



# Clinical Report—Gynecologic Examination for Adolescents in the Pediatric Office Setting

Paula K. Braverman, MD, Lesley Breech, MD, and THE COMMITTEE ON ADOLESCENCE

## KEY WORDS

pelvic examination, Pap smear, sexually transmitted infections, menstrual disorders, pubertal development

## ABBREVIATIONS

STI—sexually transmitted infection

AAP—American Academy of Pediatrics

NAAT—nucleic acid amplification test

This document is copyrighted and is property of the American Academy of Pediatrics and its Board of Directors. All authors have filed conflict of interest statements with the American Academy of Pediatrics. Any conflicts have been resolved through a process approved by the Board of Directors. The American Academy of Pediatrics has neither solicited nor accepted any commercial involvement in the development of the content of this publication.

The guidance in this report does not indicate an exclusive course of treatment or serve as a standard of medical care. Variations, taking into account individual circumstances, may be appropriate.

[www.pediatrics.org/cgi/doi/doi:10.1542/peds.2010-1564](http://www.pediatrics.org/cgi/doi/doi:10.1542/peds.2010-1564)

doi:doi:10.1542/peds.2010-1564

All policy statements from the American Academy of Pediatrics automatically expire 5 years after publication unless reaffirmed, revised, or retired at or before that time

PEDIATRICS (ISSN Numbers: Print, 0031-4005; Online, 1098-4275).

Copyright © 2010 by the American Academy of Pediatrics

## abstract

FREE

The American Academy of Pediatrics promotes the inclusion of the gynecologic examination in the primary care setting within the medical home. Gynecologic issues are commonly seen by clinicians who provide primary care to adolescents. Some of the most common concerns include questions related to pubertal development; menstrual disorders such as dysmenorrhea, amenorrhea, oligomenorrhea, and abnormal uterine bleeding; contraception; and sexually transmitted and non-sexually transmitted infections. The gynecologic examination is a key element in assessing pubertal status and documenting physical findings. Most adolescents do not need an internal examination involving a speculum or bimanual examination. However, for cases in which more extensive examination is needed, the primary care office with the primary care clinician who has established rapport and trust with the patient is often the best setting for pelvic examination. This report reviews the gynecologic examination, including indications for the pelvic examination in adolescents and the approach to this examination in the office setting. Indications for referral to a gynecologist are included. The pelvic examination may be successfully completed when conducted without pressure and approached as a normal part of routine young women's health care. *Pediatrics* 2010;126:583–590

## INTRODUCTION

Gynecologic issues are commonly seen by clinicians who provide primary care to adolescents. Some of the most common problems include questions related to pubertal development; menstrual disorders such as dysmenorrhea, amenorrhea, oligomenorrhea, and abnormal uterine bleeding; contraception; and sexually transmitted infections (STIs) and non-STIs. Approximately one-half of adolescents attending high school have been sexually active, which places them at risk for STIs and pregnancy.<sup>1</sup> Younger adolescents often have questions about pubertal development, and the gynecologic examination is a key element in assessing pubertal status and documenting physical findings.

The American Academy of Pediatrics (AAP) promotes the inclusion of the pelvic examination in the primary care setting within the medical home. The examination can be a positive experience when conducted without pressure and approached as a normal part of routine young women's health care. At a minimum, examination of the external genitalia should be included as part of the annual comprehensive physical examination of children and adolescents of all ages. Routinely explaining and including this examination normalizes the experience rather

than setting it apart as something that is only performed as an exception. Most adolescents do not need an internal examination involving a speculum or bimanual examination. However, for cases in which more extensive examination is needed, the primary care office is often the best setting for pelvic examination. The primary care clinician, who has established rapport, trust, and a comfort level with the patient, is allowed to prepare the patient in advance and to more successfully address preconceived negative attitudes and fears.

Although pediatric residency training includes instruction in performing the pelvic examination, many pediatricians may not use these skills in their current practice setting. The purpose of this report is to provide pediatricians with background information regarding indications for the pelvic examination, along with information about the equipment and supplies needed and techniques used in performing the examination in the primary care office setting.

