

Methods of Obstetrics & Gynecology treatment

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Gynecology is the medical practice dealing with the health of the female reproductive systems (vagina, uterus and ovaries) and the breasts

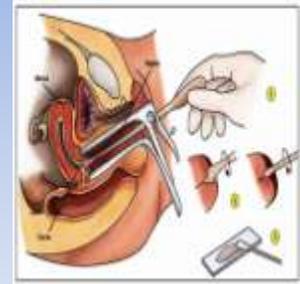


Obstetrics & Gynecology

Females should visit a gynecologist for an exam about once per year. Generally, females should begin seeing a gynecologist at the age of 21, but begin earlier if they become sexually active. After their first visit, females ages 21 to 29 should visit their gynecologist annually to get a Pap smear

Pap Smear

Also known as a Pap test and named after its developer, George Papanicolaou, M.D, a Pap smear is a procedure checks for abnormal cells on the cervix



Preparation for the Pap-smear

Do not insert anything into the vagina for 24 to 48 hours prior to the Pap smear. This includes intercourse, douches, and any vaginal inserts. Inform your doctor before the appointment if you have recently performed any of these activities



Preparation for the Pap-smear

- Try to avoid scheduling a Pap smear during your period. Menstrual fluid may interfere with the accuracy of your results.
- If you have had previous abnormal Pap smear results, inform your doctor. If you have copies of previous abnormal test results, be sure to bring them to your appointment.
- Schedule a follow-up appointment if you receive abnormal Pap smear results.

Types of Pap Smear



Types of Pap Smear

- Conventional Pap—In a conventional Pap smear, samples are smeared directly onto a microscope slide after collection.
- Liquid based cytology—The sample of (epithelial) cells is taken from the Transitional Zone; the squamo-columnar junction of the cervix, between the ecto and endocervix. Liquid-based cytology uses an arrow-shaped brush, rather than the conventional spatula. The cells taken are suspended in a bottle of preservative for transport to the laboratory, where using Pap stains it is analysed.

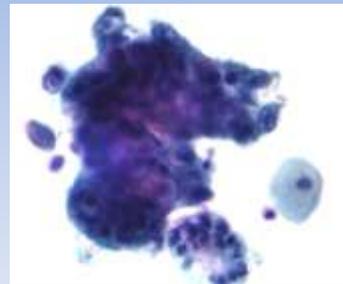
Results of the Pap Smear



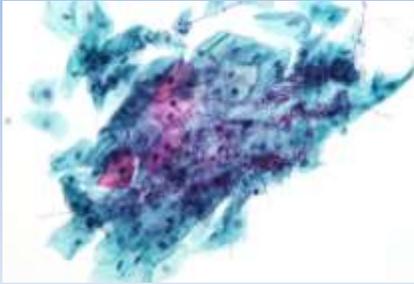
Results of the Pap Smear

- The cells will be checked for these changes. It usually takes about 1-3 weeks to obtain the results from a Pap test.
- A negative Pap smear means that results are completely normal. A positive Pap smear, however, means that results are not. About 5% to 7% of Pap smears produce abnormal results. Most of the time, abnormal Pap test results do not mean that it s exist cervical cancer.

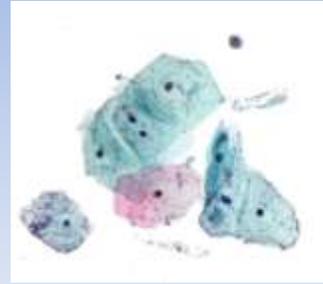
Adenocarcinoma on pap test



Candida pap



Trichomonas pap test



Pregnancy and Pap Smear

Pap tests can usually be performed during pregnancy up to at least 24 weeks of gestation. Pap tests during pregnancy have not been associated with increased risk of miscarriage. An inflammatory component is commonly seen on Pap smears from pregnant woman and does not appear to be a risk for subsequent preterm birth. After childbirth, it is recommended to wait 12 weeks before taking a pap test because inflammation of the cervix caused by the birth interferes with test interpretation

Obstetrics & Gynecology

Females between the ages of 30 to 64 should also visit gynecologist every year. Other reasons to visit a gynecologist include seeking treatment for irregular periods, sexually transmitted infections (STIs), and vaginal infections. Females who are sexually active or are considering becoming sexually active can visit a gynecologist to learn more about contraceptive methods

Ultrasound of mammary gland

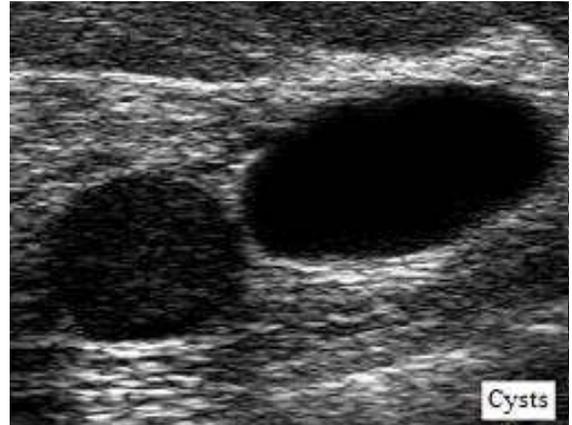


Ultrasound methods

Medical ultrasound (also known as diagnostic sonography or ultrasonography) is a diagnostic imaging technique based on the application of ultrasound

