Block III

**GYNAECOLOGIC NURSING**

**Main objective**

To acquire knowledge, skills and attitudes that will be used in producing quality nursing care to persons with gynaecological disorders as well as promote family unity.

**Content**

1. Review anatomy and physiology of the female reproductive system – (homework)
2. Review of the menstrual cycle
3. History taking
4. Physical examination – Bimanual pelvic exam, digital exam, and general physical exam
5. Gynaecologic investigations
6. Describe common gynaecologic disorders using :-
   * + Aetiology/causes
     + Epidemiology
     + Pathophysiology
     + Examinations, Investigations, and Test
     + Treatment and Management
     + Complications both short term and long-term and prognosis
     + Prevention and Control
7. Common disorders include
   * + Disorders of Menstruation
     + Infertility
     + Ectopic pregnancy
     + Cervical cancer
     + Breast cancer
     + Ovarian cysts
     + Uterine fibroids
     + Uterine prolapse
     + Endometriosis
     + Inflammatory conditions – Vaginitis, PID, cervicitis, Bartholin’s abscess
     + Vaginal fistula
     + Menopause

**Definition –** Gynaecology is the study of the conditions (diseases) that affect female reproductive system.

Anatomy and physiology of female reproductive system

External genitalia (Vulva)

* Mons pubis
* Labia majora
* Labia minora
* Clitoris – highly developed nervous supply
* Vestibule -
* Bartholin’s glands – secrete mucus
* Hymen – mucous membrane with small openings

Internal Genitalia

* **Vagina** – a fibro-muscular canal lined with stratified squamous non-keratinised epithelium, posteriorly longer than the anterior aspect (9 -7 cm) but elastic in nature. Has no glands of its own but the epithelium is thick and rich in glycogen. The glycogen is broken down by the Doderlein’s bacillus to produce lactic acid which is responsible for acidic nature of the vagina.
* **Cervix** – it is narrower around the vaginal portion and projects to form the fornices. It has deep glandular follicles that secrete clear alkaline mucus. The epithelium is columnar and ciliated in the upper third and stratified squamous epithelium covers the lower third. Where these two epithelia meet is called *Squamo-Columnar Junction* or the transitional Zone. The SCJ is an area of very rapid cell division thereby 90% of all cervical cancers arise from this zone
* **Uterus –** a hollow muscular pear shaped structure that weighs 70grams (non-gravid). Grossly, the uterus is divided into three parts. I.e. Body (corpus), Isthmus, and the cervix. The uterus contains three layers – the outer layer; serous layer/ peritoneum, the myometrium, and Endometrium
* **The Salphinx –** extends outwards from the uterine cornua and near the ovary, approx 10M long and contains the interstitial portion, Isthmus, Ampulla, and infundibulum
* **Ovary –** attached to the uterus by the ovarian ligament and covered by the peritoneum. Activities of the ovaries is controlled by the hormones
  + - **Oestrogen –** ovaries, corpus luteum, and placenta
    - **Progesterone –** corpus luteum and adrenal glands
* **Breasts –** Apocrine gland or (modified sweat gland) located on the pectoralis muscle and consists of Lobes, lobules, and acini.

**REVIEW OF THE NORMAL MENSTRUAL CYCLE**

The cycle consists of a series of changes that take place in the ovaries and the uterine walls due to hormonal influence on the structures although the changes are regulated by the feed-back mechanisms. The hypothalamus secrets the Luteinizing releasing hormone which stimulates the anterior pituitary to secrete Luteinizing hormone and the follicle stimulating hormone

The LH stimulates the dev’t of the corpus luteum and secretion of the progesterone while FSH promotes maturation of the ovarian follicles and secretion of Estrogen

PHASES

1. **Proliferative phase / Follicular phase** – follows the menstruation and lasts till ovulation. During this stage, there’s stromal and glandular growth in preparation to receive the fertilised ovum. Three layers are formed, i.e. The Basal layer,(rudiments) the functional layer,(tubular glands) and cuboidal ciliated epithelial layer (Covers the FL and dips down to the tubular glands) Primarily under control of Estrogen
2. **Secretory phase –** follows ovulation (Progesterone), the Endometrium becomes thick, oedematous or spongy and the secretory glands increase production of the mucus which assists the spermatozoan motility. The uterine and the cervical glands secrete mucus too.

Return to premenstrual phase / follicular phase is automatic whenever there is no fertilization

1. **Menopause –** Cessation of menses due to depletion of the primordial germ cells and therefore secretion and release of the ovum fails

**GYNAECOLOGIC ASSESSMEMNT OF A PATIENT**

History taking, physical examination, and Laboratory investigations

1. Collect Bio – data
2. Have a brief statement of the general nature and duration of the chief / present complains. And the complains should be recorded in a chronological manner
3. Ask about any abnormal menstrual loss (-n- 35ml – 80ml)
4. Ask about pattern of bleeding (ir/regular), spotting, No of pads/24hrs during menses, blood clots / flooding
5. Find out if there’s pelvic pain, the site, nature, and relationship with menses; Ask about anything that may aggravate or alleviate pain
6. Ask about vaginal discharge – amount, odour, bloodstained or not
7. Ask about previous gynaecologic history and the date of the last cervical smear
8. Collect the client’s obstetric history
   * 1. Abnormality during pregnancy, labour and puerperium
     2. No. of miscarriages (if any)
     3. Any pregnancy termination
     4. Request to know about the cycle length, LMP, FP Hx
     5. Sexual history (dyspareunia, contact bleeding – during or after coitus
9. In cases of infertility, establish time of ovulation and history of coitus around the fertile period (frequency, quality, right route and contraception)
10. Medical – Surgical history
11. Family – Social history – The type of a relationship she is in (Marital status)
12. Occupation and level of income
13. History of Diabetes Mellitus in the family
14. Review of the body systems : Prepare the client for physical exam

**PHYSICAL EXAMINATION**

* General appearance – the gait, assess responsiveness, level of intelligence, assess the affect/mood, observe non-verbal communication from the client
* Examine palms, mucosa membranes, for any evidence of anemia
* Observe the client’s face and eyes (signs of thyroid insufficiency)
* Palpate thyroid to confirm visible enlargement
* Palpate the left side for supra-clavicular nodes (abdominal malignancy, these nodes are enlarged) Troissier’s sign
* Breast examination as described earlier on..ref.
* Abdominal examinations – (inspect, palpate, percuss, auscultate), the client should empty the bladder
* Inspection – note the contour of the abdomen, any obvious distension, masses, scars, dilated veins, striae and rule out any herniation
* Palpation – first locate the site of pain, if any (to be the last part to be palpated), examine the masses, rule out organomegally
* Percussion – particularly useful if free fluid is suspected, in case of ascites, there is shifting dullness, fluid thrill can be elicited, and there could be enlarged urinary bladder
* Auscultation – listen to the bowel sounds to R/o acute abdomen, paralytic ileus in post-operative patients

**PELVIC EXAMINATION** – Obtain verbal consent, provide privacy, but a chaperone s’d be present during any vaginal or rectal Xm, (you should be gloved)