## INDICATIONS FOR THE PELVIC EXAMINATION

Fewer adolescents require a complete screening pelvic examination because of recent changes in recommendations for the initiation and follow-up of abnormal Papanicolaou (Pap) test results, as well as newer tests available to screen for STIs, which can be performed on urine specimens, vaginal swabs, or cervical samples. However, there are instances in which the pelvic examination is a crucial part of the medical evaluation. The goals of a pelvic examination are primarily to screen for and diagnose diseases and abnormalities but also to provide education about gynecologic issues and reassure the patient about normal, healthy anatomy. Because of previous negative experiences or inaccurate in-

formation relayed by peers or family members, the adolescent may be fearful or anxious about the examination. It is important to proactively allay any fears before performing the examination. Issues that need to be addressed up front with the patient include fear of discovering a disease or abnormality, possible pain or discomfort, embarrassment in undressing or exposing the genital area, and uneasiness with the examiner, particularly when the clinician is male or a trainee. Clinicians should always be sensitive to the possibility of past or current sexual abuse, which can affect the patient's comfort with the examination and her preference regarding the gender of the examiner. When performed in a thoughtful and sensitive manner, the pelvic examination can be a positive experience. In some cases, it may be helpful to have the patient make an appointment specifically for the pelvic examination to ensure that the provider does not feel rushed in the midst of a busy day of clinical practice.

Indications for the pelvic examination are listed in Table 1. In the past, a history of sexual activity was an automatic indication for a full pelvic examination to perform Pap tests and STI testing and to act as a prerequisite to prescribing hormonal contraception. Certainly, the external genitalia of all patients should be examined to confirm normal anatomy, assess pubertal

**TABLE 1** Indications for a Pelvic Examination

Persistent vaginal discharge
Dysuria or urinary tract symptoms in a sexually active female
Dysmenorrhea unresponsive to nonsteroidal anti-inflammatory drugs
Amenorrhea
Abnormal vaginal bleeding
Lower abdominal pain
Contraceptive counseling for an intrauterine device or diaphragm
Perform Pap test
Suspected/reported rape or sexual abuse
Pregnancy

development, and look for evidence of abnormal lesions, infection, or trauma. However, with the availability of urine-based and vaginal-swab STI testing, examination with a speculum in an asymptomatic patient is not necessary for diagnosing asymptomatic STIs.<sup>2,3</sup> Other non-sexually transmitted vaginal infections, such as bacterial vaginosis and yeast infections, can also be diagnosed with a vaginal swab obtained by either the provider or the patient.<sup>4,5</sup>

Previous recommendations to perform Pap tests at the onset of sexual activity have changed. Current guidelines state that the first Pap test should be performed at 21 years of age, except if a patient has immune suppression or infection with HIV, in which case annual Pap tests are started with the onset of sexual activity. Adolescents who had been screened previously and had documented cervical intraepithelial neoplasia (CIN) 2 or 3 or carcinoma would require continued screening as outlined in the new recommendations.<sup>6</sup>

Cervical cancer generally develops several decades after initial exposure to human papillomavirus (HPV) and is rare in women younger than 21 years. Although many sexually active adolescents are exposed to HPV, and some develop abnormal cervical cells, these changes resolve without intervention in the vast majority of adolescents. Furthermore, there are indications that interventions for abnormal cervical cytology in this age group cause unnecessary anxiety and have the potential to contribute to pregnancy complications in the future.

A speculum or bimanual examination is now considered unnecessary before prescribing most forms of contraception. The package insert for oral contraceptive pills specifically states that a gynecologic examination is not necessary. The rationale is that there is

nothing that would be found on the pelvic examination that would be a contraindication to prescribing oral contraceptive pills. The same reasoning can be applied to the contraceptive patch, ring, progestin-releasing implant, and medroxyprogesterone injections. A urine-based pregnancy test and STI screen can be performed, if indicated, before a clinician prescribes hormonal contraception. The 2 exceptions would be an intrauterine device (IUD) or diaphragm, for which anatomic variation could affect insertion or appropriate sizing of the device.

A complete pelvic examination is always indicated in cases of suspected or reported rape or sexual abuse and/or as part of the evaluation of lower abdominal pain. In the case of lower abdominal pain, the examination is performed to identify the source of pain, which may be caused by pelvic inflammatory disease, ovarian mass or torsion, and/or normal or ectopic pregnancy. When rape or sexual abuse has occurred in the previous 72 hours, a pelvic examination should be performed in a clinical setting along with the physical examination to identify and document evidence of trauma and to collect and safeguard forensic specimens obtained in a standardized manner. The necessary supplies, equipment, and staff knowledge and skills may not be available in the primary care office setting; therefore, some patients may need referral to a specialized medical center.