Ultrasound methods

Ultrasound is sound waves with frequencies which are higher than those audible to humans. Ultrasonic images also known as sonograms are made by sending pulses of ultrasound into tissue using a probe. The sound echoes off the tissue; with different tissues reflecting varying degrees of sound. These echoes are recorded and displayed as an image to the operator



Breast ultrasound may be done to

- Find the cause of breast symptoms, such as pain, swelling, and redness.
- Check a breast lump found on breast self-examination or physical examination. It is used to see whether a breast lump is fluid-filled (a cyst) or if it is a solid lump. A lump that has no fluid or that has fluid with floating particles may need more tests.
- Check abnormal results from a mammogram.

Breast ultrasound may be done to

- Look at the breasts in younger women because their breast tissue is often more dense, and a mammogram may not show as much detail.
- Guide the placement of a needle or other tube to drain a collection of fluid (cyst) or pus (abscess), take a sample of breast tissue (biopsy), or guide breast surgery.
- Watch for changes in the size of a cyst or a noncancerous lump (fibroadenoma).
- See how far cancer has spread in a breast.
- Check your breasts if you have silicone breast implants or dense breasts. In these situations, a mammogram may not be able to see breast lumps

Breast ultrasound

Breast ultrasound preferable to be done at the beginning of the menstrual cycle (better on the 5th day)

Mammography



Mammography

Mammography is specialized medical imaging that uses a low-dose x-ray system to see inside the breasts. A mammography exam, called anammogram, aids in the early detection and diagnosis of breast diseases in women

Mammography

The radiation exposure associated with mammography is a potential risk of screening. The risk of exposure appears to be greater in younger women. The largest study of radiation risk from mammography concluded that for women 40 years of age or older, the risk of radiation-induced breast cancer was minuscule, particularly compared with the potential benefit of mammographic screening

Purpose of Mammography

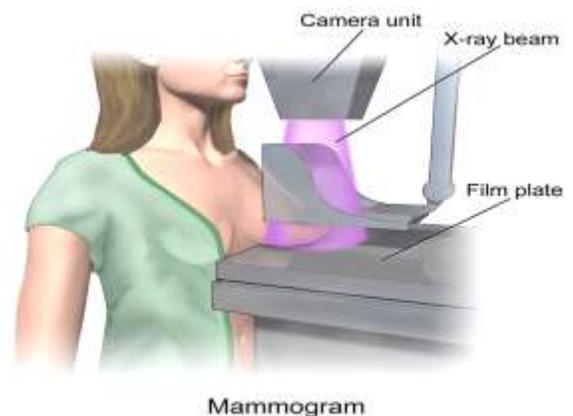
- To screen for malignant breast tumors.
- To investigate breast masses, breast pain, or nipple discharge.
- To differentiate between benign breast disease and malignant tumors.
- To monitor patients with breast cancer who are treated with breast-conserving surgery and radiation

Patient Preparation for Mammography

- Instruct the patient to avoid using underarm deodorant or powder the day of the exam.
- Explain that the test takes about 15 minutes.
- Explain to the patient that she may be asked to wait while the films are checked.
- When scheduling the test, inform the staff if patient has breast implants.
- Make sure the patient has signed an appropriate consent form.
- Note and report all allergies

Implementation

- The patient rests one breast on a table above the X-ray cassette.
- The compressor is placed on the breast.
- The patient holds her breath until the X-ray is taken and she's told to breathe again.
- An X-ray of the cranicaudal view is taken.
- The machine is rotated, and the breast is compressed again.
- An X-ray of the lateral view is taken.
- The procedure is repeated for the other breast.
- The film is developed and checked for quality

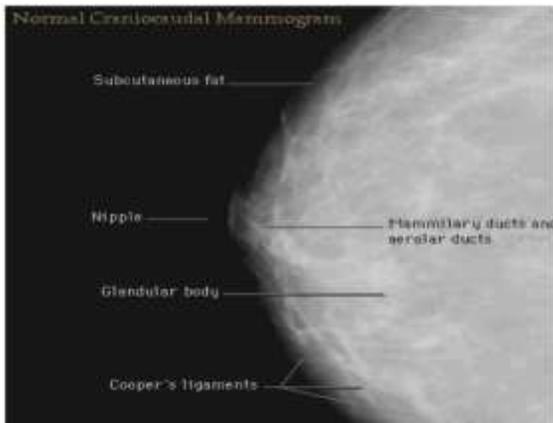


Nursing interventions

- Answer the patient's questions about the test.
- Encourage the patient to deep breathe to alleviate fear and anxiety.
- Make the patient feel comfortable after the procedure.
- Prepare to educate the patient about her diagnosis.
- Prepare the patient for further testing or surgery, as indicated