* Inspect external genitalia and note any manifestations of clinical significance e.g.…….?
* R/o stress incontinence by asking the client to cough
* R/o utero-vaginal prolapse by requesting the client to strain down (bear-down)
* Do a digital palpation to locate the cervix and R/o pelvic tenderness, masses
* Palpate the uterus for size, shape, mobility, position, and tenderness
* Do a bimanual palpation – for the fallopian tubes and the ovaries
* Palpate the adnexas – shortened and hardened in endometriosis, the uterus feels immobile
* Confirm rectocele (rectal prolapse) or R/o enterocele by gently feeling the upper third of the vaginal
* A Cusco’s bivalve speculum should be used in-order to visualise the cervix. Also, you could benefit more to take a specimen at this time if deems necessary
* Do a Sim’s speculum to visualize the vaginal walls cos at times there could be inflammation
* RECTAL Examinations are done when the V.E is not possible (severe inflammation, virgin), or in case of inflammation of the fallopian tubes cos they’re better reached rectally
* Record these findings

**GYNAECOLOGIC INVESTIGATIONS**

1. **High vaginal Swab** – indicated for any vaginal discharge requiring culture and sensitivity. Ensure you have sterile gloves, good light source, sterile swabs, sanitary pad and Cusco’s spec
2. **Pap smear (**papanicolaou**)** – indicated for detection of any cytological abnormalities, screen for cervical dysplasia, and Ca cervix…or any intraepithelial neoplasia. The specimen must consist of the scrapping of the cervix and the epithelial cells, spread on a glass slide and fix with alcohol. Label the specimen and take it to the lab…for cervical intraepithelial neoplasia

Results may be like, CIN I – mild neoplasia; II – moderate dysplasia; early carcinoma; III – severe dysplasia

1. **Cervical biopsy** – it is a cauterization procedure done under local anaesthesia by use of a colposcopic machine to take cervical tissue for specimen to confirm malignancy.

* **Preparations of the patient** – obtain consent, explain the procedure, done a week after menses cos that is when the cervix is least vascularised.
* **Procedure** – clean the perineum and the vulva, insert the Cusco’s spec into the vagina properly expose the cervix, then the colposcopic machine biopsy forceps is used to take a bit of the cervical tissue. Preserve in 50% Formalin, pack the cervix to prevent any bleeding
* **Post procedure care** – Allow client rest for like one hour, advice her to avoid heavy lifting (bleeding) before 24hrs, refrain from coitus for 2-3 days, avoid douching, advice her to return for gauze removal in 4-5 day post procedure; if not possible then within 24 hours. Advice the client on sitz bath

1. **Colposcopy – (a Colposcope has a magnifying lens like a binoculars) x15-20** to allow to study and enhance direct observation to detect any abnormal cells associated with pre-malignant or malignant lesions of the cervix. It’s also associate with immediate biopsy or pap smear for histopathology.
2. **Pelvic ultrasound –** Done to confirm suspective tumors and lesions of the pelvic organs and isolate the state of the other organs within the pelvic cavity.
3. **Laparoscopy** – for inspection of the pelvic cavity through use of an endoscope passed thru the abdominal wall. Should be done cautiously cos it may cause trauma and complications may develop from injury or infection if aseptic technique was not followed to the last detail
   * **Indications** – detect ectopic pregnancy (Tubal Pregnancy), confirm endometriosis, severe painful pelvic region of unknown cause/origin, investigation of infertility, for bilateral tubal ligation, excision of an ovarian cyst, reserved for women who’re less than 35yrs with malignancy and who, conservation of the uterus/ovarian tissue is important
   * **Complications** – accidental perforation of the abdominal organs, Haemorrhage from any of the damaged vessels of abdominal organs, secondary infection from unnoticed bowel damage resulting in peritonitis.
4. **Radiological investigations** –
   * Trans-vaginal ultra sound – used to demonstrate presence of an ovarian mass & detect any malignancy
   * Intravenous urogram – used to R/o obstruction of the blood circulation around the uterus
   * Hysterosalpingiography – R/o sub-fertility in order to assess the patency of the uterus and the fallopian tubes, contours of the uterine cavity, cervical incompetence.
   * Magnetic resonance imaging – uses radiofrequency in the presence of a magnetic field and create cross-sectional images of the body
   * Chest X-ray – to rule out metastasis of cancerous tissue to the lungs
   * Pelvic X-ray – to visualize any calcification of the pelvic tumour

**MENSTRUAL DISORDERS**

Clinicians should always be compassionate and empathetic during care, treatment, and referral of a person with menstrual disorders. Menstrual disorders are very common, they can cause major social and occupational disruption and affect an individual’s psychological well-being

1. **MENORRHAGIA** – heavy menses or blood loss of more than 80mls per period or blood loss that causes a fall of Hb.
2. **Causes** – uterine tumours/fibroids, Pelvic Inflammatory Disease, endocrine disturbances, clotting disorders (Von Willebrand’s disease) , endometriosis, and thyroid diseases, drug therapy
3. **Signs** and **symptoms** – excessive menstrual loss occurring over a several consecutive cycles. Pale extremities and mucosa membranes due to anemia, easy fatigability, looks tired, feeling of pelvic heaviness.
4. **Diagnostic tests**

– Proper detailed history taking, Pelvic examination (no V.E), Full haemorrhage (Quality and Quantity of blood), Transvaginal ultrasound, Endometrial biopsy, Thyroid function tests, Hormonal essay study for luteinizing & Follicle stimulating hormones, Adrenal function tests (adrenocorticoids)

1. **Treatment**
   * + **Medical –** Mefenamic acid / Tranexamic acid or NSAIDs if not contraindicated. Danazol (rarely used cos it causes severe acne, hirsutism, wt gain, voice changes. COCs e.g. Microgynon. Levonogestrol intrauterine system; Progesteron secreting IUCD,
     + **Surgical** – prescribed for clients whose medical Rx has failed. This includes;
     + endometrial ablation (basalis layer is destroyed) achieved through use of heated normal saline introduced into the endometrial cavity by use of a cervical catheter; or via a laser treatment
     + hysterectomy –Sub-total (Cx retained, bilateral oophorectomy)
       - * total **– TAH –** entire uterus is removed + Boo done
     + **Nursing intervention**
     + encourage the client to have dietary supplementation of iron
     + Enc. Rest and explain rationale
     + Provide educational opportunities to allay anxiety and depression
     + Enc. Prompt consultation when need be
     + Monitor vital signs, interpret & intervene appropriately
     + Offer pre-op care where surgical intervention is intended, re-assure the client and the partner
     + Care of client & partner, relatives & friends
     + Teach the client on self hygiene, estimation of blood loss (how many pads changed, flooding in the pad)
     + Empathize and offer psychological support and avail all the necessary information.
2. **DYSMENORRHEA** – Painful menstruation - Very common (with an average of between 45-95%) of women of reproductive age experiencing this. The pain is crampy, suprapubic

