

VIDEOS IN CLINICAL MEDICINE

Pelvic Examination

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INTRODUCTION

The purpose of the pelvic examination is to identify developmental or anatomic abnormalities, infections, neoplasms, tubal pregnancies, ovarian cysts, uterine fibroids, and other conditions or disorders. A comprehensive pelvic examination includes an examination of the external genitalia, a Papanicolaou test, a bimanual examination of the pelvic organs, and a rectovaginal examination.

GYNECOLOGIC HISTORY

To perform a thorough examination, first obtain a basic gynecologic history, including menstrual, sexual, and obstetrical history; information on the type of contraception used by the patient; results of past Papanicolaou (Pap) smears; records of previous gynecologic procedures; history of discomfort during pelvic examinations; and history of pelvic infections, infertility, endometriosis, or polycystic ovary syndrome. Review symptoms involving pelvic pain, vaginal discharge, abnormal uterine bleeding, urinary incontinence, sexual function, and infertility.

INDICATIONS

The American College of Obstetricians and Gynecologists recommends annual pelvic examinations for adult women for cervical cancer screening and for contraceptive care.¹ Screening should begin not more than 3 years after first vaginal intercourse or no later than 21 years of age. After the age of 30 years, a woman who has had normal Pap smears may undergo screening every 3 years.² Any patient with genital or pelvic symptoms should also undergo a gynecologic examination. Pap testing may be discontinued in women who have had a total hysterectomy and in low-risk women who have reached 65 to 70 years of age.³

CONTRAINDICATIONS

Patients with physical or mental disability, abnormal anatomy, or physical immaturity with an intact hymen may be difficult to examine in the ambulatory setting. In such cases, an examination under anesthesia should be considered. If the patient is menstruating heavily and the traditional glass-slide technique is to be used, the Pap smear should be delayed until menstruation is lighter or has ceased.

PREPARATION

A patient's consent to the gynecologic exam is often assumed, although patients have expressed greater satisfaction when their permission is explicitly requested. Many women report feelings of anxiety regarding pelvic examination. Explain each step of the examination to the patient in advance, warm the instruments, and maintain eye contact when possible.

EQUIPMENT

You will need a drape to cover the patient, an examination table with stirrups, an examination light, a speculum, Pap smear supplies (wooden spatula, cervical brush, and glass slide with fixative), materials to test for chlamydia (an immunoassay kit or DNA probe) and gonorrhea (a culture plate), cotton-tipped swabs, pH indicator paper, dropper bottles of potassium hydroxide and saline, water-soluble lubricant, disposable gloves, and a microscope.

No universal guidelines exist regarding the use of a chaperone during the examination; however, both male and female providers should consider whether the presence of a chaperone is appropriate and should offer the possibility of a chaperone to the patient.

PROCEDURE

The patient should empty her bladder before the examination. With the patient in the supine position, place her feet in the stirrups, have her slide her buttocks toward the edge of the examining table, and relax her legs into abduction. Pelvic examination is performed in the dorsal lithotomy position. Place the drape over the patient in a way that results in minimal exposure.

The pelvic examination consists of evaluation of the abdomen, external genitalia, internal genitalia, and the rectum. Examination of the abdomen includes inspection, auscultation, palpation, and percussion. Look for abnormalities of skin color, hernias, organomegaly, masses, fluid collection, and tenderness.

To perform the examination, first wash your hands and put on gloves. Inspect and palpate the external genitalia. Evaluate the hair distribution, skin, labia minora and majora, clitoris, introitus, perineal body, Bartholin glands, and urethral meatus for developmental abnormalities, discoloration, erythema, inflammation, excoriation, ulcers, plaques, verrucous changes, rashes, masses, and evidence of trauma or infection. Palpate for areas of tenderness.

Inspect the vagina, using an appropriately-sized, wet or lightly lubricated speculum that has been warmed. Insert a finger into the distal vagina and apply gentle downward pressure to help the muscles at the opening of the vagina to relax, and then slowly insert the warmed speculum into the introitus. Apply downward pressure to allow for further insertion into the vagina, to a depth of 4 cm. Open the speculum blades 1 to 2 cm and identify the cervix. With the cervix in view, open the blades further to encircle the cervix. Then lock the speculum in place.

To obtain a sample for cervical cancer screening, place the cervical brush against the cervix and rotate five times. Remove the brush from the vagina, then disconnect the brush tip and place it in the liquid-based Pap container. For glass-slide samples, place the wooden spatula on the face of the cervix and rotate 360 degrees, then place the endobrush in the cervical os and rotate the brush 360 degrees. Transfer the specimen onto the slide by rolling or twisting the spatula and brush on the slide, and then apply fixative.

To perform wet-mount and cervical cultures, use a cotton-tipped swab to obtain a sample of vaginal discharge from the fornix. Evaluate the volume, color, consistency, and odor. Drag the swab across the glass slide. Apply potassium hydroxide to one side of the slide and saline to the opposite side. Apply a coverslip. Examine under the microscope for clue cells, budding hyphae, or trichomonads. To perform a DNA gonococcal or chlamydia probe, place a Dacron cotton-tipped swab in the cervical os for 30 seconds; place this end in the assay-transport medium.

Before removing the speculum from the vagina tell the patient that you are



External genitalia with arrow indicating Bartholin glands



View of the cervix between speculum blades

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closing the blades and will be removing it; unlock the speculum and back off the cervix. Slowly close the blades so that they are completely closed by the time you remove the speculum from the introitus.

The bimanual examination includes palpation of the vagina, cervix, uterus, adnexa, and cul-de-sac. Use the nondominant hand on the abdomen to sweep the pelvic organs downward, and use the index and middle fingers of the dominant hand in the vagina to simultaneously elevate the organs to determine the size, shape, symmetry, mobility, position, and consistency of the uterus and ovaries.

The purpose of the rectovaginal examination is to assess a retroverted uterus, to screen for colorectal cancer in women 50 years of age or older, and to detect pelvic abnormality or disease.⁴ Place the index finger of your dominant hand into the vagina while inserting the middle finger of the same hand into the rectum. Apply pressure with these fingers laterally and anteriorly to palpate structures. To assist in palpating structures, use your nondominant hand to apply downward pressure on the abdomen.

COMPLICATIONS

There are relatively few complications associated with comprehensive pelvic examination. A small amount of bleeding after the Pap sampling can occur but is usually considered normal.

CONCLUSIONS AND RECENT DEVELOPMENTS

The comprehensive pelvic examination is an essential component of periodic health maintenance and disease screening in adult women. The Food and Drug Administration has recently approved the first vaccine developed to prevent cervical cancer, precancerous genital lesions, and genital warts due to human papillomavirus (HPV) types 6, 11, 16, and 18. The vaccine is approved for use in women between the ages of 9 and 26 years. According to the Federal Advisory Committee on Immunization Practices, which advises the Centers for Disease Control and Prevention on vaccine issues, the availability of the HPV vaccine does not diminish the importance of performing a comprehensive pelvic examination and cervical cancer screening with Pap technology.

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