



Southern Technical



Technical Institute of Amara

Southern Technical University

Technical Institute of Amara

Nursing Department

Second Class

1st course

Obstetrics and Gynecology

Done by

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M.Sc. Nursing

Anatomy & Physiology of female reproductive system.

The female reproductive system functions to produce gametes and reproductive hormones, just like the male reproductive system; however, it also has the additional task of supporting the developing fetus and delivering it to the outside world. the female reproductive system is located primarily inside the pelvic cavity.

-female reproductive system consist of-:

External Genitals

Internal Genitals

Vulva-:

The external female genitalia is referred to as vulva. It consists of the labia majora , labia minora , Clitoris, Urethra, Hymen and Perineum .

labia majora :- are the outer "lips" of the vulva. They are pads of loose connective and adipose tissue, as well as some smooth muscle.

Labia Minora :- are the inner lips of the vulva, they are thin stretches of tissue within the labia majora that fold and protect the vagina.

Clitoris:- is a small body of spongy tissue that functions solely for sexual pleasure .

Urethra:- The opening to the urethra is just below the clitoris, the urethra is actually used for the passage of urine.

Hymen-:

The hymen is a thin fold of mucous membrane, Sometimes it may partially cover the vaginal orifice.

Perineum-:

The perineum is the short stretch of skin starting at the bottom of the vulva and extending to the anus. It is a diamond shaped area between the symphysis pubis and the coccyx

Internal Genitals

1 -Vagina-:

The vagina is a muscular, hollow tube, vagina is a (approximately 10 cm long) that extends from the vaginal opening to the cervix of the uterus. It is about three to five inches long in a grown woman.

Purposes of the Vagina-:

- Receives a male's erect penis and semen during sexual intercourse.
- Pathway through a woman's body for the baby to take during childbirth.

Provides the route for the menstrual blood (menses) from the uterus, to leave the body.

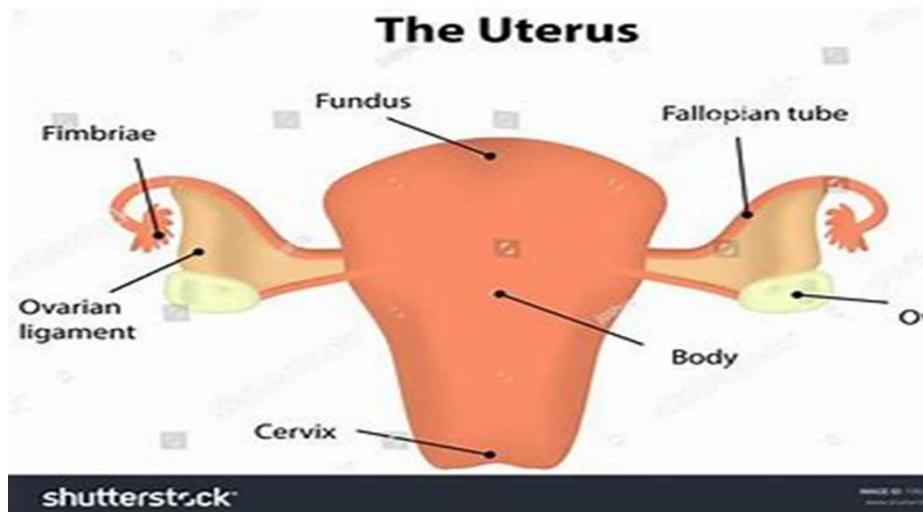
May hold forms of birth control, such as a FemCap or female condom.

-2 Uterus-:

The human uterus is a single, hollow, pear-shaped organ with a thick muscular wall; it lies in the pelvic cavity between the bladder and rectum. The non pregnant uterus varies in size depending on the individual but generally is about 7 cm in length, 3 to 5 cm at its widest and 2.5 to 3 cm thick, weighs about 60 grams, during pregnancy it changes rapidly and dramatically .

The uterus is shaped like an upside-down pear, with a thick lining and muscular walls. Located near the floor of the pelvic cavity, it is hollow to allow fertilized egg, to implant and grow.

Functions of the uterus include nurturing the fertilized ovum that develops into the fetus and holding it till the baby is mature enough for birth.



-The uterus can be divided anatomically into four regions :

a- fundus – the uppermost portion of the uterus. The fallopian tubes attach to the uterus just below the fundus.

b- corpus (body)- The corpus is the main body of the uterus. It's very muscular and can stretch to accommodate a developing fetus. During labor, the muscular walls of the corpus contract to help push the baby through the cervix and vagina.

The corpus is lined by a mucus membrane called the endometrium. This membrane responds to reproductive hormones by changing its thickness during each menstrual cycle. If an egg is fertilized, it attaches to the endometrium. If no fertilization occurs, the endometrium sheds its outer layer of cells, which are released during menstruation.

C- Isthmus

The portion of the uterus between the corpus and the cervix is called the isthmus. This is where the walls of the uterus begin to narrow toward the cervix.

D- cervix

the cervix is the lowest part of the uterus. where it joins with the top end of the vagina It's lined with a smooth mucous membrane and connects the uterus to the vagina.

The function of Cervix is contractions of the uterus will dilate the cervix up to 10 cm in diameter to allow the child to pass through During childbirth.

The uterus has three layers (endometrium, myometrium, perimetrium)

endometrium :- the inner lining of the uterus, this layer responds to reproductive hormones When this layer is shed, this results in menstrual bleeding.

3 -Fallopian Tubes -:

There are two fallopian tubes, also called the uterine tubes or the oviducts. Each fallopian tube attaches to a side of the uterus and connects to an ovary. The function of Fallopian Tubes is Egg transportation from ovary to uterus (fertilization usually takes place here).

The fallopian tube is described as having four parts (Fimbriae, Infundibulum, Ampulla, Isthmus)

4 -ovaries

The ovary is an organs found in the female reproductive system that produces an ovum, about the size of an almond. When released, this travels down the fallopian tube into the uterus, ovaries found on the left and right sides of the body. It is also secrete hormones that play a role in the menstrual cycle and fertility

At puberty, the ovary begins to secrete hormones. Secondary sex characteristics begin to develop in response to the hormones. The ability to produce eggs.

Signs of puberty

Enlargement of breasts and erection of nipples.

Growth of body hair, most prominently underarm and pubic hair

First Period Starts.

Greater development of thigh muscles behind the femur.

Introduction

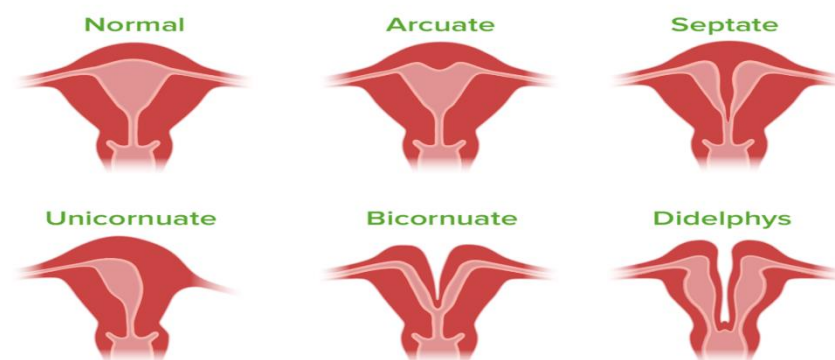
- This term refers to a diversity of structural disorders of the reproductive tract (vagina, cervix, uterus and fallopian tubes) that occur while the child is growing in the womb. Congenital abnormalities of the reproductive tract occur in a few percent of the female population, and may affect
- **Types**

There are several types of congenital anomalies of the female

(external and. internal) These malformations include:

Congenital anomalies of the uterus

- 1 .Septate uterus—A common congenital uterine abnormality, this condition occurs when a band of muscle or tissue divides a uterus into two sections. This condition can cause miscarriages and preterm birth .
2. Bicornuate uterus—This condition deals with a heart-shaped uterus with two horns. It could increase the risk of preterm labor.
- 3 .Arcuate uterus — This condition is described as a uterine surface that has a slight indentation. This condition isn't highly associated with the loss of pregnancy.
- 4 .Unicornuate—A unicornuate describes a uterus that is only half-developed.
5. Didelphys—This condition occurs when a woman has two uterine bodies. Each uterus has a cervix.



Congenital anomalies of the vagina

1 .Transverse vaginal septum—A transverse vaginal septum is a horizontal collection of tissue that forms in the embryo. It essentially creates a blockage of the vagina. This can occur at different levels of the vagina. Some women have a small hole in the septum called a fenestration .

During a menstrual period, blood could take longer to flow, causing periods to last longer than four to seven days. If there is no hole and the septum is blocking the upper vagina from the lower vagina, menstrual blood can pool and may cause abdominal pain. This will most likely require surgical correction.