**Classification**

10 Dysmenorrhoea – there is no underlying pathology that can account for the pain. Caused by prolonged menstrual flow, younger than normal age, cigarette smoking

20 Dysmenorrhoea – This is where there is identifiable organic pathology associated with dysmenorrhea

Caused by; Endometriosis, PID, adenomyosis, Asherman’s syndrome, cervical stenosis. Dysm typically starts at the onset of menstrual flow and it lasts 8 \_ 72 hours

**Investigations**

Proper history taking is adequate for the diagnosis but in persistent symptoms, consider HVS, pelvic Ultrasound, endo-cervical swab to rule out infections, i.e. Neisseria gonorrhoea, Chlamydia trachomatis

Rx. – Nsaids, e.g. Naproxen, brufen, Mefenamic acid

* + Antispasmodics e.g. buscopan
* Oral contraceptives especially pop’s and coc’s (thinning of the endometrium)
* Endometrial ablation, or neurotomy

1. **PRE – MENSTRUAL SYNDROME (PMS)**

The occurrence of cyclical, somatic, psychological, and emotional symptoms that occur in the luteal phase of the menstrual cycle and resolve by the time the menses ceases.

**Causes** – variations in the sex steroidal levels especially progesterone spike after the mid-cycle, luteal surge. Lowered serotonin levels may play a role in pre-menstrual syndrome

**Symptoms** – Breast tenderness (sense of bloating), cyclical weight gain, 3\_12 days b4 menses, abdominal cramps, fatigue, headache, mild depression.

**Diagnosis** – Proper history taking to rule out pre-existing psychiatric disorder thru mental status assessment. Monitor cyclism of the symptoms – use symptoms chart so that the client can record what she believes are symptoms. Assess the severity of the symptoms by how they affect ADLs

**Medical Mx** – reassure the patient; administer mild tranquilizers (Diazepam 5mg Nocte), diuretics e.g. Frusemide 25mg OD, Nsaids to treat physical symptoms, SSRI e.g. Fluoxetine

**Nursing Mx –** Monitor vital signs, and pt’s weight gain, provide nutritional counselling (balanced diet, low Na+ diet, minimise coffee, and alcohol), Encourage rest during symptoms and report the case when symptoms worsen.

1. **AMENORRHOEA**

This is the absence of menses; a condition considered normal in physiological situation called pregnancy, exclusive breastfeeding, and prior to onset of puberty.

* + - 1. Primary amenorrhea – failure to develop 20 sexual characteristics by 14 or menarche by 16 yrs
      2. Secondary amenorrhea – the cessation of menses in a period ≥ 6 months in a normal woman of reproductive age without pregnancy

**Causes –**

* Reproductive outflow tract disorders
  + Asherman’s syndrome (severe scarring of the Endometrium and cervical endothelium causing cervical stenosis,
  + imperforate hymen, presence of transverse vaginal septum, testicular feminization syndrome
* ovarian disorders
  + Anovulation leads to no formation of the Endometrium
  + Gonadodysgenesis – turner’s syndrome
  + Premature ovarian failure – early menopause due to depleted stock of the functional primordial germ cells/follicles
  + Resistant ovarian syndrome – to gonadotropin releasing hormone
* Pituitary disorders
  + Pituitary tumors, e.g. Prolactin secreting type
  + Pituitary necrosis – Sheehan’s syndrome whereby there’s no sex hormone secretion.
* Hypothalamic malfunctions
  + Caused by excessive loss of weight (15-25%)
  + Excessive exercises or optional starving, or anorexia nervosa
  + Stress could switch off the hypothalamic stimulation of the pituitary

**Treatment**

Cause dependent but for ovarian disorders give cocs & pops, hormonal replacement therapy (Estradiol mg OD for 3/52, and progesterone 1/52

For other causes, referral to a specialist (gynaecologist) is encouraged

1. **POST - MENOPAUSAL BLEEDING**

For women who are not taking hormonal replacement therapy, any bleeding during menopause is abnormal. For those on HRT, there is bleeding during the free period, i.e when the progesterone is withdrawn. Any other bleeding outside the free period is called unscheduled bleeding

* **Cause**s
  + Atrophic vaginitis – the vaginal epithelium becomes very thin and breaks down due to low levels of estrogen
  + Endometrial cancer – the incidence and the risk increases with age, for those not on HRT, the risk is very high.
* Differential diagnosis
  + Endometrial cancer, cervical malignancy, endometrial and cervical polyps
* Investigations
  + Proper history taking, pelvic exam, cervical smear, ultrasound, endometrial biopsy when the U/S shows a thickness of more than 5mm
* Treatment
  + Treat the cause, treat anemia, HRT should be prescribed

1. METRORRHAGHIA - This is the uterine bleeding not related to menses and is at irregular intervals Causes – Hormonal imbalances, endometriosis, uterine fibroids, uterine cancer. May cause severe anemia and cause mild depression to the client.
2. MENOMETRORRHAGHIA – This is a prolonged or excessive uterine bleeding, i.e. more than 5days occurring at irregular intervals and more frequently than normal intervals
3. INTERMENSTRUAL BLEEDING (spotting) – uterine bleeding of variable amounts occurring between regular menstrual periods.
4. Polymenorrhea – uterine bleeding occurring at regular intervals of less than 21 days
5. Oligomenorrhea – uterine bleeding occurring at intervals of btn 35 days and 6 months

**INFERTILITY / SUB – FERTILITY**

Inability of a couple to obtain a clinically recognisable pregnancy after a year of unprotected regular coitus (3\_5)

Classification

* 10 infertility – when the couple has never conceived in the past despite regular coitus
* 20 infertility – a couple that has conceived in the past but have failed to since twelve months
* Involuntary – when a couple has never tried for a pregnancy and they don’t intend to

Causes (Female)

* Ovulation problems – arise from defects of the hypothalamus, pituitary or ovary whereby many factors disrupt normal pulsatile release of the gonadotropin releasing hormone leading to disorders of ovulation due to absence of LH/FSH
  + Predisposing factors – stress, psychological disturbance, weight changes (severe obesity or weight loosing syndrome), tumors in the hypothalamus, hypo/hyperthyroidism, hyperprolactinemia, renal failure, hepatic dysfunction, phenothiazine therapy, polycystic ovarian syndrome, impaired oocyte production, premature ovarian failure, complications of pelvic surgery.
* Tubal dysfunction – occurs when fallopian tube is damaged due to pelvic infection, endometriosis, STDs caused by *Chlamydia Trachomatis & Neisseria gonorrhoea or* any other pyogenic bacteria that causes pelvic sepsis/ after appendicitis or peritonitis
  + Fallopian tube damage impairs or curtails or stops oocyte pick up by fimbriae and also damage the tubal epithelium and lumen
* Disorders of implantation – involves defects related to endometrial development or production and growth of adhesion molecules which fuse together and form a scar which prevents implantation
  + Sub-mucous fibroids distort endometrial cavity and therefore no implantation
* **Please *–* infertility / fecundity**

**Male Sub-fertility**

Causes

* Disorders of spermatogenesis
* Impaired sperm transport due to obstruction of the conducting ducts due to DM or multiple sclerosis
* Ejaculatory dysfunction – due to conditions like aspermia (Azoospermia)

NB: Normozoospermia can be obtained with 2\_3 day’s abstinence from any form of masturbation or coitus

**WHO reference values for sperm – count**

* Volume – 2-5 mls
* Liquification – within 30 minutes
* Sperm conception – 20 M/ml per ejaculation
* Sperm motility 50% showing progressive motility
* Sperm morphology - 30% of normal shapes
* White blood cells – should be less than 1 M

These values are greatly affected by the psychotropic drugs which may also affect sexual functioning e.g antiepileptic agents, also antihypertensives, cancer drugs

**Diagnosis**

Proper history taking ask about alcoholism, cigarette smoking, coital frequency, difficulties during coitus, rule out psychological stress.