Persistent symptomatic vaginal discharge is another indication for a speculum examination. Although nucleic acid amplification tests (NAATs) can be used on non-clean-catch urine samples to detect *Chlamydia trachomatis* and *Neisseria gonorrhoeae* infections, cervical or vaginal specimens may be more sensitive, depending on the test that is used.<sup>2</sup> Although vaginal swab specimens obtained during the

speculum examination can be used to diagnose trichomoniasis, bacterial vaginosis, and yeast infection, a blind vaginal swab is sufficient for obtaining an adequate sample for diagnosing these infections. Visualizing the cervix also allows for assessment for the presence of mucopurulent discharge and friability, which have been associated with the diagnosis of chlamydia and gonorrhea. The speculum examination is also important for ruling out other causes of discharge, such as a foreign body or a cervical abnormality such as a large ectropion.

Another indication for a complete pelvic examination is menstrual disorders, including dysmenorrhea that is unresponsive to first-line therapy with nonsteroidal anti-inflammatory drugs (NSAIDs) and/or hormonal therapy, amenorrhea, and abnormal vaginal bleeding. In these instances, the pelvic examination is important for confirming normal anatomy, isolating the source of pain, ruling out lesions or masses, and identifying sources of vaginal/uterine bleeding. A complete pelvic examination with a speculum may not be necessary for all adolescents with abnormal vaginal bleeding if it is determined that the clinical scenario is that of an individual with heavy and/or prolonged menses within the first few years after menarche who promptly responds to medical management and does not have any indication of trauma or history of sexual activity or abuse.

### PREPARATION FOR THE PELVIC EXAMINATION

Before performing a pelvic examination, it is important to explain the components of the examination to the patient and to show the patient the equipment that will be used. Allowing the patient to touch the speculum to demonstrate that it is smooth and will not injure her can be

reassuring. Use of anatomic models, pictures in handouts, and pamphlets that describe the examination are valuable adjuncts. The amount of detail included depends on the age and maturity level of the patient. Depending on the patient's preference, having the patient's mother or another trusted female, such as a relative, present for both the preexamination preparation and the examination itself can sometimes be helpful and reassuring to the patient.

It is important to reassure the patient that nothing will be done without telling her first and that, although the examination may be uncomfortable, it should not be painful in the absence of pelvic abnormality. Patients should be encouraged to give feedback to the clinician during the examination if they are not comfortable, either physically or emotionally. The patient should be reminded that she is in control of her body and that it is fine to say, "Wait a minute," "Stop," or "That's not comfortable." For a cooperative patient, the examination can be completed in 10 to 15 minutes. However, the examination should be performed only when there is adequate time allotted, particularly if it is the patient's first examination or if the patient has had a previous negative experience. If the patient does not appear to be tolerating the examination, it should be stopped and tried again at a later time to minimize negative experiences. In addition to explaining some relaxation techniques to the patient, pressing on the perineal muscle without inserting a finger in the vagina and having the patient practice contracting and relaxing that area can be helpful in later successfully inserting the speculum or a finger during the bimanual examination.

Before performing the examination, the patient should be asked to empty her bladder. This will minimize any pain or discomfort, particularly dur-

ing the bimanual examination. The pelvic examination should be performed in the lithotomy position on an examination table with stirrups. Although frog-leg or knee-chest position is used to examine younger girls, the use of stirrups is preferred when performing a speculum examination to allow for proper insertion and positioning of the speculum. The room should be set up to ensure privacy with a curtain or locked door, and gowns and draping should be provided. Chaperones are strongly recommended, with the permission of the patient, even when the patient and clinician are the same gender, to help avoid any false accusations of impropriety. The chaperone can also serve as the assistant to the clinician, which improves efficiency in collecting specimens.

The equipment needed to perform a pelvic examination is listed in Table 2 and includes materials used to perform Pap tests and STI/non-STI cervicitis/vaginitis evaluation. Warm running water is helpful to provide lubrication for the speculum before insertion. Jelly lubricants should not be used on the speculum, because they interfere with the results of Pap tests and STI

tests. The jelly lubricant is reserved for the bimanual examination, which is always performed after the speculum examination is completed. Nonlatex gloves are needed, particularly for those who have latex sensitivity or allergy. A variety of specula of varying widths should be available. The pediatric/infant speculum should never be used on a pubertal female, because it does not have the required 4-in length to reach the cervix. The speculum commonly used in a sexually active female is the Pederson speculum, which is 7/8 in wide. In cases of virginal adolescents or those who cannot relax their vaginal muscles, the Huffman speculum can be useful, because it is narrower, with a width of 0.5 in, but has the required length. Use of the Graves speculum should be avoided, because its width can cause unnecessary discomfort. Plastic disposable specula are available in the appropriate sizes. Specula with self-contained lighting can be useful, because they make visualization easier.