2. Vertical or complete vaginal septum (longitudinal)—A vertical or complete vaginal septum is a condition where a wall of tissue runs vertically up and down the length of the vagina, dividing it into two cavities. While this condition may cause no symptoms, you could experience pain when removing or inserting a tampon, or pain during intercourse.

3 .Vaginal agenesis—Vaginal agenesis is a condition that develops before birth where the vagina fails to fully develop. The most common form of this condition is Mayer-von Rokitansky–Küster-Hauser’s syndrome (MRKH), in which the vagina does not develop in the embryo .

There are several variations of MRKH, such as

the absence of a vagina and a uterus, or no vagina, a single midline uterus and no cervix. Symptoms include a small cyst where the vagina should be, absence of a menstrual cycle and lower abdominal pain. Vaginal agenesis requires(surgical correction), or having intercourse and a baby may be impossible. Some women may have kidney abnormalities.

Congenital anomalies of the cervix

1 .Cervical agenesis—Cervical agenesis occurs when a woman is born without a cervix. This means there could be the absence of a uterus and a vagina. If a uterus is present, Your doctor may also perform a surgical procedure that fuses the uterus to a vagina.

2. Cervical duplication—Cervical duplication occurs when a woman is born with two cervixes. Symptoms can include abnormal pain before a period, abnormal bleeding and infertility issues.

congenital anomalies of ovary & fallopian tube

-Fallopian tube agenesis, a type of Mullerian anomaly, is the absence of one or both fallopian tubes .

-Anomalies of the ovaries , may include :

Absence of one or both ovaries.

An extra ovary .Extra tissue attached to an ovary .Ovotestis, which contain both male and female tissue

Congenital malformations of the vulva Labial hypoplasia— Labial hypoplasia occurs when one or both of the labia do not develop normally. The labia act as fat pads that protect from trauma. (childhood, or through puberty.)

Labial hypertrophy—Labial hypertrophy describes the enlargement of the labia. This can lead to irritation, chronic infections, interference with intercourse and pain

Menstrual cycle

Menstruation:- is a woman's monthly bleeding. When menstruate, the body sheds the lining of the uterus (womb). Menstrual blood flows from the uterus through the small opening in the cervix and passes out of the body through the vagina. Most menstrual periods last from 3 to 7 days.

Having regular menstrual cycles is a sign that important parts of body are working normally. The menstrual cycle provides important body chemicals, called hormones, to keep healthy. It also prepares body for pregnancy each month.

Menarche is the medical term for a woman's first menstruation, commonly known as first period, menarche usually begins between twelve and fifteen years of age.

What happens during the menstrual cycle?

In the first half of the cycle, levels of estrogen (the "female hormone") start to rise. Estrogen plays an important role in keeping health, especially by helping to build strong bones. Estrogen also makes the lining of the uterus (womb) grow and thicken.

The normal physical symptoms of menstruation:

- Tender breasts
- Bloating, fluid retention
- Muscle aches
- Joint pain
- Headaches
- Acne
- Abdominal cramps
- Diarrhea or constipation
- Lower back pain
- Low energy, fatigue

What's occurring in menstrual cycle ?

Day 1 starts with the first day of period. This occurs after hormone levels drop, signaling blood and tissues lining the uterus (womb) to break down and shed from the body. Bleeding lasts about 5 days.

Usually by Day 7, bleeding has stopped.

What is a typical menstrual period like?

During period, shed the thickened uterine lining and extra blood through the vagina. period may not be the same every month. It may also be different than other women's periods. Periods can be light, moderate, or heavy in terms of how much blood comes out of the vagina. This is called menstrual flow. The length of the period also varies. Most periods last from 3 to 5 days. But, anywhere from 2 to 7 days is normal.

problems with menstrual cycle

-Amenorrhea

the lack of a menstrual period. This term is used to describe the absence of a period.

Causes can include:

Pregnancy

Breastfeeding

Extreme weight loss

Eating disorders

Excessive exercising

Stress

Serious medical conditions in need of treatment

Dysmenorrhea

is painful menstruation. For generations, it

was thought to be mainly psychological, needing no treatment other than reassurance that it was a normal phenomenon and something women should endure..

Dysmenorrhea can also be a preliminary symptom of an underlying illness such as PID, uterine myomas (tumors), or endometriosis (abnormal formation of endometrial tissue).

Therapeutic Management.

Painful symptoms can usually be controlled by an analgesic such as acetylsalicylic acid (aspirin) or ibuprofen (Advil, Motrin). Acetylsalicylic acid (aspirin) works well as an analgesic for dysmenorrhea because it is a mild prostaglandin inhibitor

Ibuprofen is a stronger prostaglandin inhibitor and relieves more severe menstrual pain.

Naproxen sodium (Aleve) is also effective. Be certain that girls know not to take these drugs on an empty stomach, because they can be extremely irritating to gastric mucosa.

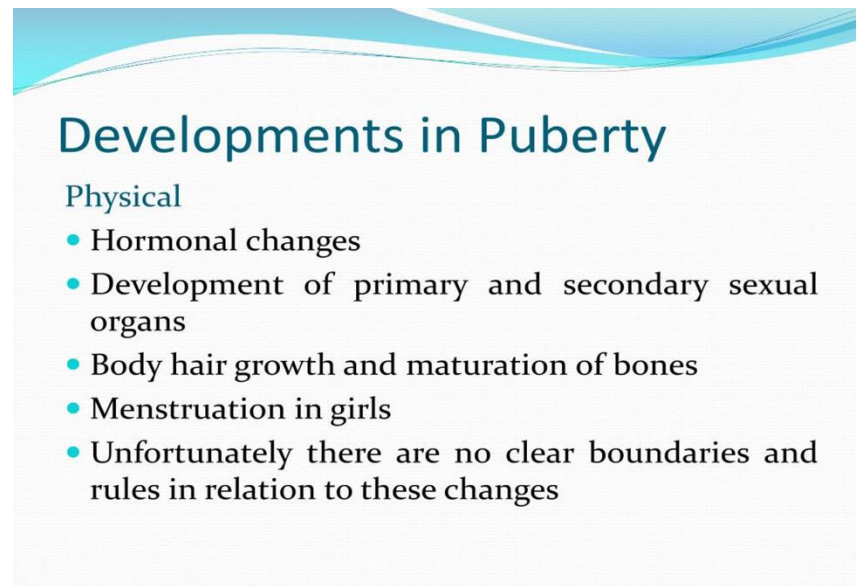
Low-dose oral contraceptives to prevent ovulation may also be effective if pregnancy is not desired.

Introduction

a period of rapid change in the lives of boys and girls during which the reproductive systems mature and become capable of reproduction. Puberty begins when the secondary sex characteristics (e.g., pubic hair) appear.

Puberty ends when regular menstrual cycles occur.

Pubertal changes in girls occur 6 months to 2 years before they occur in boys. Puberty is easily recognized in girls by the onset of menstruation. The first menstrual period is called the menarche. It commonly occurs about age 12 or 13 years, but this varies. It may occur as early as age 10 years or as late as age 15 years. Secondary sex characteristics become more apparent before the menarche. Fat is deposited in the hips, thighs, and breasts, causing them to enlarge



Developments in Puberty

Physical

- Hormonal changes
- Development of primary and secondary sexual organs
- Body hair growth and maturation of bones
- Menstruation in girls
- Unfortunately there are no clear boundaries and rules in relation to these changes

Secondary Sex Characteristics

In girls, pubertal changes typically are manifest as:

- 1 .Growth spurt
- 2 .Increase in the transverse diameter of the pelvis
- 3 .Breast development
- 4 .Growth of pubic hair
- 5 .Onset of menstruation
- 6 .Growth of axillary hair
7. Vaginal secretions

Types of Puberty Disorders:

Delayed puberty – puberty hasn't started by age 13

Precocious puberty – puberty begins too early, before age 7 or 8 in girls

Contrasexual pubertal development – development of male characteristics in females

Premature thelarche – breast development without any other signs of puberty

Premature menarch – periods start without any other signs of puberty

Adolescent

adolescence A period of human development beginning with puberty and ending with young adulthood.

Common problems of adolescence

School-age children begin an exposure to the outside world, where peers gradually become more important to them than their family contacts, and they begin to spend more time in outside experiences and less time with family activities. During adolescence, more complex social tasks include entering high school, where new friendships are formed; interacting with multiple teachers in one day; increasing academic rigor that must be mastered; and romantic experiences that are introduced.

Social anxiety disorders

affect many adolescents, although some are never recognized or treated. Many adolescents are shy, but basic shyness is a totally normal characteristic for an adolescent and should not be confused with a social

anxiety disorder, which most often involves distress that impairs functioning. However, the adolescent who has few personal friends and displays impaired social skills may be at risk and may drop out of high school.