Enquire about pelvic history of injury, STIs, or any allegations of pregnancy and Assess for any testicular mass

**Management**

* Empathize
* Counsel on timing of the ovulation and abstain for some days before a trial.....a week after menstruation.
* Induce ovulation in case of primary anovulatory causes by use of Clomiphene citrate 50mg from day 2 of the cycle and you can icrease the dose to 100mg in the second cycle, or 150mg in the third and this is the maximum dosage for clomiphene citrate

S/E : will include ovarian enlargement, multiple pregnancy, and abortions due to congenital malformations, or preterm prelabour rupture of the membranes.

**ASSISTED CONCEPTION**

The commonly used techniques are

* Intra – uterine insemination
* Micro – epididymal sperm aspiration (MESA) technique to obtain male gametes, later introduced into the female reproductive tract using a syringe and an endocervical catheter
* In-vitro fertilisation – whereby the sperm and ova union is performed outside the body and a zygote is transferred into the fallopian tube or an embryo is transferred into the endometrial cavity using Trans – cervical catheter after which a low dose of progesterone is administered for luteal support.
  + This process depends on the availability of the health gametes. Pregnancy test is necessary to confirm the success of the process, and it is characterised by a higher level of HCG
* Complications
  + Ovarian overstimulation syndrome
  + Ectopic pregnancy
  + Multiple pregnancy

**DISORDERS OF EARLY PREGNANCY**

* Spontaneous miscarriages/ abortions
* Ectopic pregnancies Cervical/ Vaginal cancer symptoms
* Gestational trophoblastic disorder

**ABORTIONS**

It is the expulsion of the fetus or conceptus before it is viable (< 24 weeks of gestation) and most frequently occur in the first trimester.

Causes – chromosomal abnormalities

* Endocrine disorders especially DM, PCOS, luteal phase deficiency
* Elderly primigravidae (≥ 35 years)
* Uterine abnormalities e.g. Bicornuate uterus.
* Infections
  + Salmonella typhi, Malaria, CMV infection, Chlamydia Trachomatis, Herpes simplex
* Intentional or accidental ingestion of abortifacient agents

Types

1. **THREATENED ABORTION** – the cervical OS is normally closed

There is painless vaginal bleeding occurring between implantation and 24 weeks

The bleeding may resolve spontaneously in a few days never to recur, or may continue in small quantities or stop and start over after several days

**Features:** - having a normal values or level of HCG for gestation age and a normal intrauterine gestational sac, normal FHR, hematoma due to intrauterine bleeding especially at 6\_9 weeks when the definitive placenta forms.

**Investigations: -** Full hemogram (close analysis of WBC and Hb)

* Blood grouping and cross-matching.
* Ultra sound done and repeated after seven days to rule out persistence of the symptoms and conditions which may make abortion inevitable.

**Management –**

* Admit client and advocate for bed rest
* Reassure the client when the prognosis is good and empathise if the threatened abortion is imminent
* Administer prescribed analgesics – in-case there’s pain
* Offer psychological support in all areas of care
* Advocate for coital abstinence
* Void speculum exam if there is history of abdominal cramps or passage of tissues through the cervix
* Avoid vaginal examination
* Administer anti – D for those clients with Rh –ve because of the bleeding in the uterus

1. **INEVITABLE ABORTION**

Unavoidable situation whereby the conceptus is expelled because there are uterine contractions and the cervical OS is usually opened. Can be either complete or incomplete depending with whether or not all foetal parts and placenta have been expelled.

* Incomplete abortion is characterised by heavy or intermittent bleeding, passage of blood clots and passage of tissues and lower abdominal pains
* If these symptoms improve spontaneously, a complete abortion is likely.

**Investigations –**

* Ultrasound done to determine presence of the persistence of products of conception
* Blood grouping and cross matching**.**

**Management –**

* Take proper history from the client to determine if the products have been expelled.
* Admit the client
* Advocate for bed rest
* Intervene if there is any sign of anemia....may transfuse
* Administer broad spectrum antibiotics prophylactically
* Monitor the vital signs depending on the severity of bleeding of bleeding and interventions made. If on transfusion is done, monitor closely, rule out hypovolemic shock and systemic bacteraemia (Sharp increase in temp) through vital signs.
* Resuscitate the HV – shock with IV fluids and blood transfusion
* In-case of incomplete abortion, administer 0.5mg egometrine Stat. Or syntocinon 15 IU IM Stat. To control bleeding
* Inform the Gynaecologist for surgical intervention and prepare patient for cervical dilatation and curettage or Mechanical vacuum aspiration
* In preparation of the patient, prepare cervix with prostaglandins which helps in easy dilation of the cervical OS. So as to prevent cervical tears, uterine perforations or creation of a false passage.
* Ensure client safety during the procedure, regardless of their sanity or social status.
* Offer psychological support.
* Administer the prescribed analgesics, antispasmodics before the intervention is initiated.

1. **MISSED ABORTION**

This is when there is a gestational sac containing a dead embryo or fetus before 20 Wks gestation without symptoms of expulsion. The diagnosis is mainly made by failure to identify fetal hearts on U/s

The cervical OS is closed and uterine size is smaller for gestation age. There is chronic but light per-vaginal bleeding.

**Management –**

* Admit the client on preparation for evacuation of the uterus by D&C / MVA and part of preparation should include prophylactic antibiotics (Augmentin 625 mg Qid or at least 72 hours before the procedure.
* In case of any complications, transfuse with fresh whole blood because such clients stand a high risk for DIC (Disseminated Intravascular Coagulopathy)....so transfuse and give IV anticoagulants immediately.

1. **SEPTIC ABORTION**

Incomplete abortion is hugely associated with sepsis, fever, and foul smelling discharge and suprapubic tenderness. There may be little vaginal bleeding, uterine contractions, and a closed cervical OS and this favours the septic abortion to arise.

The main cause

* Mechanical interference of pregnancy i.e. passage of unsterile instruments through the cervical canal and thus transfer the micro-organisms.
* During incomplete abortion, the tissue debris encourage growth of micro-organisms...into pathologic levels.
* Remember to ensure hygiene of the client before the procedure..its a major concern.

