

JoVE: Science Education

Introduction to the Pelvic and External Genitalia Examination

--Manuscript Draft--

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Overview

The pelvic exam can feel invasive to patients, so it is important to do everything possible to make patients feel comfortable and empowered, rather than vulnerable. The clinician should be aware of how they are communicating, both verbally and non-verbally, and should give their patients control whenever possible. There are many ways to do this, from how the exam table is positioned to how the patient is engaged throughout the exam. As many as 1 in 5 patients may have experienced sexual trauma¹; it is important to avoid triggering those patients, but it's not always possible to know who they are. The exam in this video demonstrates neutral language and techniques that can be employed with all patients to create the best experience possible.

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It's important to keep the patient covered wherever possible and to minimize extraneous contact. A clinician should be careful to keep their fingers that aren't being used to examine the patient tucked to avoid accidental contact with the clitoris or anus.

While it is always important to avoid extremely clinical language, certain colloquial words can cross the line from caring to overly intimate during this exam. It is helpful to avoid the words "touch" and "feel," which can feel sexualized in this context; instead, the words "assess," "check," "inspect," or "examine" should be used. The words "bed" and "sheet" should be avoided, and "table" and "drape" should be used instead. Also, a clinician should use the word "footrests" rather than "stirrups" to avoid connoting horses. It's a good idea to avoid telling patients to "relax," because it's a hard order for a patient to follow when they're anxious. Asking patients to "soften" or "release" specific muscles can be more useful, and having a patient do a Kegel exercise or Valsalva maneuver can serve as a specific relaxation technique.

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Best practice dictates avoiding assumptions about patients' gender, as patients with female anatomy may identify as another gender (e.g., transgender or genderqueer). This video depicts the approach to a patient in whom history has revealed no specific complaints or risk factors related to gynecological health.

The pelvic exam consists of three parts: the visual and manual exam of the external genitalia, a speculum exam, and a bimanual exam. This video covers the introduction to the pelvic exam and the external genitalia exam. To avoid missing potential findings, the external pelvic exam should be performed in a systematic approach consisting of two

¹ Black MC, Basile KC, Breiding MJ, Smith SG, Walters ML, Merrick MT, Chen J, Stevens MR. The National Intimate Partner and Sexual Violence Survey (NISVS): 2010 Summary Report. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention; 2011.

main components: a visual inspection of the vulva (**Figure 1**), and internal palpation and assessment of glands and tone.

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Procedure

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1. Preparation for the Exam

1.1. Before beginning the exam, establish an expectation of comfort, and ask the patient to communicate their questions and concerns during the visit. For example, say something like, "Have you had an exam like this before? How was that experience for you? I expect this to be a comfortable exam. If there is anything I can do to make this more comfortable for you, please let me know, and I will make any adjustments I can. You can ask me questions at any time."

1.2. Introduce and summarize the exam for the patient, "The pelvic exam has three parts. First, I am going to assess the hair and skin around the outside of your vagina and some of the glands near the vaginal opening. Then, I will place a speculum in your vagina to view your cervix and take some samples. Last, after I have removed the speculum, I will place two fingers in your vagina and use my other hand to press on your abdomen to assess your uterus and ovaries."

1.3. Practicing clinicians often utilize a chaperone for the patient's comfort or their own, or based on institutional policies. Discuss the presence of a chaperone with the patient. Engage the chaperone by requesting their assistance throughout the exam.

1.4. Ask the patient to change into a gown (if they are not already wearing one), and step out of the room. Specify how they should dress: underwear off, gown open in the back (or however is preferred by the examiner).

1.4.1. Leave the patient with a drape and tell them they can place it over their lap when they are seated on the table.

1.5. Set up the room and instruments: make sure to have a trash can, a working light, a stool near the exam table, swabs, and lubricant nearby.

1.5.1. Give the patient a hand mirror to follow along with the exam and say, "This allows me to communicate with you during the exam. Please hold it for now, and I will explain how to use it shortly."