Smoking and vaping

The regulation of tobacco use and education concerning the health risks to children and adults have reduced traditional smoking of tobacco cigarettes. The use of electronic cigarettes (e-cigs) has increased by 150% since 2012

Easy access and flavoring make such devices especially enticing to adolescents and young adults, but they can lead to nicotine poisoning. Vaping is the inhalation and exhalation of vapor through a device such as an e-cig or hookah pipe.

Genital tract infections

also known as reproductive tract infections can lead to extreme pain, discomfort, and unwanted consequences in women. These infections are classified into two main categories: Lower Genital Tract Infections: This includes any infection of the lower reproductive tract including the vagina, vulva and cervix. Upper Genital Tract Infections: This includes any infection of the upper reproductive tract which includes the fallopian tubes, uterus and ovaries

types

Types of Genital Tract Infection Depending on the causes of the genital tract infection,

- 1- Sexually Transmitted Diseases(STDS)
- 2- Endogenous Infections In medicine, an endogenous infection is a disease arising from an infectious agent already present in the body but previously asymptomatic
- 3- Iatrogenic Infections

Pruritus vulvae

Pruritus Vulvae means itching of vulva. The vulva is the area of skin just outside the vagina. Most women experience a slight itching in vulva now and again.

Symptoms

- 1-The sensation of vulva itching
- 2-Burning sensation
- 3-whitish vaginal discharge
- 4-Vulval dermatitis is a rash causing red , swelling, and hot skin
- 5-Excessive dryness of skin, fluid filled blisters and scales
- 6- small cracks on the skin of your vulva

precaution

- 1.Stopping/reducing the itchiness using moisturizer .

2.Prevent further damaging to skin by avoiding the itch scratch cycle. (and it is important to keep nails short, to minimize the damage causes to the skin during scratching (

3.Modifications in Under garments -Important to use cotton underwear (Change undergarments daily.)

4 -Wash and dry underwear in sunlight which helps to reduce fungal infection

5 -Maintain vulva hygiene -Wash vulva gently -avoid cleaning of the area with soap. -Avoid hot water baths

Vaginitis

Vaginitis is an inflammation of the vagina that can result in discharge, itching and pain. It's due to an imbalance of yeast and bacteria that normally live

in the vagina . The most common types of vaginitis are :

1 -Bacterial vaginosis . This results from an overgrowth of the bacteria naturally found in your vagina, which upsets the natural balance .

2 -Yeast infections. These are usually caused by a naturally occurring fungus called *Candida albicans* .

4- Trichomoniasis. This is caused by a parasite and is often sexually transmitted

causes

The cause depends on what type of vaginitis you have :

Bacterial vaginosis. This most common type of vaginitis results from a change of the bacteria found in your vagina, upsetting the balance . What causes the imbalance is unknown. It's possible to have bacterial vaginosis without symptoms.

Yeast infections. These occur when there's an overgrowth of a fungal organism — usually *Candida albicans* — in your vagina. *C. albicans* also causes infections in other moist areas of your body, such as in your mouth (thrush), skin folds and nail beds. The fungus can also cause diaper rash.

Trichomoniasis. This common sexually transmitted infection is caused by a microscopic, one-celled parasite called *Trichomonas vaginalis*. This organism spreads during sex with someone who has the infection.

symptoms

- 1 -Vaginitis signs and symptoms can include :
- 2 -Change in color, odor or amount of
- 3 -discharge from your vagina
- 4 -Vaginal itching or irritation
- 5 -Pain during sex
- 6 -Painful urination
- 7- Light vaginal bleeding or spotting

Nursing intervention

- 1 -Administer fluid as permitted and monitor intake and output and record
- 2 -Apply prescribed soothing topical creams on the irritated skin
- 3 -Encourage personal hygiene by doing vaginal swabs at least twice a day
- 4 -Assess and document the nature, amount ,odor and color of the vaginal discharge
- 5- Administer prescribed medication to resolve the presenting pathology

3 -Cervicitis

Cervicitis is an inflammation of the cervix, the lower, narrow end of the uterus that opens into the vagina . Which can be due to irritation/infection/injury of cells that line the cervix (

Causes

- 1- Sexually transmitted infections. Most often, the bacterial and viral infections that cause cervicitis are transmitted by sexual contact. Cervicitis can result from common sexually transmitted infections

(STIs), including gonorrhea ,chlamydia, trichomoniasis and genital herpes.

Introduction

Uterine fibroids are a common type of noncancerous tumor that can grow in and on your uterus. Not all fibroids cause symptoms, but when they do, symptoms can include heavy menstrual bleeding, back pain, frequent urination and pain during sex. Small fibroids often don't need treatment, but larger fibroids can be treated with medications or surgery ***Fibroids differ in number and size. You can have a single fibroid or more than one. Some of these growths are too small to see with the eyes. Others can grow to the size of a larger. A fibroid that gets very big can distort the inside and the outside of the uterus. In extreme cases, some fibroids grow large enough to fill the pelvis or stomach area. They can make a person look pregnant.

There are different types of uterine fibroids depending on where they're located and how they attach. Specific types of uterine fibroids include:

- 1- Intramural fibroids: These fibroids are embedded into the muscular wall of your uterus. They're the most common type.
- 2- Submucosal fibroids: These fibroids grow under the inner lining of your uterus.
- 3- Subserosal fibroids: This type of fibroid grows under the lining of the outer surface of your uterus. They can become quite large and grow into your pelvis.
- 4- Pedunculated fibroids: The least common type, these fibroids attach to your uterus with a stalk or stem. They're often described as mushroom-like because they have a stalk and then a wider top.
5. Cervical fibroids Cervical fibroids are benign growths of the uterus. It develops in the cervix, the lower part of the uterus.
6. Broad ligament fibroids Broad ligament fibroids are a benign muscle growth which develop from the broad ligament hormone-sensitive smooth muscle or the uterine smooth muscle. Typically, Broad ligament fibroid is the rare type of uterine fibroids

Causes:

What causes uterine fibroids? The cause of uterine fibroids is unknown. However, the female hormone oestrogen has been linked to the growth

of fibroids. Fibroids usually develop during a woman's reproductive years, and may shrink after menopause due to reduced oestrogen levels.

Diagnosis:

Diagnosis of Uterine Fibroids During a normal pelvic exam, fibroids may be detected for the first time. Gynaecologist may perform some of the below diagnostic procedure to know the type of fibroids before starting **treatment**:

• Blood tests • Radiology examination (Ultrasound abdomen and pelvis, Transvaginal ultrasonography) • Computed tomography (CT) • Magnetic resonance imaging (MRI) • Hysteroscopy • Hysterosalpingography • Sonohysterography • Laparoscopy

Nursing care

- 1- Nurses should educate themselves about uterine fibroids , It is highly recommended to be familiar with treatment plans, clinical expectations, and outcomes
- 2- Nurses should educate the patients about the prescribed treatment plan
- 3- Emotional support
- 4- Patients should receive education to complete prescribed treatment in its entirety

5-the healthcare team can educate patients about alternatives to childbirth like surrogacy, adoption or cryopreservation – egg freezing.

Ovarian cysts are sacs, usually filled with fluid, in an ovary or on its surface. Females have two ovaries. One ovary is located on each side of the uterus.

Ovarian cysts are common. Most of the time, you have little or no discomfort, and the cysts are harmless.

Most cysts go away without treatment within a few months. But sometimes ovarian cysts can become twisted or burst open (rupture).

types of ovarian cysts:

- 1- Follicular cysts :During the menstrual cycle, an egg grows in a follicle sac. This sac is located inside the ovaries.
- 2- Corpus luteum cysts :The corpus luteum is a benign structure that appears in an ovary after an egg is released Other types
- 3- Ovarian cysts that aren't formed as part of a typical menstrual cycle

- 4- Dermoid cysts: These sac-like growths on the ovaries can contain hair, fat, and other tissue.
- 5- Endometriomas: Tissues that normally grow inside the uterus can develop outside the uterus and attach to the ovaries.
- 6- Cystadenomas: These growths can develop on the outer surface of the ovaries

Symptoms :

Most ovarian cysts cause no symptoms and go away on their own .

But a large ovarian cyst can cause :

- 1 -Pelvic pain that may come and go. You may feel a dull ache or a sharp pain in the area below your bellybutton toward one side .
- 2 -Fullness, pressure or heaviness in your belly (abdomen) .
- 3 -Bloating .

Diagnosis

Pelvic examination- ultrasound – blood tests- MRI_ laproscopy

WHAT CAUSES URINARY ISSUES?

The cause depends largely on your symptoms and underlying issues. There are many causes, ranging from childbirth to the natural course of aging.

What are the symptoms of urinary issues?