Management

* Admit the client
* Prepare client through psychological support for speculum examination and high vaginal swab for culture and sensitivity.
* Prepare for evacuation of retained products.
* Monitor hemodynamics, i.e. BP, Pulse, Hb and intervene appropriately
* Administer the prescribed intravenous fluids and antibiotics....e.g, Metronidazole 500mg tds IV together with Cufuroxime 1g OD at least for a week followed by oral antibiotics which are organism specific for 5days\
* Monitor vital signs and severity of the condition
* Administer the prescribed analgesics, antipyretics and encourage bed rest
* Record all the interventions in the patient’s progress notes.

1. **RECURRENT / HABITUAL ABORTIONS**

This is when there are three or more consecutive abortions in one client. Such patient requires close monitoring during their fourth pregnancy for investigations to include;-

* Parental and fetal Karyotypes, Pelvic exam , Thyroid function tests, FHG, VDRL
* Widal test, Blood smear, Rule out gestational diabetes

Management

* Take proper history and if necessary admit the client
* Grouping and cross – matching
* Manage anaemia with hematinics and diet, or transfuse
* Control DM if present
* Administer Benzathine Penicillin 2.4 Mu IV/IM Qid for 4 wks or Erythromycin 500 mg tds for 4 wks
* Monitor vital signs and regulate BP
* In case of cervical incompetence, admit and advocate for Mc Donald’s (Cerclage) stitch and encourage bed rest
* Advice against straneous exercises or duties during this period until the fetus is viable
* Administer progesterone
* Advocate for Gynae follow up

**ECTOPIC PREGNANCY**

This is when the conceptus or the zygote implants outside the uterus in places like, the fallopian tubes, ovaries, cervix, or peritoneum. Most commonly in the fallopian tubes, with 25% (Isthmus), 55% (Ampulla), 17% (Infidibulum), 2% Cornua and 0.5% (Ovary).

**Risk factors**

* Advanced maternal age, Increased number of sexual partners
* IUCD – insertion without aseptic technique being observed, causes infections
* Smoking – reduces ciliary activity of the fallopian tube
* Congenitally long fallopian tube

**Causes**

* Every condition that delays fertilised ovum in the fallopian tubes, e.g. infections, trauma
* Pelvic tumours which distort fallopian tubes

**Signs and symptoms**

* Before rupture of the fallopian tube, there is slight abdominal distension and tenderness.
* History of amenorhoea
* Positive pregnancy test results
* Patient experiences localised peritoneal irritation on affected site
* Shoulder pain due to hemo-peritoneal diaphragmatic irritation
* After acute rupture of the fallopian tube, there is vomiting, vaginal bleeding (dark brown in colour), and signs of shock, hypotension, and fainting, agonizing pain making the patient restless, sweating, pain during pelvic examination.
* A mass can be felt on one side of uterus and on palpation, there’s a blood clot (pelvic hematocele) in the pouch of Douglas

**Diagnosis**

* Proper history taking, Pelvic examination – involves full head to toe exam
* Paracentesis – insertion of a long hollow needle or canulla to draw non-clotted blood.
* Culdocentesis – involves aspiration of contents of pouch of Douglas through the posterior aspect of the vaginal wall, and GxM, Hb estimation, Laparoscopy, Ultrasound

**Management**

* Resuscitate the patient, Admit the client, and provide psychological support during this time
* Give IV fluids, e.g. plasma volume expanders, peripheral parenteral nutrition depending in the severity anemia, you can transfuse.
* Prepare the patient for emergency laparatomy
* Recovery from Operation must be monitored closely by strictly monitoring the vital signs for any signs of shock or infection
* Administer broad spectrum antibiotics before prophylaxis
* Analgesics for pain, nutritional supplementation to encourage recovery sedating (Mild) to encourage and promote rest.
* Inspect the incision site to ensure no bleeding; if any tell surgeon observe asepsis
* Offer psychotherapy so that the patient and the relatives may understand their situation and so you should empathise
* Offer health education on future fertility...talk of contraception and pregnancy
* Advise patients for gynaecological review
* Refer to obstetrician for planning of future pregnancies

**HYDATID MOLE**

This is a condition in which the chorion degenerates during early pregnancy and turns into a mass of small cysts. These cysts are filled with fluid and look like small balloons

The fetus dies and cysts continue to grow faster than expected and they fill the uterus. It is a form of a benign growth or a condition which may turn into a cancerous condition

**Signs and Symptoms**

* Fetal parts are not felt on palpation and fetal heart is not present on ultra sound (HcG +ve)

**Diagnosis**

* History taking – reveal ≥ 2months amenorrhea, X – ray or ultra sound are recommended to rule out malposition, Ask for fetal movements

**Treatment**

* Counsel the couple and share information regarding the condition stating clearly the is no fetus or baby
* Prepare patient for evacuation of the uterus i.e removal of cysts, Closely monitor the vital signs
* Administer broad spectrum antibiotics to prevent ascending of infections
* Adminster the prescribed analgesics, Encourage general hygiene
* Advice for abstinence until the gynaecologist approves a fp methd may fail at thus time.

**INFLAMMATORY CONDITIONS**

**VAGINITIS**

[Vaginitis](http://www.healthscout.com/ency/68/594/main.html) is a term used to describe disorders that cause infection or inflammation of the vagina

These conditions can result from an infection caused by organisms such as bacteria, yeast, or viruses, as well as by irritations from chemicals in creams, sprays, or even clothing. In some cases, vaginitis results from organisms that are passed between sexual partners.

Vaginitis can be caused by several different organisms, sometimes at the same time, as well as by hormonal changes, [allergies](http://www.healthscout.com/ency/68/98/main.html), or irritations.

Vaginitis can also be caused by prolonged antibiotic use, [diabetes](http://www.healthscout.com/ency/68/150/main.html), excessive alcohol, steroid use, a weakened immune system, abrasions of the vagina, or tight non-cotton underwear.

**Causes and Risk Factors of Vaginitis**

There are six most common types of vaginitis. These are:

[**Yeast infections**](http://www.healthscout.com/ency/68/594/onelibrary.cfm?id=193) are a common cause of vaginitis. Yeast infections produce a thick, white vaginal discharge with the consistency of cottage cheese. Although the discharge can be somewhat watery, it is odorless. Yeast infections usually cause the vagina and vulva to be very itchy and red. An antibiotic taken for a [urinary tract infection](http://www.healthscout.com/ency/68/594/onelibrary.cfm?id=774) can kill "friendly" bacteria that normally keep the yeast in balance; as a result, the yeast overgrows and causes the infection.

**Bacterial vaginitis** results in a vaginal discharge. The discharge is usually thin and milky and is sometimes described as having a "fishy" odor. This odor may become more noticeable after intercourse. Since bacterial vaginitis is caused by bacteria, treatment is usually with antibiotics.