In light of existing barriers to reproductive health services for adolescents with disabilities, the need for access to appropriate screening and sexual education cannot be overstated. Young women with physical disabilities may require modification of the physical approach to the examination because of limb, pelvic, or spine deformity or immobility. The teenager with physical, behavioral, or developmental disability may require a referral to a gynecologist and possibly an examination under anesthesia. The same may apply to patients who are unable or unwilling to cooperate. All efforts should be made to perform the examination in the office setting, but forcing a patient to undergo pelvic examination is always contraindicated (refer to the AAP clinical report on sexuality of disabled children and adolescents<sup>7</sup>).

## PERFORMING THE PELVIC EXAMINATION AND COMMON FINDINGS

### External Genitalia

The first part of the pelvic examination is inspection of the pubic hair, noting Tanner stage (sexual maturity rating) and the presence of any lesions, including pubic lice, nits, folliculitis, and other inflammatory lesions such as hidradenitis suppurativa. Folliculitis presents as papules and pustules primarily in the pubic hair region. They can be mildly tender and are usually smaller than hidradenitis suppurativa, which causes larger, tender, draining lesions that represent recurrent infection of apocrine glands. Folliculitis is particularly common with the increased popularity of shaving pubic hair. Teenagers need to be counseled that shaving should be performed carefully with adequate lubrication to minimize trauma. In addition, although not as common as in other body locations, some teenagers will have genital piercings. Teenagers should be counseled on proper hygiene and potential medical complications of piercing in the genital area, particularly those that involve the clitoris.

The external genitalia are examined next to assess for signs of inflammation, including redness or swelling, as well as any pigmentary changes, including hypopigmentation, which can be seen in lichen sclerosis or vitiligo. Clitoral size should be evaluated after retracting the clitoral hood, and the width should be <10 mm. An enlarged clitoris can indicate elevated androgens associated with a problem at the level of the ovary or adrenal gland. The hymen should be assessed for patency and configuration, including the presence of an imperforate, microperforate, or cribriform hymen or hymenal band, which may impair uterine blood flow or preclude use of tampons. A

**TABLE 2** Materials and Equipment Needed for the Pelvic Examination

Room with warm running water
Room with a curtain or locked door
Examination table with stirrups
Adequate adjustable light source
Nonlatex gloves
Water-soluble lubricant
Gowns, drapes
Speculum: Pederson, Huffman
Pap test materials: liquid-based or slide, cytobrush, paddle, fixative
Culture/antigen tests for STIs: chlamydia, gonorrhea, trichomoniasis
Urine pregnancy tests
Swabs: cotton, calcium alginate, Dacron
Microscopy materials: glass slides and coverslips, saline solution, 10% potassium hydroxide
pH paper
Tampons/pads
Tissues



pubertal female with an imperforate hymen should be referred promptly to a gynecologist to prevent accumulation of blood in the vagina and upper genital tract. Other abnormalities, such as a vertical or transverse vaginal septum, would be an indication for further evaluation to rule out other genital tract anomalies. If there are any questions about patency of the vagina, a saline-soaked cotton swab can be gently inserted to demonstrate patency. The Bartholin glands are located in the posterior vestibule at the 4 and 8 o'clock positions. When infected, they present with swelling, erythema, and tenderness that can extend into the entire labia minora. Although any vaginal organism can infect the glands, they are commonly infected by STI pathogens, including gonorrhea and chlamydia. The Skene glands are located on each side of the urethra, and infection can present as erythematous areas lateral to the urethra. Insertion of a finger into the vagina and anterior pressure may produce discharge from the ducts.