In addition to the more obvious urinary issues noted above, other symptoms can include:

- Pressure in the vagina or pelvis
- Pelvic pain
- Pain and/or bleeding with intercourse

HOW ARE URINARY ISSUES DIAGNOSED?

Urodynamic testing: These tests help determine how well the bladder, sphincters and urethra hold and release urine **Cystoscopy:** A thin tube equipped with a camera and light is inserted through the

urethra and into the bladder How are urinary issues treated? Your treatment plan will depend upon the cause of your urinary issues and the severity of your symptoms.

Treatment options might include:

- Kegel exercises designed to strengthen the pelvic floor muscles
- Weight loss
- Bladder retraining: Voiding on a set schedule
- Pelvic floor electrical stimulation
- Pessary: A small removable device inserted into the vagina to provide support if the cause is a prolapsed (dropped) bladder • Medication • Vaginal laser or PRP (platelet rich plasma) injections • Various minimally invasive surgical options such as vaginal repair, pelvic floor reconstruction, and urethral sling

Cancers

Cancers affecting the female reproductive system, including the ovaries, fallopian tubes, cervix, endometrium, peritoneum, uterus, vagina, and vulva, are called gynecologic cancers.

A gynecologic cancer occurs when cells in a part of a woman's reproductive system grow and divide abnormally. Cells are the building blocks of the tissues that make up the organs of the body. Normal cells divide only to replace worn-out or dying cells. Cancer cells, instead of dying, outlive normal cells, grow abnormally, and form a growth or mass of tissue, called a malignant tumor, which can then spread its cancer cells throughout the body.

Uterine Cancer (Endometrial Cancer)

Uterine cancer, also called endometrial cancer, is the most common cancer occurring within the female reproductive system. Uterine cancer begins when healthy cells in the uterus change and grow out of control, forming a mass called a tumor. A tumor can be cancerous or benign

Symptoms

- Vaginal bleeding between periods before menopause.
- Vaginal bleeding or spotting after menopause, even a slight amount.
- Lower abdominal pain or cramping in your pelvis, just below your belly.
- Thin white or clear vaginal discharge if you're postmenopausal.
- Extremely prolonged, heavy or frequent vaginal bleeding if you're older than 40.

Uterine Cancer Causes

The common uterine cancer causes and risk factors are include the following

There are several risk factors for endometrial cancer .

Many of them relate to the balance between estrogen and progesterone .

These risk factors include having obesity

a condition called polycystic ovarian syndrome (PCOS)

taking unopposed estrogen (taking estrogen without taking progesterone, too) .

The genetic disorder Lynch syndrome is another risk factor unrelated to hormones.

Nursing care

1. Providing Emotional Support and Assisting in Grieving
- 2-Enhancing Body Image and Self-Esteem
3. Managing Acute Pain
4. Improving Nutritional and Fluid Volume Status
5. Decreasing Fatigue
6. Minimizing Infection Risk
7. Maintaining Oral Mucous Membrane Integrity and Preventing Stomatitis

Cervix cancer

Cervical cancer is the growth of abnormal cells in the lining of the cervix. The most common cervical cancer is squamous cell carcinoma, accounting for 70% of cases. Adenocarcinoma is less common (about 25% of cases) and more difficult to diagnose because it starts higher in the cervix

Causes

Almost all cases of cervical cancer are caused by persistent infection with some high-risk types of the human papillomavirus (HPV)

Symptoms

In the early stages of cervical cancer, there will be no signs and symptoms. So, women should have regular screening through HPV or Pap tests.

This helps to find out the precancerous cell changes early and prevent the development of cancer.

The most common symptoms of cervical cancer include:

- Bleeding after sexual intercourse
- Smelly vaginal discharge
- Pelvic pain not related to menstrual cycle
- Bleeding between periods
- Discomfort during sexual intercourse
- Vaginal discharge tinged with blood
- Bleeding in post-menopausal women
- Unusual vaginal discharge that is thick or watery
- Pain during urination
- Increased urinary frequency

Nursing care

- 1 .Listen to the patient's fears and concerns

Encourage the patient to use relaxation techniques to promote comfort during the diagnostic procedures.

.3 Monitor the patient's response to therapy through frequent Pap tests and cone biopsies as ordered.

.4 Watch for complications related to therapy

.5 Monitor laboratory studies and obtain frequent vital signs.

.6 Understand the treatment regimen and verbalize the need for adequate fluid and nutritional intake to promote tissue healing.

.7 Explain any surgical or therapeutic procedure to the patient, including what to expect both before and after the procedure.

What is ovarian cancer?

Ovarian cancer occurs when abnormal cells in your ovaries or fallopian tubes grow and multiply out of control.

Ovaries are part of the female reproductive system. These two round, walnut-sized organs make eggs during your reproductive years.

What causes ovarian cancer?

The exact cause of ovarian cancer isn't yet known. But some people have a slightly higher risk of developing the condition. Ovarian cancer risk factors include:

- Being over the age of 60.
- Obesity.
- A family history of ovarian cancer (others in your biological family have had the disease) or have inherited a gene mutation (BRCA1 or BRCA2) or Lynch syndrome.
- Never being pregnant or having children later in life.
- Endometriosis. There's also an increased risk of developing ovarian cancer as you grow older.

What are the symptoms of ovarian cancer?

Ovarian cancer can develop and spread throughout your abdomen before it causes any symptoms. This can make early detection difficult. Ovarian cancer symptoms may include:

Pelvic or abdominal pain, discomfort or bloating.

Changes in your eating habits, getting full early and losing your appetite.

Vaginal discharge or abnormal bleeding, especially if the bleeding occurs outside of your typical menstrual cycle or after you've gone through menopause.

Bowel changes, such as diarrhea or constipation.

An increase in the size of your abdomen.

Peeing more often (frequent urination).

Nursing Interventions

- 1 -Teach women the importance of having routine screenings for cancer of the reproductive system. (pap smear, and pelvic exam)
- 2 -Teach women about the risk factors of the reproductive system.
- 3-Teach women about menopause signs and symptoms after bilateral oophorectomy.
- 4 -Teach women about hormone replacement therapy and the side effects.
- 5-Manage client's pain related to chemotherapy.
- 6-Monitor for infection.
- 7- Teach client how to prevent DVTs after surgery. i.e. frequent changes in positions, leg exercises to promote circulation.

Cauterization

(or cauterization, or cautery) is a medical practice or technique of burning a part of a body to remove or close off a part of it. It destroys some tissue in an attempt to mitigate bleeding and damage, remove an undesired growth, or minimize other potential medical harm, Curettage: Removal of tissue with a curette from the wall of a cavity or another surface. For example, curettage may be done to remove skin cancer. After a local anesthetic numbs the area, the skin cancer is scooped out with a curette. Curettage may also be done in the uterus; dilation and curettage (D&C) refers to the dilation (widening) of the cervical canal to permit curettage of the endometrium, the inner lining of the uterus

Hysterectomy

There are several types of hysterectomies. Your doctor will discuss the risks, benefits and potential side effects of each procedure. It's important to ask your doctor if removal of the ovaries and fallopian tubes during your hysterectomy is recommended. Types of hysterectomies include: Total hysterectomy removes the entire uterus and the cervix (most common type). Partial hysterectomy (also called supracervical hysterectomy) removes only the uterus, leaving behind the cervix (research is ongoing about the risks and benefits of leaving the cervix intact). Radical hysterectomy removes the uterus, cervix and upper part of the vagina (usually for cancer treatment).

There are a variety of reasons your doctor may recommend a hysterectomy, including:

Abnormal bleeding Adenomyosis Dysmenorrhea (painful menses)
Endometriosis Gynecologic cancers, including cancer of the uterus, ovary, cervix or endometrium Heavy or prolonged menstrual bleeding (menorrhagia) Fibroids Uterine prolapse, which may be combined with bladder repair Gender affirmation for males who are transgender and people who are nonbinary

Pre and post operative nursing care

1. Explain the reason for operative and surgical consent.
2. Encourage women to take at least one preoperative shower using an antiseptic agent on the night prior to the scheduled procedure.
3. Obtain laboratory testing as per orders, CBC and type
4. Verify that the woman has been NPO for 6–8 hours before surgery
5. Removal of

jewelry, eyeglasses/contact lenses, and dentures. 6. Start an IV line and administer an IV fluid preload as per orders.