1.5.2. Use the exam to communicate with the patient about potential findings. If the patient is following along with a mirror, this exam can provide an opportunity for education about anatomy. Point out the structures throughout the exam and provide an explanation appropriate to the patient's comfort and knowledge; do not force someone

to engage, and try to avoid informing highly knowledgeable patients about basic facts they already know.

1.6. Pull out the footrests (or ask the chaperone to do so) and ask the patient to place their feet in them.

1.7. Raise the back of the exam table to 45-60 degrees, and ask the patient to sit back. They should be able to see you now, and this position allows their internal organs to sink into the pelvic basin, which is their natural position, making it much easier to assess.

1.8. Wash your hands and put on gloves.

1.9. Instruct the patient to move so the buttocks are at the end of the exam table. One way to do this is to use the drape as a barrier, place the back of your hand on the end of the exam table, and ask the patient to, "Please slide down until you feel the back of my hand."

1.10. Place the backs of your hands lateral to each of the patient's knees, far apart, and ask them to, "Please extend your knees toward my hands."

1.11. Fold back the drape by grabbing it with both hands in the middle and scrunching it up toward their pubic bone.

1.11.1. Once the pubic bone is reached, move your hands apart, while still holding the drape, and say, "Please hold this here."

1.12. As the drape is raised, immediately glance at the pubic hair to check for movement, as lice may scatter when light first hits the area.

1.13. Ask the patient to bring the mirror to one of their knees. Place two fingers near, but not touching, the patient's vulva and say, "Please adjust the mirror until you see my fingers. This is where the exam will take place."

2. Visual Exam

Your fingers are the tools in this exam. Use the first two fingers of your dominant hand in a "peace" sign and keep the other fingers tucked. Use the pads of your fingers, not the tips, when examining (**Figure 2**). Be careful to avoid contact with the clitoris. Never place your fingers centrally while near the anterior structures, and keep your hand low.

2.1. Visually assess for: the pattern of hair growth; rashes; lesions; masses; discharge; scarring, burns, or bruising (potential signs of domestic violence); signs of female genital mutilation (FGM); hemorrhoids; skin tags; fissures; and other irregularities. Inquire about any findings during the exam by pointing them out to the patient in the mirror

and asking, “Is this normal for you? How long has it been like this?”

2.2. Introduce the exam to the patient. Before starting, place the back of your hand on the inside of the patient’s thigh, over the drape. This maneuver prepares the patient, as starting with non-invasive contact may help put them at ease and avoid muscle spasm.

2.3. Using the pads of the index and middle fingers on your dominate hand, separate the labia minora and majora on one side to inspect the entirety of the sulcus (**Figure 1**).

2.3.1. Repeat on the other side of the vulva.

2.4. Using the same two fingers, separate both of the labia minora to view the vaginal introitus and urethral opening.

2.5. Rotate your wrist up and use the back of the two fingers to retract the clitoral hood to view the clitoral shaft.

2.6. Make a fist with your hand, place the back of your fist on the fleshy part of one buttock, and pull away to view the anus.

2.7. Optional patient education as indicating each structure:

2.7.1. “This is the introitus, or the opening of your vagina. This is where period blood exits the body; a tampon can be placed here. Additionally, this is where a penis is inserted during vaginal sex, and where some sex toys are used. The female condom and NuvaRing, along with some other birth control methods, are inserted here. This is where a baby exits the body during a vaginal birth.” And, if applicable, “For today’s exam, this is where I’ll be inserting the speculum.”

Commented [DM6]: If this is too brand-specific we could delete it and just say “The female condom and other birth control methods....”

2.7.2. “This is your urethra, where you urinate.”

2.7.3. “This is your clitoris, where you may experience heightened sexual pleasure.”

2.7.4. “This is your anus, where you have a bowel movement.”

3. Internal Exam

When assessing glands internally, think about the vulva as if it were a clock face in order to ensure your fingers are placed correctly.