Any lesions, including papules, vesicles, pustules, ulcers, fissures, and warts, should be noted. These could be signs of an STI or other dermatologic conditions. In addition, any signs of trauma, including laceration, should be noted. Ulcers found on the external genitalia as well as in the vagina are commonly caused by herpes simplex virus (HSV), syphilis, or chancroid, which are sexually transmitted. Although lymphogranuloma venereum can present with an ulcer, it is an uncommon STI in the United States.<sup>8</sup> Because HSV and syphilis are the most common cause of genital ulcers in the United States, a viral culture for HSV and serologic tests for syphilis should be performed for suspicious lesions. Some ulcers are not acquired sexually, including aphthous spectrum ulcers and those caused by Epstein-Barr virus

infection.<sup>9</sup> Genital warts (condylomata acuminata) can present as flat or exophytic and are attributable to human papillomavirus. Condylomata lata are flesh-colored papules on mucous membranes, which can be confused with warts but are filled with spirochetes and are a manifestation of secondary syphilis.<sup>8</sup>

The presence of any blood coming from the vagina should be noted; vaginal discharge should be assessed, including amount, color, and odor. The perianal area should be included in the external examination with specific reference to evidence of trauma, discharge, or warts. Inguinal nodes should be palpated for size, tenderness, and consistency. Enlarged painful nodes could be an indication of an STI, including syphilis or herpes simplex virus.

### Speculum Examination

The speculum examination is performed after completion of the external examination. Although not always necessary, a single finger can be inserted along the posterior vaginal wall before insertion of the speculum to locate the cervix. Lubricating the speculum with warm water can facilitate insertion of the speculum, and anterior pressure should be avoided during the insertion process to prevent pain along the urethra. If the speculum is completely inserted before opening the blades, the cervix frequently is easily viewed without much further manipulation. Opening the speculum before inserting it the complete length of the vagina can be painful. Once inserted, the vaginal walls should be inspected for discharge and lesions.

The cervix should be completely visualized to note the presence of any lesions as well as the presence or absence of an ectropion (transition between the columnar and squamous epithelium) on the exocervix. The ectropion is a

normal developmental finding of the adolescent cervix in which the squamocolumnar junction is on the exocervix. This usually regresses into the cervical canal with advancing gynecologic age. When prominent, the ectropion can cause significant vaginal discharge. Friability and hyperemia of the cervix can indicate infection with an STI. White plaques on the cervix that cannot be removed with a swab could indicate condyloma acuminata, and red punctate lesions (strawberry cervix) may be seen with trichomoniasis. The cervix has a bluish hue, known as cervical cyanosis or Chadwick sign, in pregnancy.

During the speculum examination, samples are obtained for laboratory and office-based analysis. If the office has a microscope, vaginal pool samples can be examined immediately to diagnose yeast infection, bacterial vaginosis, or trichomoniasis. Samples are obtained from the pooled vaginal secretions for wet prep, potassium hydroxide examination, and vaginal pH testing. A cotton swab is used to collect vaginal secretions, which can be placed in a tube with 1 mL of normal saline solution and then used to prepare a glass slide for microscopic examination. Alternatively, the slide can be directly smeared with the swab, after which a drop of saline or potassium hydroxide is added. With the wet saline solution preparation, the clinician looks for an increased number of white blood cells as an indication of infection; clue cells (bacterial-covered epithelial cells), which are a sign of bacterial vaginosis; moving flagellated trichomonads; and hyphae or budding yeast. Potassium hydroxide preparation is helpful for identifying yeast not seen on the saline-solution preparation. Ideally, the wet mount should be read as soon as the pelvic examination is completed to increase the likelihood of detecting trichomonads. In the case

of bacterial vaginosis, when the vaginal secretions are mixed with potassium hydroxide, there is a characteristic fishy odor, known as a positive whiff test, because of the amines that are present in the discharge. The normal vaginal pH should be <4.5; pH is elevated with bacterial vaginosis and trichomoniasis. An easy method for measuring pH is to dip the pH paper in the secretions left on the tip of the speculum after it is removed and then to read the color change within 10 seconds. Other tests that are commercially available include cards that measure pH and for the presence of amines, which may be helpful in the diagnosis of bacterial vaginosis. The wet mount can miss trichomoniasis 30% to 50% of the time; culture, nucleic acid probe, or antigen-based rapid testing may be more sensitive in detecting this infection.<sup>3</sup> Clinicians can consult with their referral laboratory about performing the wet-mount or potassium-hydroxide examination if a microscope is not available in the office or if Clinical Laboratory Improvement Act compliance is an issue.