Pregnancy

Definition :- the fertilized ovum is embedded in uterine cavity and grows there until delivery. It's a normal physiological process, its state of being with child. Normal duration of pregnancy is 280 days or 40 weeks, 10 lunar, 9 calendar

stages of pregnancy

- 1- ovulation
- 2- insemination
- 3- fertilization
- 4- implantation

Signs and symptoms of pregnancy

- 1- presumptive signs :- - menstrual suppression (amenorrhea) - nausea and vomiting (morning sickness) - breast changes - frequency of urination - drowsiness and tiredness - vaginal changes - skin changes :-
 - a- striae gravidarum (stretching of the skin)
 - b- linea nigra c- chloasma - psychological changes .
- 2- probable signs :- - change in uterus (enlargement of the uterus) . - uterine contraction - palpation of the fetus - quickening (the mother's first perception of the movement of the fetus 18-20 wks . - positive lab. Test
- 3- positive signs :- - auscultation of fetal heart . - palpate the fetal parts after 24 wks - ultra sound - x- ray calculation By adding 7 days and 9 month to the date of the (LMP) EDD = LMP + 7 day + 9 month Ex. LMP. 15-4-2009 7 - 9 E.D.D. 22-1-2010 EX: LMP of the pregnant woman on 7 feb 2013 calculate EDD ? LMP. 7- 2- 2013 +7 +9 ----- EDD = 14 – 11 - 2013 Also it can be calculated by count back 3 month from the 1st day of LMP & add 7 day correct for year necessary EDD = LMP +7 days - 3 Month EX : LMP. 7 - 11 - 2013 +7 - 3 ----- EDD = 14- 8 -2014

Placenta 15-20 cm in diameter 1½ kg weight

Function 1- nutrition 2. O₂ and CO₂ exchange .

3- Transfer of heat .

Umbilical cord 50 cm length . 1-2 cm width Contain 2 arteries and one vein Fetal membrane amnion and chorion Amniotic fluid normal amount 500-1500 cc contain K⁺ , Ca⁺⁺ , Na protein , estrogen .

Function

- 1- Protect fetus
- 2- Easy movement of fetus
- 3- Keep fetus at mean temperature
- 4- Help in dilatation of cervix during labor

Size and development of the fetus : Ovum – fertilized ova the first 2 weeks . Embryo – from 2nd to the 5th wks . Fetus – after 5th weeks to the time of birth .

1st month (4 week) – nervous system gen. to- urinary system , skin , bones , lungs are formed , arm and legs begin to form , eyes ears and nose appear .

2nd month (8 week) – head enlarged , sex differentiation begins . 3rd month – fingers and toes are distinct placenta is complete , fetal circulation .

4th month – fetal movements are felt by mother heart sounds by auscultation.

6th month – skin appears , vernix caseosa , appears , eyebrows and finger nails develop

7th month – skin is red 8th month – eye lids open , fetal movement 9th month – amniotic fluid decreases .

Antenatal care

Refers to the medical and nursing care given to the pregnant women during the period between conception and the onset of labor . It

includes :-

- 1- History :- a- Personal H. b- Family H.
- 2- Past history (medical & surgical H.).
- 3- Obstetrical history :- - G.P.A. - L.M.P. & EDD
- 4- Laboratory test :-

- Urine exam \ for albumin and sugar
- Blood exam \ Blood group , Rh , Hb %
- 5- Physical examination – chest , abdomen , vaginal exam , fetal exam (fetal heart , fetal part and position)
- 6-

Antenatal visits :-

- 1-6 month \ once per month
- 7-8 month \ every 2 weeks
- 9 month \ every per week Each visit will be exam the general condition , B\P , weight , fetal growth and monitor any changes or signs or symptoms such as bleeding , edema , pain , fever and headache .
- In last visit will exam the pelvis and fetal size and position .
- 7-

Vaccination :

- 4th month
- 5th month 1st after 6 month tetanus
- 2nd after year
- 3rd after year 7

Antenatal advices

- Rest , relaxation and sleep – rest for a half hour every morning with afternoon and at least 9 hrs sleep should be obtained every night .
 - Exercise – such as walking in the fresh air avoid holding heavy objects .
 - Breast care – must need clean to prevent infection .
 - Alcohol and smoking – should be avoided , effect to cardiac output the CO₂ & O₂
 - Care of the teeth – protect from any infection and must be treated .
 - Diet – need adequate and food to growth and development of fetus , to prevent complication to maintained mother health , to successful lactation , for active with physical strength during labor . she need protein , CHO , minerals , Iron , vitamins and decrease tea and coffee .
- General problems during pregnancy

1- **Hyperemesis gravidarum** :- it is severe form of morning sickness , occurs in 50 % of pregnant woman

Signs & symptoms :

- 1- Recurrent vomiting
- 2. Dry mouth
- 3. Tacky cardiac
- 4- Decrease weight
- 5- Acetone breathing
- 6- Dark urine
- 7- Constipation

Causes :-

- 1- Psychological
- 2- Hormonal
- 3- Other causes
- Appendicitis
- Ovarian cyst
- Peptic ulcer

Treatment and nursing care :-

- Admission to hospital
- Nothing by mouth for 24 hr. IV. Fluid
- Antiemetic
- B6 - Psychological support
- Complete bed rest
- Call doctor if :-
 - a- Pulse rate > 100/min
 - c- Temperature > 37 c
 - d- Jaundice d- Protein e-

e- Signs of amnesia , delusions , diplopia , fainting

Heart burn :- occur in late pregnancy due to pressure of uterus on stomach . Causes Regurgitation of the stomach contents in to esophagus & cause irritation of stomach

Management and nursing care :

- 1- Stop fatty food .
- 2- Small frequent meals .
- 3- Pillow under head .
- 4- Encourage milk intake .
- 2- **Hemorrhoids** – it's varicose of lower part of rectum and anus lead to bleeding specially with constipation .

Nursing Treatment and nursing care :

- 1- Avoid constipation .
- 2- Use cold sponging on area .
- 3- Do massage using ointment .
- 4- **Edema** :- it's swelling of the lower extremities is very common during pregnancy .

Prevention

- 1- Avoiding highly salted food
- 2- Eating high protein food
- 3- Avoiding tight clothing & constriction of legs
- 4- Avoid standing for long time

Treatment :-

- 1- Pt. may have to stay in bed and take rest .
- 2- elevate legs .
- 5- **Constipation**
- 6- Causes :- 1- Diminishing peristalsis movement of the intestine . 2- Pressure of the enlarged uterus .

Treatment :

- 1- Good bowel habits
- 2- Take adequate fluid
- 3- Exercise

- 4- Cascara by doctor order .
- 5- **Varicose veins** – it's enlargement in the diameter of a vein .

Predisposing factors :

- 1- Increase of progesterone .
- 2- Physical and hormonal changes .
- 3- Uterus pressure on the lower extremities .
- 4- Prolonged standing .
- 5- Multigravida .

Signs and symptoms :-

- 1- Pain in legs .
- 2- Engorgement of superficial veins .
- 3- Edema .

Treatment :-

- 1- Avoid long periods of standing .
- 2- Sit with her feet raised on stool .
- 3- Lie down for an hour with her feet higher than her head .
- 4- Avoid tight cloths .

Prevention

- 1- Avoid constricting clothes .
- 2- Avoid constipation
- 3- Avoid standing for long time.

Anemia during pregnancy

Causes :-

- 1- Increase need of the mother by the growing fetus .
- 2- Iron deficiency
- 3- Folic acid deficiency

Signs & symptoms :-

- Weight loss - Skin pale - Fatigue - Palpitation - Dizziness - Headache
Effect of anemia on pregnancy :-

- 1- Premature birth
- 2- Abortion 3- Small for gestational age 4- Decrease immunity 5- Weak fetus 6- Increase uterine bleeding

Treatment :- 1- Take folic acid daily 2- In severe anemia need blood transfusion . 3- Iron therapy 4- Good diet rich with , especially after third month .

Diabetes mellitus during pregnancy

Effect of diabetes on pregnant woman :-

- 1- Decrease immunity
- 2- Slow and difficult labor
- 3- Increase incidence of C\S
- 4- Increase incidence of pre-eclampsia
- 5- Maternal death

Effect of diabetes on fetus :-

- 1- Macrosomia – increase fetal size .
- 2- Habitual abortion .
- 3- Congenital malformations .
- 4- Prenatal death .
- 5- Polyhydramnios .

Signs and symptoms :-

- 1- Poly uria , poly dipsia , poly phagia
- 2- Delay wound healing .
- 3- Loss of weight .
- 4- Prurities .
- 5- Glucose uria .
- 6- Loss or disturb vision .

Nursing Treatment & nursing care :-

- 1- Admission at third month to regulate blood sugar by insulin .
- 2- Antenatal care-every week after third month because blood sugar increase with pregnancy .
- 3- Diet control .
- 4- During cold and morning sickness , consult the doctor .
- 5- Psychological rest .
- 6- Admission at 36 week .
- 7- Induction of labor or C\S to avoid complication at 37 wks .

Preparation for C\S

- 1- Avoid CHO one day before operation
- 2- Give soluble insulin one day before C\S

Complication of pregnancy

1- Hypertension :- start at beginning of pregnancy not disappear after delivery.

