHEA**

Amenorrhea

Amenorrhea is a term describing the absence of a woman's menstrual period during the age when the woman is reproductive.

Note: Pregnancy and lactation can cause Amenorrhea.

Amenorrhea: The definition

Primary amenorrhea is:

- the absence of menses (blood and discharge from the uterus) by 14 years of age. Additionally, primary amenorrhea includes the absence of secondary sexual chch growth and development.

- the absence of menses by 16 years of age with normal secondary sexual chch growth and development

Amenorrhea: The definition

Secondary amenorrhea is:

- The absence of menses for 3 cycles or six months in women who have previously menstruated regularly

Amenorrhea: Causes

Primary amenorrhea causes are:

- Extreme weight gain
- Congenial abnormalities of the reproductive system
- Stress
- Excessive exercise
- Eating disorders
- Polycystic ovarian syndrome
- Hypothyroidism
- Turner Syndrome
- Imperforated Hymen
- Chronic illness
- Pregnancy
- Cystic fibrosis
- Congenial heart disease
- Ovarian or adrenal tumors

Amenorrhea: Causes

Secondary amenorrhea causes are:

- Breast feeding
- Emotional stress
- Malnutrition
- Pituitary, ovarian, or adrenal tumours
- Depression
- Pregnancy
- Hyper thyroid or hypothermia
- Hyper prolactinemia
- Rapid weight gain or loss
- Chemotherapy or radiotherapy
- Vigorous excrete
- Kidney failure
- Colitis
- Tranquilizers or antidepressants
- Post partum pituitary necrosis
- Early menopause

Amenorrhea: Assessment

A medical assessments should include:

- History of etiologic factors
- Physical examination for:
  - Nutritional status
  - Weights, height and vital signs
  - Signs of eating disorder (hypothermia, bradycardia, hypertension, and reduced subcutaneous fat)
  - Androgen excess e.g. facial hair and acne
  - Delayed puberty: absence of facial hair and axillary hair
- Laboratory tests for:
  - U/S
  - Pregnancy test
  - Thyroid function test
  - Prolactine levels
  - If high level FSH: indicate ovarian failure
  - If high level of LH: indicate gonadal dysfunction
  - Leprascopy
  - CT

Amenorrhea: Treatment

To treat Primary amenorrhea:

- Correct the underlying causes
- Oestrogen replacement therapy
- If pituitary tumour: treatment with surgical resection, radiation and drug therapy
- Surgery to correct abnormalities of genital tract

Amenorrhea: Treatment

To treat secondary amenorrhea:

- Cyclic progesterone
- Promocriptime to treat hyperprolactinemia
- GnRH: when the cause is hypeothalamic failure
- Thyroid hormone replacement

Amenorrhea: Nursing Intervention

Nurses will:

- counsel and educate patients
- address the diverse causes of amenorrhea, the relationship to sexual identity, possible infertility
- inform the woman about the purpose of each diagnostic test
- sensitive listening, interviewing, and presenting treatment options
- Nutritional counseling
- Emphasize healthy life style

Amenorrhea: Teaching guidelines for maintaining a healthy lifestyle

- Balance energy expenditure with energy intake
- Modify diet to maintain ideal weight
- Avoid excessive use of alcohol and mood-altering or sedative drugs
- Avid cigarette smoking
- Identify areas emotional stress and seek assistance to resolve them
- Balance work, recreation, and rest
- Maintain a positive outlook regarding the diagnosis and prognosis
- Participate in ongoing care to monitor replacement therapy or associated conditions.
- Maintain bone density through:
  - calcium intake(1,200-1.5 mg or more daily)
  - weight-bearing exercise(30 minutes or more daily)
  - hormone replacement therapy

- **DYSMENORRHOEA**

DYSMENORRHOEA:

- **Dysmenorrhoea :**Derived from the Greek meaning difficult monthly flow,
- the word dysmenorrhoea has come to mean painful menstruation.
- Dysmenorrhoea can be classified as either
- 1.Primary
  2. secondary

- Primary dysmenorrhoea:
- In this type there is no pelvic pathology.
- Secondary dysmenorrhoea:
- implies underlying pathology which leads to painful menstruation.