When indicated, Papanicolaou tests are obtained by using a Papanicolaou paddle, which is rotated 360° to sample the entire exocervix, and a cytobrush is used to collect an endocervical specimen. The cytobrush can cause bleeding, which may be more prominent in patients with an STI. The patient should be warned about the possibility of some light bleeding or spotting after the Pap test. Liquid-based Pap tests are preferred, because they produce fewer inadequate readings and false-negative results. An additional benefit of liquid-based Pap tests is that, in some cases, STI testing can be performed on the same specimen. Alternatively, direct smearing of a slide, which is immediately fixed before air drying, is still used in many laboratories. It is important to verify with the

cytology laboratory whether they use 1- or 2-slide Pap tests in which the endocervical or ectocervical specimens are either placed on 1 slide or separated. Any nonulcerative lesions of the cervix should be evaluated with a Pap test, and any patient with unknown suspicious lesions should be referred to a gynecologist for further evaluation regardless of the Pap test result. The Pap test is performed before obtaining the endocervical swab for STI testing.

Cervical specimens should be obtained for gonorrhea and chlamydia testing by using an NAAT, culture, or DNA probe (nonamplified DNA testing). Some of the NAATs for gonorrhea and chlamydia have also been approved for vaginal swab specimens. In cases of sexual abuse or rape, cultures may be legally required for gonorrhea and chlamydia instead of the NAAT. For non-NAATs including culture, an endocervical specimen must be obtained for chlamydia, because this organism, unlike gonorrhea, is an intracellular organism that infects columnar cells. The NAATs are the most sensitive tests for chlamydia, but depending on transport issues, culture for gonorrhea may be equivalent to an NAAT. Testing using NAATs should not be performed sooner than 3 weeks after treatment for chlamydia or gonorrhea because of the possibility of false-positive results. Blind vaginal swab for *Trichomonas* testing is equivalent to a specimen obtained during speculum examination.<sup>2,3,5</sup>

Once the speculum examination is completed, the speculum is closed and then carefully removed with posterior pressure while avoiding pinching the sides of the vaginal wall. The speculum should never be removed in the open position.

### **Bimanual Examination**

The bimanual examination is performed by inserting 1 or 2 fingers into

the vagina with a water-based lubricant on the gloved hand. The cervix is assessed for consistency. The normal nonpregnant cervix is firm, while the cervix of a gravid uterus is softer. The cervix should be gently moved to assess for cervical motion tenderness, which indicates pelvic infection or inflammation. It is important to remember that adolescents, particularly those not experienced with the examination, commonly mistake movement or pressure for pain. Distinguishing between discomfort and true pain can be challenging. The uterus is then palpated for size and tenderness. The nonpregnant uterus is small and firm, whereas at 10 to 12 weeks' gestation, it is the size of a grapefruit and is softer, globular, and starting to protrude from the pelvis. The uterus starts becoming larger and softer between 8 and 10 weeks' gestation. The adnexa (ovaries) are then assessed for pain or masses. Normal ovaries are usually barely palpable.

When the examination is completed, the patient should be given time to remove any excess lubricant and offered tampons or pads for bleeding. The findings and recommendations are then discussed once the patient is dressed.

The common gynecologic abnormalities that are identified during pelvic examination are listed in Table 3.

### **REASONS TO REFER TO A GYNECOLOGIST**

The role of the pediatrician is to recognize abnormalities that warrant referral to a gynecologist and to identify common infections that can be treated without referral. The types of conditions that should be referred to a gynecologist are listed in Table 4 and include masses, chronic pelvic pain, pregnancy, menstrual disorders unresponsive to medical management,

**TABLE 3** Common Gynecologic Findings Seen on Gynecologic Examination

External genitalia
Bartholin gland abscess
Skene gland infection
Genital ulcers/fissures
Warts: condyloma acuminata
Papular lesions (condylomata lata from syphilis)
Molluscum contagiosum
Urethral prolapse
Folliculitis
Hidradenitis suppurativa
Vulvitis
Pigmentary changes
Papillomatosis
Cervix
Ectropion
Strawberry cervix
Human papillomavirus/condyloma
Cervical polyp
Cervical ulcers
Vagina
Ulcers
White adherent plaques: <i>Candida species</i>
Condyloma acuminata

**TABLE 4** Reasons to Refer to a Gynecologist

Adnexal mass
Vulvar or cervical lesion of undetermined etiology
Possible genital tract anomaly (imperforate hymen, duplicated upper tracts, absence of vagina, uterus)
Abnormal Pap test result requiring colposcopy
Acute pelvic pain with possible ovarian torsion, ectopic pregnancy, tubo-ovarian abscess, adnexal mass
Pelvic inflammatory disease (if the clinician is not comfortable with management)
Chronic pelvic pain
Dysmenorrhea unresponsive to medical therapy
Abnormal vaginal bleeding unresponsive to medical therapy or with severe anemia
Intrauterine device insertion
Pregnancy

unknown vulvar or cervical lesions, abnormal Pap test results requiring colposcopy, and genital anomalies.