Complication:- • Intrauterine death . • Early separation of placenta . • Renal failure . • Abortion . • Antipartium hemorrhage .

Treatment and nursing care :- 1- Complete bed rest . 2- Antenatal monitoring of B\P and fetal health 3- Diet free from salt . 4- In severe cases admit to hospital . 5- G.U.E. exam every wk for protein . 6- Checking vital signs and fluid input & output . 7- Give antihypertensive drugs . 8- Give sedative 9- During last week's monitor fetal condition and may do termination by C\S .

2- Toxemia of pregnancy

It is hypertension disorders include a variety of vascular disturbance occurs during gestation of the early puerperium and disappeared after delivery .

Predisposing factors :-

- Common in primigravida
- Age < 20 > 35
- Chronic hypertension
- Low socioeconomic status
- H.mole
- **Diabetes Characterized by :-**

- 1- Hypertension
- 2- Edema
- 3- Protein urea

Classification of toxemia

- 1- Pre-eclampsia
- 2- Eclampsia

Signs & symptoms of pre-eclampsia

- 1- Sudden hypertension

- 2- Headache
- 3- Swelling of the face , fingers and foot
- 4- Blurring of vision
- 5- Excessive weight gain .
- 6- Epigastric pain .

Complications A – on mother

- 1- Eclampsia
- 2- Abruptio placenta
- 3- Antipartum haemorrhage .
- 4- Hepatic & renal failure

B- on fetus 1- IUD (intrauterine death) 2- Prematurity . 3- Prenatal death

Management & nursing care :-

- Preventive .

- Monitor B/P , Wt , proteinuria specially between 20-30 wks .
- More frequent antenatal visit .
- Good nutrition (protein , iron , vit) and decrease salt .
- Complete bed rest .

3- In severe cases

- Admit to hospital
- Give antihypertensive drugs , aldomet , Adalat
- Give sedatives , valium , phenobarbitone
- Restrict fluid intake & salt
- Increase protein and calcium
- Measure B/P , wt , G.U.E. every wk .

Nursing care during labor

- 1- Monitor B/P & proteinuria
- 2- Monitor the general condition .
- 3- Monitor the FH.
- 4- Give sedation-valium amp .

- 5- Use epidural anesthesia
- 6- Monitor vital signs .
- 7- Monitor fluid intake and output .
- 8- Sometime need episiotomy or forceps.
- 9- Psychological support .
- 10- If B/P increase give apresolin drip .

Nursing care after labor

In some cases fit may occur after labor

- 1- Give sedative-morphine 15 mg IM.
- 2- Sometime need anticonvulsant drugs e.g. magnesium sulphate
- 3- Measure B/P every 1½ hr if remain high , then every 4 hr . for 24 hr. then twice daily if the B/P decrease .

Eclampsia It is an acute condition characterized by convulsion and coma .

Stages of eclampsia

- 1- Premonitory stage
- 2- Tonic stage
- 3- Clonic stage
- 4- Coma stage

Management and nursing care

Main aim is to control fit and delivery as quickly as possible

- 1- Admit to I.C.U.
- 2- Sleep in quite dark room and put cotton in ears .
- 3- Put in bed with walls and tight to it .
- 4- Give O₂ , and put the pt. on lateral position , and use sucker for respiratory tract. \
- 5- Vital signs every 1½ hr
- 6- Remove artificial teeth , and put mouth closer .
- 7- Urinary catheter .
- 8- Drugs according to doctor's order .

Complication of eclampsia

A- To fetus :-

- Anoxia
- Still birth

B- To mother :-

- Cerebral hemorrhage .
- Thrombosis
- Mental disturbances
- Hepatic failure
- Renal failure
- Heart failure
- Aspiring pneumonia
- Temporary blindness
- Tongue bite or injury
- Fracture of bones

Uterine bleeding during pregnancy

It is dangerous complication may lead to death of mother and fetus.

Causes :-

A- During first half of pregnancy

- 1- Abortion
- 2- Hydatidi form mole
- 3- Ectopic pregnancy

B- During second half of pregnancy

- 1- Abruptio placenta
- 2- Placenta previa
- 3- Rupture of uterus
- 4- Carcinoma of cervix

Abortion:- expulsion of fetus and placenta outside the uterus before 28 wks of pregnancy Early abortion – before 12 wk Late abortion- between 12-28 wks

Causes :-

A- Fetal causes

- Chromosomal abnormalities
- H.Mole

B- Maternal causes

- 1- General causes
 - a- Infection lead to fever .
 - b- Chronic nephritis
 - c- Diabetes mellitus
 - d- Trauma
 - f- Hormonal disturbances
 - f- Used drugs e.g. quinine g
 - Malnutrition
- 2- Local causes
 - a- Uterine malformations
 - b- Uterine fibroid
 - c- Cervical incompetence

Types of abortion

A- Induced abortion

Medical or therapeutic abortion Indications :-

- 1- Heart disease
- 2- Chronic hypertension
- 3- Respiratory disease
- 4- Hyperemesis gravidarum
- 5- H.Mole
- 6- Intra uterine death
- 7- Malignant disease
- 8- Inherited disease
- 9- Rh-iso immunization
- 10- Viral disease

Done in a hospital and be sure that complication of medical abortion is less than that of the original cause .

Method :- A- During first 12 wks dilatation & curettage (D&C)
under general anesthesia

- 1- Empty bladder
- 2- Prepare instruments
- 3- Explain to patient
- 4- Give general anesthesia
- 5- Do dilatation
- 6- Do curettage-by clean instruments .
- 7- Vital signs checking
- 8- Give drugs that contract the uterus e.g. methergin .

B- Between 12-28 wks induction of labor by pitocin drip .

- 1- Complete rest
- 2- Checking vital signs & uterine contraction
- 3- Clean vulva perineum .
- 4- Watch vag. Bleeding (colour & smell)
- 5- Complete delivery of fetus , placenta , membrane .
- 6- Good nutrition , rich with protein , and iron .

2- Septic abortion –

Cause

- Infection of uterus after incomplete or illegal abortion .
- Use of unsterilized instruments .
- Malnutrition and anemia .
- An practiced doctor or nurse .

1- Threatened abortion

Signs and symptoms

- 1- uterine bleeding
- 2- mild abdominal pain
- 3- closed cervix
- 4- membrane intact

treatment and nursing care

- 1- Admission to hospital
- 2- Complete bed rest

- 3- Check vital signs
- 4- Monitor vaginal bleeding (colour and smell)
- 5- Pregnancy test , HB % , blood group , Rh
- 6- Ultrasound
- 7- Give sedation like valium
- 8- Give iron , vitamins
- 9- Body hygiene specially vulva
- 10- Advice at home – rest and take good nutrition

2- Inevitable abortion

Signs and symptoms :-

- 1- severe uterine contractions
- 2- continuous uterine bleeding
- 3- cervical dilatation
- 4- rupture of membranes

treatment and nursing care

same as for threatened abortion in addition to :-

- 1- give pethidine
- 2- give blood transfusion
- 3- complete abortion by curettage
- 4- Incomplete abortion it's expulsion of fetus but placenta still inside uterus .

signs and symptoms

- 1- severe uterine bleeding
- 2- severe uterine contraction
- 3- cervical dilatation

Spontaneous abortion

Treatment and nursing care

- 1- Curettage if less than 12 wks

2- Induction by pitocin and then curettage if more than 12 wks

3- Body hygiene

4- Good nutrition rich with protein and iron

5- Complete abortion It is expulsion of fetus , placenta , and membrane all outside the uterus mainly before 8 wks .

Signs and symptoms :-

1- Cervical dilation and uterine contraction during abortion .

2- After abortion occur the uterine contraction , and bleeding stopped cervix closed and uterus returned to normal .

Treatment and nursing care

1- Be sure of complete abortion

2- Check bleeding and vital signs

3- Give drugs according to doctor order

6- Missed abortion

Death of fetus inside the uterus and remains for weeks or months .

Signs and symptoms :-

1- Sometime sings of threatened abortion

2- Disappear of symptoms of pregnancy

3- Pregnancy test negative

4- Uterus small for date

5- No FH or FM

6- Serum fibrinogen become less than normal

7- Cervix is closed

Treatment & nursing care

1- Do evacuation of uterus by curettage if less than 12 wks or by induction with pitocin if more than 12 wks sometimes need C\S .

2- sometime the pt. needs heparin for 2-3 days then evacuate the uterus .

7- habitual abortion

1- Advise the mother to do investigations for diabetes , renal disease , hypothyroidism . 2- Examination for uterus , pelvic , ultrasound , and hysterosalpingeography .

3- Avoid coitus during early pregnancy

4- Physical and psychological rest

5- Good nutrition

6- Treat the cause

7- Treat during pregnancy

- Progesterone (primolut-depot) inj.