CAUSES OF SECONDARY DYSMENORRHOEA:

- 1. uterine fibroid.
- 2.endometriosis.
- 3.pelvic inflammatory disease.
- 4.adenomyosis.
- 5.chronic pelvic congestion.
- 6. Intra uterine device.

PRIMARY DYSMENORRHOEA:

- **The prevalence of dysmenorrhoea**:
  - is high about 72%.
  - nearly 40% regularly used medication for the pain and 8% stayed absent from work or school at every period.

AETIOLOGY

1. Primary dysmenorrhoea is associated with uterine hypercontractility characterized by excessive amplitude and frequency of contractions and a high ‘resting’ tone between contractions.

2. During contractions endometrial blood flow is reduced and there seems to be a good correlation between minimal blood flow and maximal colicky pain.

3. Prostaglandin and leukotriene levels elevated.

PRESENTATION AND ASSESSMENT:

- In general primary dysmenorrhoea appears 6–12 months after the menarche when ovulatory cycles begin to become established.

- The early cycles after the menarche are usually anovular and tend to be painless

- The pain usually consists of lower abdominal cramps and backache and there may be associated gastrointestinal disturbances such as diarrhoea and vomiting.

Symptoms occur predominantly during the first 2 days of menstruation.

DIAGNOSIS OF PRIMARY DYSMENORRHOEA:

- The diagnosis of primary dysmenorrhoea is one of exclusion .
- If symptoms are typical of primary dysmenorrhoea, a therapeutic trial may be embarked on before considering any examination and investigation especially in adolescents

- If clinical evaluation raises suspicion of secondary dysmenorrhoea transvaginal sonography (TVS) or magnetic resonance imaging (MRI) or laparoscopy should be considered.

- if symptoms of primary dysmenorrhoea are not alleviated with either NSAIDs or the combined oral contraceptive pill, secondary causes of dysmenorrhoea need to be considered

MANAGEMENT:

- Women will usually seek medical advice when self-help measures such as heat and over the counter NSAIDs have failed .
- Reassurance and explanation.
- The mainstays of treatment are NSAIDs and

the combined oral contraceptive pill, the latter especially when fertility control is required.

1.NON-STEROIDAL ANTI-INFLAMMATORY DRUGS :

-COX-1 inhibitors : such as mefenamic acid, naproxen, ibuprofen and aspirin are all effective .

- Ibuprofen is the preferred analgesic because of its favourable efficacy and safety profiles.

-Commencing treatment before the onset of menstruation appears to have no demonstrable advantage over **starting treatment when bleeding starts.**

-This observation is compatible with the **short plasma half-life of NSAIDs.**

2. THE COMBINED ORAL CONTRACEPTIVE PILL

- They are thought to act by inhibiting ovulation and decreasing endometrial production of **prostaglandins and leukotrienes** by inducing endometrial atrophy and therefore reducing the amount of endometrial tissue available to produce these mediators.

3.OTHER HORMONAL METHODS:

- Although primarily designed for parous women, the LNG-IUS may be an effective treatment for women who have a contraindication to either NSAIDs or the combined oral contraceptive.
- alternatives include depot progestogens used for contraception Clinically they are effective since they render most women amenorrhoeic.

CHECK YOURSELF:

- 1. What is the term used for pain during menstruation??

- A) dysmenorrhea
- B) dyspepsia
- C) dyspariunea
- D) metrorrhagea

- 2.The term used for absence of menstruation cycle ??

- A) dysmenorrhea
- B) menorrhagia
- C) thelarche
- D) amenorrhea

- 3.Irregular,acyclic bleeding from the uterus is termed:

- A) menorrhagia
- B) epimenorrhea
- C) metrorrhagia
- D) dysmenorrhea

- 4.The most common cause of pelvic inflammatory disease is:

- A) mycobacterium tuberculosis
- B) streptococcus
- C) staphylococcus
- D) gonorrhea

- 5. Abnormal proliferation of uterine endometrial tissue outside the uterus is known as:

- A) cystic fibrosis
- B) endometriosis
- C) metrorrhagia
- D) menorrhagia

- 6 Inflammation of lining of uterus is known as:

- A) vaginitis
- B) endocervicitis
- C) adenomyositis
- D) endometritis


Thank you