## REFERENCES

- Eaton DK, Kann L, Kinchen S, et al; Centers for Disease Control and Prevention. Youth risk behavior surveillance: United States, 2007. *MMWR Surveill Summ.* 2008;57(4):1–131
- Johnson RE, Newhall WJ, Papp JR, et al. Screening tests to detect *Chlamydia trachomatis* and *Neisseria gonorrhoeae* infections: 2002. *MMWR Recomm Rep.* 2002; 51(RR-15):1–38
- Huppert JS, Batteiger BE, Braslins P, et al. Use of an immunochromatographic assay for rapid detection of *Trichomonas vaginalis* in vaginal specimens. *J Clin Microbiol.* 2005;43(2):684–687
- Blake DR, Duggan A, Quinn T, Zenilman J, Joffe A. Evaluation of vaginal infections in adolescent women: can it be done without a speculum? *Pediatrics.* 1998;102(4 pt 1):939–944
- Sobel JD. What's new in bacterial vaginosis and trichomoniasis? *Infect Dis Clin North Am.* 2005;19(2):387–406
- American College of Obstetricians and Gynecologists. Cervical cancer in adolescents: screening evaluation, and management. Committee Opinion No. 463. *Obstet Gynecol.* 2010;116(2):469–472
- Murphy NA, Elias ER; American Academy of Pediatrics, Council on Children With Disabil-

Recently, changes were made in the recommendations for follow-up of abnormal Pap test results. As opposed to high-grade lesions, low-grade lesions and atypical squamous cells of undetermined significance should now be followed up by repeat Pap tests at 1-year intervals. Colposcopy is recommended only if the abnormality persists or becomes a high-grade lesion over a 2-year period.<sup>6</sup>

## CONCLUSIONS

Many gynecologic issues can be managed by the primary care clinician without performing a speculum or bimanual examination. For conditions that require a complete pelvic examination, the patient may prefer to have it performed in a familiar setting rather than being referred to another provider. There are instances in which the pelvic examination must be performed during a problem visit and cannot be deferred to a separate, dedicated appointment time slot. These urgent situations may affect office costs in terms of physician and assistant time. However, providing urgent examinations will provide more comprehensive continuity of care for the patient. Specific details concerning billing and coding, including billing for confidential services, can be found in other AAP publications and policy statements.<sup>10–13</sup> With appropriate backup from a gynecologist, most medical gynecologic issues can be managed by the clinician in the primary care office setting.

## LEAD AUTHORS

Paula K. Braverman, MD  
Lesley Breech, MD

## COMMITTEE ON ADOLESCENCE, 2009–2010

Margaret J. Blythe, MD, Chairperson  
Paula K. Braverman, MD  
Cora C. Breuner, MD, MPH  
David A. Levine, MD  
Pamela J. Murray, MD  
Rebecca F. O'Brien, MD  
Warren M. Seigel, MD

## LIAISONS

Rachel J. Miller, MD – *American College of Obstetricians and Gynecologists*  
Jorge L. Pinzon, MD – *Canadian Paediatric Society*  
Benjamin Shain, MD – *American Academy of Child and Adolescent Psychiatry*

## STAFF

Mark Del Monte, JD  
Karen Smith  
ksmith@aap.org

## OTHER SUGGESTED READINGS

Emans SJ, Laufer MR, Goldstein DP. *Pediatric and Adolescent Gynecology*. 5th ed. Philadelphia, PA: Lippincott, Williams & Wilkins; 2005

Cavanaugh RM Jr. Screening adolescent gynecology in the pediatrician's office: have a listen, take a look. *Pediatr Rev.* 2007;28(9):332–342

Braverman PK. Body art: piercing, tattooing, and scarification. *Adolesc Med Clin.* 2006;17(3):505–519, ix

Morse SA, Ballard RC, Holmes KK, Moreland AA. *Atlas of Sexually Transmitted Diseases and AIDS*. 3rd ed. Philadelphia, PA: Mosby-Elsevier Ltd; 2004