**Trichomonas**, commonly called "trick," is caused by a single-celled organism that is a member of the protozoa family of microorganisms. When this organism infects the vagina it can cause a frothy, greenish-yellow discharge. Often this discharge will have a foul smell. Women with trichomonal vaginitis may complain of itching and soreness of the vagina and vulva, as well as burning during urination. These symptoms may be worse after a menstrual period. This type of vaginitis can be transmitted through sexual intercourse.

**Chlamydia**, a [sexually transmitted disease](http://www.healthscout.com/ency/68/594/onelibrary.cfm?id=227), can cause vaginitis. Unfortunately, most women do not have symptoms. A vaginal discharge is sometimes present with this infection but not always. More often a woman might experience light bleeding especially after intercourse. [chlamydia](http://www.healthscout.com/ency/68/594/onelibrary.cfm?id=316)l vaginitis is most common in young women under the age of 30 who have multiple sex partners.

**Viral vaginitis** can be caused by [herpes simplex](http://www.healthscout.com/ency/68/162/main.html) virus that is spread by sexual intercourse. The primary symptom of herpes vaginitis is pain associated with lesions or sores. These sores are usually visible on the vulva or the vagina and can only be seen during a gynecologic exam.

**Non infectious vaginitis** is most often caused by an allergic reaction or irritation from vaginal sprays, douches, or spermicidal products. The skin around the vagina can also be sensitive to perfumed soaps, detergents, and fabric softeners. No infection is present.

**Symptoms of Vaginitis**

The common symptoms of [vaginitis](http://www.healthscout.com/ency/68/594/main.html) are itching, burning, and vaginal discharge that is different from the normal secretions. The itching and burning can be inside the vagina or on the skin or vulva just outside the vagina. Discomfort during urination or sexual intercourse may also occur.

If everyone with vaginitis had exactly these symptoms, then the diagnosis would be fairly simple. However, it is important to realize that as many as 4 out of every 10 women with vaginitis may not have these typical symptoms.

Frequently, a routine gynecologic exam will confirm vaginitis even if symptoms are not present. For this reason, it is important to have a gynecologic exam at regular intervals.

**Treatment of Vaginitis**

The key to proper treatment is proper diagnosis. Because the causes are varied, the medication prescribed may involve antifungal creams and suppositories and antibiotics. Vaginal creams and vaginal applications are often recommended first rather than oral medication.

Common medications used include Flagyl ([Metronidazole](http://www.healthscout.com/ency/68/214/main.html)), doxycycline, azithromycin, Diflucan, and over-the-counter yeast medications.

Some self-care techniques include vinegar douches or sitz baths in a solution of 1 teaspoon of vinegar for every gallon of water, and eating yogurt containing live [acidophilus](http://www.healthscout.com/ency/68/7/main.html) cultures. Sstudies have not proven whether or not these are effective.

Recurrent [yeast infections](http://www.healthscout.com/ency/68/193/main.html) (greater than 4 episodes per year) are sometimes treated with oral fluconazole (Diflucan) and itraconazole Sporanox), or vaginal clotrimazole (Mycelex, Gyne-Lotrimin, Femcare) for 6 months.

It is recommended to abstain from sexual intercourse until treatment is completed.

**Prevention of Vaginitis**

A number of simple habits can help minimize the risks of infection:

* Keep the vaginal area clean and dry, Avoid excessive douching and strong soaps and detergents
* Wear cotton underwear that absorbs moisture and keeps the vagina dry,
* Clean from front to back after a bowel movement
* Do not leave tampons or diaphragms in the vagina for long periods
* Avoid deodorized tampons
* Decrease intake of sweets, bread, and alcohol
* Eat yogurt or take acidophilus tablets, especially if you are taking antibiotics

**PELVIC INFLAMMATORY DISEASE (PID)**

It is an infectious process which involves one or more structures above the external OS of the cervix. It is essentially a consequence of STI’s but it can also be due to sequel of puerperal sepsis or septic abortion. This disease results when the micro – organisms of the lower genital tract migrate through the endocervix to the endometrial cavity and other structures.

**Risk factors**

* Multiple Sexual partners, Cigarette Smoking, Vaginal douching, and History of persistent STI’s and PID

**Clinical features**

i). **Acute PID**

* Lower abdominal pains, usually starting soon after the menses, Fever and chills, Malaise
* Bilateral adnexal tenderness, Irregular PV bleeding
* Vomiting – irritation of the pelvic cavity causes nervous response of the vagus and hypo-gastric nerves

ii). **Chronic PID**

* Chronic and concurrent abdominal pains, Dyspareunia, Mucopurulent discharge
* Anxiety and fear related to persistence of the condition
* Dysuria, Uterine and cervical tenderness – the cervix is excitable, and Infertility

**Diagnosis**

* Proper history obtained from the client, Speculum examination especially the sims’s spec
* Cervical swab for culture and sensitivity, Urinalysis, VDRL, Laparascopy
* Physical examination to rule out peritonitis, FHG and ESR

**Management**

* Acute – admit the client
* Administer broad spectrum antibiotics, e.g. amoxicillin, Metronidazole, (and analgesics to relieve pain)
* Organism specific antibiotics after culture and sensitivity
* Don’t use tetracyclines in case of pregnancy
* In cases where there is peritonitis, start IV fluids therapy, IV antibiotics, and parenteral analgesics and advice for laparatomy, Chronic – acute with peritonitis.

**Nursing Interventions**

* Provide non-judgemental and a very accepting attitude
* If patient presents with mucopurulent discharge she should be positioned in a semi-fowler’s which helps in drainage of d/c
* Apply heat to the abdominal area to improve circulation
* Administer prescribed medication and encourage compliance to therapy
* Advice the patience to have sitz bath and encourage general hygiene
* Relieve anxiety by professional reassurance – encourage the patient to express their feelings and ask questions which you should answer. Encourage the family and the significance others to provide emotional support to the client.
* Ensure treatment of sexual partner if infection was STI related
* Be compassionate and empathise always during this situation
* Teach the client on all FP methods and allow her to choose if she has not been on one

**UTERINE FIBROIDS**

These are benign tumours of the uterine smooth muscles, also called leiomyoma. Types of uterine fibroids are associated with where they arise.

* **Intra – mural** – those in the uterine wall (Myometrium)
* **Sub – mucosal** – protrude into the endometrial cavity
* **Sub – serosal** – fibroids that grow laterally and extend into the broad ligament
* **Pendunculated** – when the fibroids are attached to the uterus by a narrow pedicle containing blood vessels
* **Cervical –** located in the cervix and these are a very rare type

**Risk factors**

* Null parity
* History of fibroids
* Black Africans

Clinical presentations

* Painless abdominal bleeding
* Pressure symptoms in the bladder and rectum leading to either urinary frequency or retention.
* Increased abdominal size.
* Infertility in case of pendunculated prevent implantation and in case it occurs, there’s a high risk for a wrong lie
* Dyspareunia
* Presence of a mass arising from the pelvis or uterus.