Interpretations

- **Normal Results**
 - The test reveals normal ducts, glandular tissue, and fat architecture.
 - No abnormal masses or calcifications are present.
- **Abnormal Results**
 - Irregular, poorly outlined, opaque areas suggest malignant tumors, especially if solitary and unilateral.
 - Well-outlined, regular, clear spots may be benign, especially if bilateral



Mammography

- Powders, deodorants, or salves on the breast and axilla that may cause false positive results.
- Failure to remove jewelry and clothing (possible false-positive results or poor imaging).
- Glandular breasts that are common in patients younger than age 30, active lactation and previous breast surgery (possible poor imaging).
- Breast implants (possible hindrance in detecting masses)

Cervix Biopsy



Cervix Biopsy

A cervical biopsy is a procedure to remove tissue from the cervix to test for abnormal or precancerous conditions, or cervical cancer

Types of cervical biopsy

- **Punch biopsy.** This procedure uses a circular blade, like a paper hole puncher, to remove a tissue sample. One or more punch biopsies may be done on different areas of the cervix.
- **Cone biopsy.** This procedure uses a laser or scalpel to remove a large cone-shaped piece of tissue from the cervix.
- **Endocervical curettage (ECC).** This procedure uses a narrow instrument called a curette to scrape the lining of the endocervical canal. This is an area that can't be seen from the outside of the cervix

Endocervical curettage (ECC)



A cervical biopsy may also be used to diagnose and help treat these conditions

- Non-cancerous growth (polyps) on the cervix
- Genital warts. These may mean that you have an infection with HPV. HPV is a risk factor for cervical cancer.
- Diethylstilbestrol (DES) exposure if your mother took DES during pregnancy. DES raises the risk for cancer of the reproductive system.
- Your health care provider may have other reasons to recommend a cervical biopsy

Complications of cervix biopsy

- Infection
- Bleeding

Cervix biopsy

If the woman is pregnant or has a suspicion of it - It should be inform to the doctor immediately, because some methods of cervix biopsy contraindicate to the pregnant woman

Kinds of biopsy procedure

- **Bone marrow biopsy** - a small sample of bone marrow (usually from the hip) is removed via a slender needle. This type of biopsy helps to diagnose diseases such as leukaemia.
- **Colposcopy-directed biopsy** - a colposcope is a small microscope used to examine a woman's cervix while a tissue sample is taken. This biopsy is usually performed to investigate the reasons for an abnormal Pap test result.
- **Endoscopic biopsy** - the endoscope is a flexible tube that can be inserted into an orifice (such as the mouth or anus) or through a small skin incision. Once the lump is reached, cutting tools are threaded through the endoscope so that a sample of tissue can be taken.
- **Excisional biopsy** - the lump is entirely removed. Depending on the location of the lump, the patient may need to undergo general anaesthesia. This type of biopsy may be used for breast lumps.

Kinds of biopsy procedure

- **Incisional biopsy** - only a small slice of the lump is removed. Depending on the location of the lump, a general or local anaesthetic may be needed. This type of biopsy may be used for lumps located in connective tissue such as muscle.
- **Needle biopsy** - a small sample of the lump is removed via a slender hypodermic needle. This can be done either with or without local anaesthetic. This type of biopsy may be used to diagnose conditions of the liver or thyroid.
- **Punch biopsy** - a special tool is used to punch a hole through the uppermost layers of the skin. The anaesthetic used may be local or topical. This type of biopsy can help diagnose various skin conditions.
- **Stereotactic biopsy** - a series of x-rays help to guide the surgeon's needle to the lump. This type of biopsy is usually performed whenever the lump is hard to see or feel

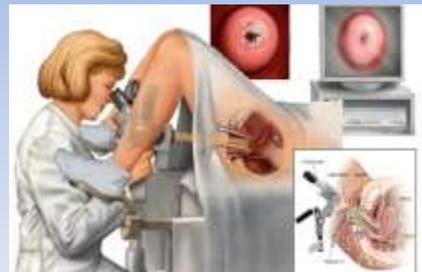
Nursing Responsibilities

- Collect deeply the gynecological and family history
- Warn the patients that some pain in biopsy region can exist
- Monitoring the patient during some hours after biopsy and check for bleeding
- If the bleeding exist blood test should be done
- Explain to the patients to rest at home next couple days

The all woman with abnormal pap smear will be testing again with biopsy of cervix and colposcopy



Colposcopy



Colposcopy

Colposcopy is a medical diagnostic procedure to examine an illuminated, magnified view of the cervix and the tissues of the vagina and vulva. The main goal of colposcopy is to prevent cervical cancer by detecting precancerous lesions early and treating them. A specialized colposcope equipped with a camera is used in examining and collecting evidence for victims of rape and sexual assault