- Cervical stitch (shirodkar suture) after 10-12 wks and release at 38 wks for cervical incompetence

Ectopic pregnancy The fertilized ovum embeds outside the uterine cavity .

Types :- commonly in the tube 95 % Abdomen 3-4 % Ovarian 1%
Cervix very rare

Causes

1- infection e.g. puerperal infection

2- peritoneal a adhesion by previous operation

3- congenital abnormalities

4- use of intrauterine device

5- chronic salpingitis (narrowing or obstruction)

6- uterine fibroid

7- hormonal disturbance

signs and symptoms

1- Lower abdominal pain

2- Slight irregular bleeding from the uterus

3- Palpation pelvic mass

4- If the tube is rupture lead to appear signs and symptoms of shock (fainting , B\p , pallor , cold skin , rapid pulse)

Diagnosis :- US , laparoscopy

Management

- 1- Treat shock
- 2- Warm the pt.
- 3- Raising the foot of the bed
- 4- Blood transfusion
- 5- Check vital signs
- 6- Give Iv. Fluid
- 7- Salpingectomy

Hydatid from mole

It is a disease of the chorion characterized by cystic degeneration of the chorionic villi which become distended with fluid and are converted into vesicles . it occurs in the first twelve weeks of pregnancy . It occurs in 1 in 2000 pregnancies

Causes :- unknown cause Signs and symptoms

- 1- excessive nausea and vomiting
- 2- uterus size is larger than gestational age
- 3- there may be signs of P.E.T. before 24 wks
- 4- V.B. may be slight or severe
- 5- Rapid onset of anemia
- 6- Uterus soft on examination
- 7- No fetal part , no FM and fH

Diagnosis :- confirmed by U \ S.

Management:- the uterus is emptied as soon as diagnosis confirmed . if the mole is small and the pregnancy is in first trimester a suction curettage is used . If the mole or prostaglandin is used . The pt. should be kept under observation for at least one year . curettage is repeated to ensure no mole remains . the pt. advised to avoid further pregnancy for 1-2 yrs.

Complications :-

- chorine carcinoma

Hemorrhage .Anti partum hemorrhage (A.P.H.)

Definition :- its vaginal bleeding after 26 weeks of pregnancy before delivering of the fetus .

Incidence : 2% -5% of all pregnancy

Classification of APH ?

- 1- abruption placenta . (1 in 100 pregnancies) 40%
- 2- placenta previa .(1 in 200 pregnancies) 20%
- 3- un classified cause 35%
- 4- lower genital tract lesion 5%

1- Placenta praevia implantation of placenta in the lower uterine segment instead of the uterine fundus occurs during 3rd trimester of pregnancy after the 7th month .

Types :-

- 1- total P.P.
- 2- Partial P.P.
- 3- Low implantation of placenta

Causes :- unknown It more common in :-

- multipara - maternal age > 35 age
- twin pregnancy
- breech presentation

signs and symptoms

- painless V.B
- normal FM & FH
- Cause malpresentation or malposition
- V.B. it occurs during rest and sleep .

Diagnosis :- confirmed by

- pt. history
- signs and symptoms
- obs. Exam
- U/S PV is avoided in P.P.

Treatment and nursing care

Admission to hospital

- Bed rest - Keep pt. on flat position and elevate her foot .
- Low implantation
- induce labor by artificial rupture of membrane
- Partial and total P.P. will do C\S
- Observe the V.B. - Give Iv. Fluid of glucose 5 % - Blood transfusion as needed .
- Check FH. & vital signs every 2 hrs - Never do enema .
- Good diet rich with iron and vitamins .
- Observe the signs of shock and treat it quickly
- Preparation of C\S if V.B. is severe .

Dangerous of P.P.

- A.P.H (shock)
- P.P.H.
- Still birth
- Periparturient sepsis

2- Abruptio placenta

It is premature separation of placenta from its uterine attachment in upper uterine segment Classification of placenta abruption ?

- 1- Partial Abruptio placenta
- 2- Complete Abruptio placenta

Causes

- unknown

- increase parity and maternal age .
- dietary deficiency (folic acid , V.D. def.)
- trauma - P.E.T.
- Short umbilical cord
- Uterine abnormalities or tumor
- Multi pregnancy and polyhydramnios
- Emotional stress

Signs and symptoms

- Bleeding with pain
- Distention of the uterus
- Difficult palpation of fetal part
- Shock
- Abnormal or absent FH.

Diagnosis :- by

- pt. history
- signs and symptoms
- obst. Exam
- U\S

Treatment

Induction of labor by (A.R.M) or oxytocin if fetus is dead .

Delivery by C\S , if fetus alive

Nursing care :-

- Treat shock
- Replace fluid
- Check intake and out put
- Blood transfusion
- Give sedative like pethidine

- Check vital signs every 2hrs
- Observe for P.P.H.
- Bed rest

Complications

- hypofibrinogenemia
- hawmorrhagic shock
- prolonged retention of dead fetus
- septic abortion
- hysterectomy if uterus not contract well

Normal Labor Labor:- The expulsion of the fetus , placenta , membranes .and cord from the uterus via the birth canal .

Delivery :- The actual birth of the baby . The onset of labor :-

- sensitivity of the uterus to oxytoxic drugs .
- progesterone suddenly drops down before labor .
- prostaglandin synthesis which lead to increase muscle contraction .

premonitory signs of labor

(1) lightening The descent of the fetus into the pelvic cavity occurs about 10-14 days before delivery . Is followed by signs :-

- 1- pain in legs .
- 2- constipation .
- 3- difficulty in walking .
- 4- Increase amount of vaginal discharge .
- 5- Frequency of urination .

(2) **False labor or Braxton** – Hicks contractions irregular and intermittent occurs 3-4 wks before true labor .

Signs of true labor

- 1- Show expulsion of blood mixed with mucus from the cervix
- 2- Effacement Thinning the cervix (3 cm to zero)

3- Dilatation The degree of opening of the cervical os (10 cm or 4 fingers) .

4- Uterine contractions Characteristics of contractions * Increment Intensity of the contractions increase * Acme The top of the contractions * Decrement diminishing of the contraction intensity * Frequency the time from the beginning of one contraction to the other . * Intensity it's moderate , mild . severe * Interval between contraction 10-15 min (1st stage) 2-3 min (2nd stage)
Distinguishing between true & false labor True labor 1- contractions regular False labor 2- Abdominal pain that spread to the back 1-

- Taking information .
- Do physical and obstetrical examination .
- Check vital signs and FHB .
- Do urine and blood test .
- Take advising about diet and fluid intake .
- Do perineal care . • Checking the drops of pitocin
- Checking uterine contraction .
- Do cleaning enema .
- Advising about walking and warm bath .
- Psychological support . Nursing care during 2nd stage of labor
 - prepare the delivery room . - sterile equipment (cord set , episiotomy set , damps)
 - Preparation the baby clothes .
 - Teaching mother about deep breathing .
 - Check F.H.B. every 5 / min & B \ P .
 - Check cervical dilatation by vaginal examination

Immediate post partum care

- See the uterus o well contracted o In the midline at the level of umbilical . If not so doing massage but gently to avoid bleeding and give methargin or pitocin by inj.

- See the laceration Check the vagina or birth canal of the blood is cloth it's from uterus , if fresh that mean the blood from vagina

- **Perinal care The purpose**

1- To prevent infection .

2- For mother comfort .

3- To promote healing .

- Cover the women and keep her warm .

- Check vital signs .

- Take warm fluid and rest .

Factor effecting the labor ? 1- Passenger 2- Passageway 3- Power
4- Psyche (psychological status) 5- Placenta position

Induction of labor

by using oxytocin drip Surgical:- A.R.M. (artificial rupture membrane) Conditions ?

- 1- Full term
- 2- Cephalic presentation
- 3- No obstetrical contradiction
- 4- Should be in hospital

Complication?

1. Rupture of uterus
2. Fetal &maternal distress
3. Drag sensitivity
4. Failure of induction

Artificial rupture of membrane (A.R.M.) OR Amniotomy used to induced labor in the beginning of the 2nd stage of labor . Forceps
Type of forceps?

1. 1-long curved forceps (for high traction)
2. Short curved forceps (for lower traction)

3. Kelland curved forceps (for traction & rotation) ex : transver position of fetal haed Indications

- 1- Delay in the 2nd stage of labor .
- 2- Malposition of the fetus head .
- 3- Maternal and fetal distress .
- 4- Large head and post mature .
- 5- Severe P.E.T. & HD

Condition which should be satisfied before the application of forceps :-

1. 1Cervix full dilated .
2. When have pelvic contraction .
3. Bladder should be empty .
4. Membrane rupture .