**Diagnosis**

* Proper detailed history, Physical examination, Pelvic examination, Ultrasound, Magnetic resonance imaging, Fine needle aspirate (FNA)/biopsy, FHG, Erythrocyte Sedimentation Rate (ESR)

**Management**

* Administer anti-progestogen – reduce size of the fibroids
* Depending on number of kids, you can perform Myomectomy and preserve the uterus – that is if you want kids or want to retain the uterus
* Hysterectomy may be preferred if the whole uterus is affected
* So, offer pre-operative psychological support
* Assess client and evaluate how they feel on their self image, sexual functioning and self perception
* Discuss their (couple) fears; discuss the procedure to detail and the importance and implications of this procedure.
* Offer prophylaxis
* Post – operatively,
  + Through Vaginal Approach
  + In case of hysterectomy, monitor for PV bleeding
  + Provide perineal care
  + Maintain and observe for drainage of the in-dwelling catheter and ensure it is always in situ

Laparatomy

* + Check for bleeding at incision site
  + Observe for signs of infection – the dressing may be having pus
  + Check the supra-pubic catheter whether it’s draining well

Complications following hysterectomy

* Poor wound healing, wound dehiscence, thrombo – embolism, intestinal obstruction
* Injury to the internal organs during op, haemorrhage, UTI’s
* Slight depression and low libido

**Health Education on Discharge**

* Advocate for kegel’s exercises
* Avoid straneous exercises or activities e.g. lifting heavily loads
* Advice pt to return in-case of any complications immediately thy occur
* Advocate for light exercises
* Advice on balanced diet especially iron
* Advice pt with spouse to abstain for a period of 3\_6 wks and to support each other during this period

**CARCINOMA OF THE CERVIX**

Most common of Ca of the reproductive system in women, occurs commonly at ages of 30 – 50 yrs

Risk Factors

* Early involvement in sexual activities, having many sexual partners, Viral infection. HPV, HSV),HIV/AIDS, High parity, Low social economical status leading to prostitution

, Intra uterine exposure to Diethylstilbestrol

Types of ca cervix

* Pre – invasive stage – the carcinoma is limited to the cervix around the SC-junction
* Invasive stage – the malignant cells are found in the cervix and other pelvic structures Remember: The squamous cell carcinoma spread by direct extension to the vaginal segment and lower segment of the uterus and perimetra, bladder and bowel. Metastasis of cancerous tissue – extensive ca in the pelvic structures through the lymphatic system or blood

Signs and symptoms

* Painless of painful PV bleeding, Post – coital bleeding, Watery bloody discharge, Severe weight loss, Anemia, Patient looks weak and tired

**Assessment and diagnosis**

* A well detailed history, Physical examination, Perform a pelvic exam and take a pap smear
* Do a speculum to visualize for lesions where bleeding may be coming from
* Visual investigation with acetic acid and Lugose Iodine, FHG, and U/S

**Staging of ca Cervix**

Stage O – Carcinoma in situ (CIN III)

Stage 1a – Micro – invasive carcinoma

Stage 1b – Invasive carcinoma confined in the cervix

Stage 2a – The tumour has extended to the upper third of the vaginal (i.e. vault)

Stage 2b – The tumor has extended to the parametrium but not in the pelvic wall.

Stage 3a – tumour involves the lower third of the vagina plus features of stage 2b

Stage 3b – Tumour has extended to the pelvic side wall plus features of 3a

Stage 4a – Tumor involves the urinary bladder and rectum and features of 3b

Stage 4b – Metastasis of the cancer to extra pelvic structures.

**Management**

* Early diagnosis and treatment of pre-invasive carcinoma....encourage screening
* Use excisive techniques, e.g. cone treatment to remove the cancerous tissue
* Chemotherapy – anti cancer agents.....e.g....
* Laser vaporization therapy – necrotising and removal of the hyperdifferentiating zones
* Cryotherapy – freezing the tissues and thus causing necrosis
* Radiotherapy – malignant lesions are exposed to the therapeutic rays to cause necrosis.
* Carcinoma of the cervical stump after hysterectomy
* Large loop excision of the transformational zone....(LLETZ) using a diathermy generator
* Pelvic exenteration – theatre today, then after three to four weeks) opted when there is recurrence of the conditioning following irradiation. Where the disease has spread to the bladder or rectum, without evidence of distant spread.
* Hysterectomy – (Wartheim’s) involves removal of the uterus, tissues surrounding the cervix, upper third of the vagina and removal of pelvic lymph nodes

**NURSING INTERVENTIONS**

* Ensure the comfort of the patient throughout the process
* Promote effective communication during treatment and avoid non-verbal communication
* Offer psychological care to patients and family.
* Encourage drug regimen or management compliance
* Do sexual counselling to encourage the patient to adjust to the new lifestyle.
* Monitor vital signs and rule out shock and intervene appropriately
* Encourage the patient for routine check ups

**UTERINE CANCER**

It is a slow growing tumor associated with menopause and arises from glandular component of the endometrial mucosa. Most common in whites

Risk Factors

* Obesity diabetes, Late menopause, Null parity, Functioning ovarian tumors, Positive family history, Excessive consumption of Estrogen during post menopausal period

Signs and symptoms

* Post menopausal bleeding, Post coital bleeding / contact bleeding, Watery discharge, Low back pain / pelvic pain, Enlarged uterus, Dilatation of the cervix may be evident of pathologic type

Diagnosis

* Well detailed history taking, Physical exam / speculum exam
* Biopsy (endometrial biopsy) involves scrapping off endometrium for histological studies
* Ultra sound to determine thickness of endometrial layer

Management

* Admit the patient
* Restrict active movement and encourage bed rest, Provide low residual diet to reduce straining during defecation, Encourage fluid intake
* Administer prescribed hematinics, broad spectrum antibiotics, mild tranquillizers and heparin
* Discourage patient from sun bathing
* In case of cystitis, manage with micro organism specific antibiotics
* Chemotherapy – Progestogen therapy used to treat in the early stages to thin the endometrium
* TAH if there is no response to other treatments.

**BREAST CANCER**

These are groups of malignant conditions that commonly appear in female breasts and less commonly in male breasts. In every 8 women, one will develop breast cancer

Causes

* Idiopathic causes
* Ductal infiltration of the carcinoma which originates in the epithelial cells of the mammary ducts
* Considered non-invasive when it remains within the ducts, invasive when it penetrates the surrounding tissues (grows in an irregular pattern and resembles an octopus)

Risk factors

* Positive family history, Early menarche, less than 12 years, Personal history of disease, Null parity, Elderly primigravidae, Alcoholism and excessive fat intake

Symptoms

* Breast mass of irregular shape with poorly defined margins, Pain in the affected breast
* Severe oedema due to lymphatic involvement, Enlargement of the axillary lymph nodes
* Breast feels hard, There is nipple retraction
* There may be ulceration of the breast skin in later stages

Diagnosis

* Proper detailed history, Physical exam – breast exam
* Mammography – soft tissue radiological exam of the breast
* U/s, X – ray to rule out metastasis, Fine needle aspirate for histological studies