- ities. Sexuality of children and adolescents with developmental disabilities. *Pediatrics*. 2006;118(1):398–403
8. Centers for Disease Control and Prevention; Workowski KA, Berman SM. Sexually transmitted diseases treatment guidelines, 2006 [published correction appears in *MMWR Recomm Rep*. 2006;55(36):997]. *MMWR Recomm Rep*. 2006;55(11):1–94
  9. Huppert JS, Gerber MA, Deitch HR, et al. Vulvar ulcers in young females: a manifestation of aphthosis. *J Pediatr Adolesc Gynecol*. 2006;19(3):195–204
  10. Blythe MJ, Diaz A; American Academy of Pediatrics, Committee on Adolescence. Contraception and adolescents. *Pediatrics*. 2007;120(5):1135–1148
  11. American Academy of Pediatrics, Committee on Adolescence. Emergency contraception. *Pediatrics*. 2005;116(4):1026–1035
  12. American Academy of Pediatrics. *Coding for Pediatrics 2010: A Manual for Pediatric Documentation and Payment*. 15th ed Elk Grove Village, IL: American Academy of Pediatrics; 2010
  13. American Academy of Pediatrics, Committee on Adolescence, Committee on Child Health Financing. Underinsurance of adolescents: recommendations for improved coverage of preventive, reproductive, and behavioral health care services. *Pediatrics*. 2009;123(1):191–196



## Gynecologic Examination for Adolescents in the Pediatric Office Setting

Paula K. Braverman, Lesley Breech and The Committee on Adolescence

*Pediatrics* 2010;126;583

DOI: 10.1542/peds.2010-1564 originally published online August 30, 2010;

### Updated Information & Services

including high resolution figures, can be found at:  
<http://pediatrics.aappublications.org/content/126/3/583>

### References

This article cites 12 articles, 6 of which you can access for free at:  
<http://pediatrics.aappublications.org/content/126/3/583.full#ref-list-1>

### Subspecialty Collections

This article, along with others on similar topics, appears in the following collection(s):

#### Current Policy

[http://classic.pediatrics.aappublications.org/cgi/collection/current\\_policy](http://classic.pediatrics.aappublications.org/cgi/collection/current_policy)

#### Committee on Adolescence

[http://classic.pediatrics.aappublications.org/cgi/collection/committee\\_on\\_adolescence](http://classic.pediatrics.aappublications.org/cgi/collection/committee_on_adolescence)

#### Adolescent Health/Medicine

[http://classic.pediatrics.aappublications.org/cgi/collection/adolescent\\_health:medicine\\_sub](http://classic.pediatrics.aappublications.org/cgi/collection/adolescent_health:medicine_sub)

### Permissions & Licensing

Information about reproducing this article in parts (figures, tables) or in its entirety can be found online at:  
<https://shop.aap.org/licensing-permissions/>

### Reprints

Information about ordering reprints can be found online:  
<http://classic.pediatrics.aappublications.org/content/reprints>

Pediatrics is the official journal of the American Academy of Pediatrics. A monthly publication, it has been published continuously since . Pediatrics is owned, published, and trademarked by the American Academy of Pediatrics, 141 Northwest Point Boulevard, Elk Grove Village, Illinois, 60007. Copyright © 2010 by the American Academy of Pediatrics. All rights reserved. Print ISSN:

American Academy of Pediatrics

DEDICATED TO THE HEALTH OF ALL CHILDREN™



# PEDIATRICS®

OFFICIAL JOURNAL OF THE AMERICAN ACADEMY OF PEDIATRICS

## **Gynecologic Examination for Adolescents in the Pediatric Office Setting**

Paula K. Braverman, Lesley Breech and The Committee on Adolescence

*Pediatrics* 2010;126;583

DOI: 10.1542/peds.2010-1564 originally published online August 30, 2010;

The online version of this article, along with updated information and services, is located on the World Wide Web at:

<http://pediatrics.aappublications.org/content/126/3/583>

Pediatrics is the official journal of the American Academy of Pediatrics. A monthly publication, it has been published continuously since . Pediatrics is owned, published, and trademarked by the American Academy of Pediatrics, 141 Northwest Point Boulevard, Elk Grove Village, Illinois, 60007. Copyright © 2010 by the American Academy of Pediatrics. All rights reserved. Print ISSN:

American Academy of Pediatrics

DEDICATED TO THE HEALTH OF ALL CHILDREN™