Complication of forceps For mother

- 1- damage the soft tissues of the pelvis .
- 2- Laceration or tear of the vagina , cervix , and perineum
- 3- bladder or rectum injury .
- 4- P.P.H. 5- Incontinence of urine

For fetus

- 1- Intracranial hemorrhage .
- 2- Injuries .
- 3- Facial palsy .

Episiotomy It is making incision into the perineum to in large the vaginal os . **Inclication:-**

- 1- Fetal distress in the 2nd stage .
- 2- prolapsed cord in the 2nd stage .
- 3- preterm baby to avoid intracranial .
- 4- P.J.T. or cardiac dis .

5- Previous 3rd degree tear .

Types

1- Medo lateral .

2- Medium .

Advantages of medium

1. Less bleeding .

2. Rapid healing .

3. Less pain

Disadvantages of medolateral

1- More bleeding .

2- Difficult healing .

3- Discomfort to mother .

4- Pain is more common .

Nursing care

1- Perineal clean .

2- Warm sitz bath .

3- Give antibiotic .

4- Good diet .

Vaccum used in case of 1- complete dilatation . 2- uterine dysfunction . 3- multi para . Danger of vaccum ?

1- Fetal distress .

2- Rupture of uterus .

3- Premature separation of placenta

Cesarean section

Is the removal of the baby from the uterus through an incision made in the abdominal wall and the uterus .

Indications

- 1- Cephalo-pelvic disproportion .
- 2- Previous C\S .
- 3- P.E.T.
- 4- Placenta previa (A.P.H.)
- 5- Fetal and mother distress .
- 6- Heart disease .
- 7- Primgravida and old mother 35 yr . 8- Prolonged labor .

Types

- 1- Classical C\S (transverse lie) .
- 2- Lower segment C\S . **Advantages** of L.S. C\S
 - 1- Less blood loss .
 - 2- Easy to repair .
 - 3- Less area of activity .
 - 4- Less infection .
 - 5- More comfort to the mother .

Contraindication

- 1- Fetal anomalies .
- 2- Still birth .
- 3- DM .
- 4- Peritonitis .

Fetal presentation

Presentation :- It is part that is felt by the examiner's hand when doing the vaginal examination .

Types 1. Fetal head or cephalic presentation vertex Most common 97 %
face

2- breech presentation

3- Shoulder presentation .

Position

1- Longitudinal lie .

2- Transverse lie .

3- Oblique lie .

Causes of abnormal presentation

1- Unknown .

2- Multiparity .

3- Premature labor the fetus is mobile

4- Polyhydraminous can move freely

5- Hydrocephalic .

6- Multiple pregnancy (Twin) .

7- Placenta previa prevent the head from entering the pelvic

8- Fibroid & tumors brim

9- Contracted pelvis .

10- Head high not engaged .

Diagnosis

1- By abdominal examination

- Palpate mass in the fundus breech P.
- The fundus is low shoulder p.

2- By auscultation

- FH. Above the level of the umbilical
- FH. Is heard below the umbilical

3- By sonar .

Danger of breech P. For mother :-

- 1- perineal trauma .
- 2- Prolonged labor .

For baby :-

- 1- Intracranial hemorrhage .
- 2- Anoxia .
- 3- Injuries .
- 4- Death .
- 5- Cord prolapsed .

Complication of labor

Dystocia or difficult labor Involving the following problems :-

- 1-powers The uterine contractions may not be sufficiently strong .

management

- 1- give Iv. Oxytocin 0.5 with Iv. Fluid 5% glucose (induction of labor).
- 2- Forceps delivery when there is complete dilatation of cervix and C\S when there is cervical dilatation slow .

- 3- Relieve pain by pithedin 100 mg

2-Problems with the passage way

- 1- Contracted pelvis .
- 2- Variation in pelvic shape .
- 3- Cephalopelvic disproportion .

3- problem with the passenger

- 1- Malpresentation .
- 2- big baby .
- 3- hydrocephalus

hemorrhagic complications post partum hemorrhage P.P.H. It is loss of more than 500 ml of blood during the first 24 hours after giving birth . Causes 1- Uterine atony . 2- Laceration of the perineum , vagina , and cervix . more

3- Retained placenta . common

4- Rupture of the uterus . less

5- Inversion of the uterus . common

1-Uterine atony It is relaxation of uterine muscle after labor . Treatment and nursing care 1- Grasp the uterus and massage it .

2- Avoid over massage of the uterus to prevent muscle fatigue .

3- Check the size and high of uterus frequently .

4- Empty the bladder .

5- Check vital signs every 5-15 \min

6- Give ergometrine . 7- Blood transfusion as needed .

8- Treat the shock .

9- Hysterectomy .

2- Lacerations bright red arterial bleeding in the presence of a hard and firmly contracted uterus .

Treatment :- After determination the location of source of bleeding and repairs the laceration .

3- Retained placenta

1- Treat shock

. 2- Remove the placenta manually .

4- Inversion The uterus turns out side after the birth of baby .

Causes

1- Uterine atony .

2- Pressure on the fundus .

3- Pulling the umbilical cord or placenta .

Treatment

1- Treat shock

2- Repositioning the uterus manually .

5- Rupture of uterus

Causes

- 1- Weak C\S scar or other operation .
- 2- Traumatic delivery such as forceps .
- 3- Over dose of oxytocin .
- 4- Commonly in multiparas .
- 5- Abnormal presentation .

Treatment

- 1- Treat shock .
- 2- Blood transfusion .
- 3- Give sedative & antibiotic .
- 4- Hysterectomy

Post partum period Puerperium The time between delivery until the reproductive organs have returned to their pre pregnant state (6 weeks) .
Involution It is the process of returns of the uterus to it's normal size .
Lochia It's uterine discharge consists blood with a small amount of mucous .

Types

- 1- Lochia rubra
- 2- Lochia serosa
- 3- Lochia alba

Nursing care (lasts about 3 days red in color) (lasts 7 days pinkish in color) (colorless)

1. Mother needs physical examination and palpation the fundus .
2. Perineal care (observe the color , amount and order) and teaching her about the perineal self care to promote healing) .
3. Check vital signs .
4. Advice about good diet for lactation .
5. Provide rest and sleep .

6. Early ambulation to prevent thrombosis constipation and to stimulates circulation .

7. Breast care

Puerperal complication

1- Puerperal infection:- Is an infection of genital tract by organisms occurring during labor or puerperium .

Predisposing factors

1. Anemia .
2. Prolonged labor .
3. Hemorrhage more than 1000 cc .
4. Retained placenta .

Signs and symptoms

fever , tachycardia , pain , pulse rate over 120/min

Nursing care and prevention

1. Good general hygiene .
2. Avoid tub bath .
3. Protect the women from communicable disease .
4. used a septic technique in delivery room .
5. Episiotomy and laceration should be checked twice daily .
6. Perineal care .
7. Give antibiotic according to the C&S .
8. Give sedative to reduce pain .
9. Check vital signs every 4\hr .

2- Endometritis It is localized infection of the uterus .

Signs & symptoms fever 38 c , rapid pulse , headache , chilling , and loss of appetite . **Treatment and nursing care**

1. Give antibiotic .
2. Give good diet with iron , vitamin and protein .
3. Give sedative to relieve pain & fever .
4. Isolation .
5. Sleep and rest .

- **Thrombophlebitis** It is an infection of the vascular endothelium Signs and symptoms fever , pain , edema , redness , chill .

Nursing care and treatment

- 1- Bed rest and elevate the bed .
- 2- Give sedative to relieve pain .
- 3- Give heparin to prevent cloth formation .
- 4- Incontinence of urine Dribbling of urine during coughing and sneezing . Breast feeding problems

Types of nipple

- 1- Depressed nipple .
- 2- Flat nipple .

Nursing care mother needs daily exercise of the breast .

- 1- Engorgement milk build up in the breast and cause edema .

Signs and symptoms fever , pain , breast are full , heavy and hard .

Nursing care

1. Check the position of the baby .
 2. The baby should feed on demand .
 3. Give sedative to relieve pain .
- 2- mastitis :- Is inflammation of the breast occur due to :-
1. Position not well .
 2. Not feed him on demand .

Signs and symptoms painful , warm and tender , chills and fever , redness . Treatment and **nursing care**

- 1- Feed your baby in the effected side .
- 2- Put the baby on right position .
- 3- Try expressing milk by breast pump .
- 4- Take hot fluid and eat well .
- 5- Give antibiotic and sedative .

3- breast abscess

Signs and symptoms :-

- 1- Discharge of pus .
- 2- Fever with chills .
- 3- Breast swelling .
- 4- Painful .
- 5- Redness .

If mastitis not treated abscess nipple damage infection entering breast so will need surgery and put drainage under G.A. Prevention put the baby on right position . Position of baby on breast need three things

- 1- Mother posture .
- 2- How mother hold the baby .
- 3- How the baby take the breast