Staging

* Stage O – No evidence of cancer
* Stage I – T <2cm, NO lymph node involvement
* Stage IIa – T ≤2 cm + LNI
* Stage IIb – T 2-5 cm + LNI
* Stage IIIa – T clumped together to other structures
* Stage IIIb – T any size, spread to the chest wall
* Stage IIIc – T chestwall, skin, collarbone LN
* Stage IV – T Metastatic at presentation

Management

* Ensure the patient is comfortable and allay all anxiety and encourage client to express their feelings and to understand the prognosis and treatment and what they may be expected to do
* Encourage patient and family to ask questions, and explain
* Encourage client to seeking information from health care delivery team
* Surgical management – lumpectomy to remove the lump from breast +lymph node
* Simple mastectomy – removal of lump then irrigated
* Modified radical mastectomy – breast tissue, nipple, lymph nodes (pectoral muscles not)
* Halsted radical mastectomy – removal of entire breast and the underlying muscle
* Breast reconstruction – for aesthetic purposes, its expensive
* Radiology – done when patient refuses mastectomy
* Chemotherapy – corticosteroids, and anti-estrogens if the tumour is hormone dependent

Nursing management

**Pre – op**

* Psychological preparation of the patient – to allay anxiety and obtain consent
* Restrict mobility during this period

**Post – op**

* Active management of pain....Pethidine stat
* Let the client lie on a semi – fowler’s position
* Ensure the client does not lie on the affected side.
* Assess the drains and the dressing
* Record the amount and type of the discharge if any
* Monitor vital signs, Teach the family on how to encourage and support the patient
* Encourage gynaecologic review
* Encourage the client to perform breast exam and report any findings of significance

**VAGINAL FISTULA**

Abnormal tube like opening between two internal structures

Causes

* Traumatic child bearing and prolonged labour
* Gynaecological surgery, e.g. BTL, hysterectomy, through the vaginal wall
* Radiological therapy e.g when intervening for cervical cancer thus damage to the vaginal wall

Types

* Utero-vaginal – connection between the uterus vaginal and there is no cervical connection
* Vesico-vaginal – communication between the vagina and the urinary bladder
* Recto-vaginal – communication between the rectum and the vagina
* Urethro-vaginal – communication between the urethra and vagina
* Uretero-vaginal, Vaginal perineal

**Signs and symptoms**

* Uterine leakage through the vagina, Fecal matter leakage, Prolonged dull pain around the pelvic region, Foul smelling discharge

Diagnosis

* History, physical exam, Cystoscopy, u/s, and speculum

Management

* Admit the patient, Re – assure the client and the family, Apply zinc oxide around the area if the fistula is small, Prepare the patient for surgery to close the opening
* For recto-vaginal fistula, there shall be a temporary colostomy after rep[air to aid healing

**UTERINE PROLAPSE / PROCEDENTIA**

A prolapse refers to the protrusion of an internal organ or a structure beyond its normal confines. There is down ward displacement of the uterus through the vaginal orifice. The connective tissues, levator ani muscle, nerve supplies, around pelvic structures are all responsible in uterine prolapse and a defect in one or more of these will cause the condition

Causes

* Congenital defect of the pelvic floor, Traumatic child bearing, Poor management of all the three initial stages of labour

Grading

* 1st degree – descended in the upper 3rd of the vagina
* 2nd degree – descended in the lower 3rd of the vagina
* 3rd degree – visible or outside the introitus

Clinical features

* Lower abdominal pains, Feeling of the pressure within the pelvis
* Urinary stasis – compression of the urethra
* Enlarged cervix, In coitus there is severe dyspareunia and discomfort

Management

* Admit
* Monitor vital signs
* Promote nutrition in preparation for surgery
* Surgery to involve the repair of the connective tissue
* High cervical ring to hold the cervix in the vault
* Recommended for strict bed rest for at least a week
* Abstain from sex for a month
* Avoid straneous lifting ( not more than 5 kgs and Advice on kegel’s

**OVARIAN CYSTS**

Types

1. Follicular cysts – they develop in young menstruating women
   * Develop from follicles that are not matured or those that have matured but not ruptured
   * If they don’t rupture they disappear within the next 2-3 menstrual cycles
   * Rupture of the follicles may cause severe pain.
   * Can administer COCs (1 – 2 – 1 )
   * If the condition is severe it may lead to polycystic ovarian syndrome or ovarian carcinoma. Remove the uterus
2. Corpus luteum cyst (Luteal) – they are purple red in colour and occur after every ovulation and rupture causes severe pain and intra – peritoneal haemorrhage accompanied by pelvic pain
3. Thecal pattern cysts – least common and very rare associated with hydatid form mole as a result of prolonged ovary stimulation by excessive amount of HcG

**Management – COCs**

**BARTHOLIN’S CYSTS**

This is when there is obstruction of the bartholin duct, the secretory function of the gland continues and the fluid (mucus) fills the gland and becomes acyst

Causes include infections and congenital stenosis or atresia.

**Signs and symptoms are**

* Constant localised pain with concomitant difficulties in walking and sitting down
* Feeling of a mass in the perineum
* Dyspareunia

**Diagnosis –** History and physical exam

**Management**

* Admit the client
* Prepare the patient for Marsupialization which involves the opening of the gland and having a suture to prevent recurrence
* Advice the couple to use lubricants during coitus and advice on general hygiene
* Advocate for sitz bathe BD for a week
* Advocate for compliance to prevent complications of infections

ENDOMETRIOSIS

This is when a tissue resembling endometrium is found growing in any other location outside the uterus, you may call ectopic endometrium. During menstruations the cells of this tissue are stimulated by the ovarian hormones and there’s subsequent bleeding into the surrounding tissues which results into adhesions, inflammation, bladder dysfunction, infertility and strictures (bowel or urethral)

Signs and symptoms

* Discomfort in the pelvic area before menses which worsens during the menstruation
* Pain diminishes when the menstruation is over but there is continuous feeling of heaviness
* Painful coitus
* Fatigue

Nursing interventions

* Provide emotional support to the patient, spouse, and family
* Prepare the patient for operation to drain the pelvic cavity off the blood and prepare for repair of any adhesions and other tissues involved
* Encourage the patient to have oral contraception
* Give antibiotics to prevent infections
* Observe hygiene

PYOMETRA

This is the presence of puss within the uterine cavity which may be caused by either ascending infections or cervical / uterine carcinoma or any inflammatory condition of the female genital tract

Signs and symptoms: -- heaviness in the pelvic cavity, pain, foul smelly discharge

Management

* Prepare the patient for dilation and curettage
* Consider hysterectomy
* Cover with broad spectrum antibiotics
* Give hormone replacement therapy

MENOPAUSE

This is when the physiological cessation of the menstruation occurs and it is normally associated with failure of the ovaries to function normally. The functions may include,

* Folliculogenesis – production of follicles
* Endocrine functions – secretion of hormones
* Feedback mechanism – sensitivity to the gonadotropin
* Cellular differentiation – endometrial responses towards effects of the hormones
* Depletion of the primodial germ cells – there are no follicles

Climacteric Period

Menopause in men or andropause, the gonads functions are down and the spermatogenesis is slowed, but not stopped