3.1. Point the index finger of your dominant hand, palm down, above the perineum, and insert into the vaginal introitus to just beyond your first knuckle.

3.2. Assess the Bartholin’s glands by gently pinching the tissue between your thumb and inserted finger at five and seven o’clock, watching the patient’s face for a flinch.

3.3. Apply posterior pressure to rotate the palm up, and check the Skene's glands and the urethra for infection and discharge.

3.3.1. Use the thumb and middle finger of your dominant hand to separate the labia minora to view the urethral opening (**Figure 3**).

3.3.2. Milk the Skene's glands by using the inserted index finger to gently tap upward at eleven and one o'clock.

3.3.3. If the Skene's glands are infected, discharge into the urethra may be seen. Inspect the urethra and make a gentle beckoning motion at twelve o'clock. Use a swab to get a sample of any discharge elicited.

3.4. Perform a digital cervical exam to assess the depth and direction of the cervix (which helps determine your approach during the speculum exam); release the labia and insert your finger farther to locate the cervix, standing up, if necessary. If you are able to locate it while sitting down, the patient may need a short speculum.

3.5. Sit down and slide your finger halfway out, then rotate the palm down.

3.6. Insert your middle finger by placing it over the top of your index finger, applying posterior pressure as it is being inserted, then place your fingers side by side.

3.7. Assess for cystocele by dropping your wrist and pulling down toward the perineum to make space above your fingers.

3.7.1 Ask the patient to bear down as if having a bowel movement (Valsalva maneuver) while assessing for a bulge, a sign of herniation.

3.8. Assess for rectocele by lifting your wrist up to apply anterior pressure toward the bladder until space underneath the fingers can be seen.

3.8.1. Ask the patient to bear down as if having a bowel movement (Valsalva maneuver) while assessing for a bulge, a sign of herniation.

3.9. If performing a speculum exam with a plastic speculum, lower your wrist so the fingers are flat and centered, and gently separate them to assess for the plastic speculum size. If you're having a difficult time maneuvering your fingers, start with a small size, but if you can create space in the vagina, start with a medium.

3.10. Assess pubococcygeus (PCG) muscle tone by asking the patient to squeeze around your fingers as if they are stopping the flow of urine (Kegel exercise).

3.11. Remove your fingers and prepare for the speculum exam.

Summary

This video reviewed the introduction and setup for the pelvic exam, and how to visually inspect and examine the complete female external genitalia. Before the exam, the examiner should find out how knowledgeable the patient is about the exam and their own body, and establish the expectation that they can communicate questions or concerns throughout the exam. The exam table should be positioned so the patient can see what is happening and can communicate with the examiner, and the patient should remain covered as much as possible to minimize feelings of vulnerability. The examiner can give the patient a hand mirror and show them how to position it to follow along with the exam, and educate them about their structures throughout the exam (when appropriate).

The examiner should first provide an overview of the exam, and explain every step as they go, letting the patient know before they make contact with their genitalia. First, the external genitalia is examined, including the glands and muscle tone of the vagina. The examiner should take note of any potential findings (including taking swabs of any unusual discharge elicited). Any markings or potential signs of domestic or intimate partner violence should be documented, though the examiner should remember that some of their patients may engage in rough sex, and bruising may not be indicative of violence.

Beyond asking clarifying questions, the examiner should not discuss concerns or follow-up testing while the exam is ongoing. Following the components covered in this video, the pelvic examination is typically followed by two additional components, the speculum and bimanual exams. After the speculum and bimanual exams, the examiner should step out to allow the patient to get dressed. They can then reenter the room to discuss concerns and next steps, as having those conversations while the patient is unclothed and vulnerable heightens anxiety.

When an exam has normal findings, the examiner should always tell the patient that “everything appears healthy and normal.” This simple statement relieves anxiety and empowers the patient to equate their body structures as normal.

Figures

Figure 1: Diagram of the vulva.

A diagram showing external genitals with the structures labelled.

Figure 2: Hand position during examination.

Figure 3: Visual inspection of the urethra.

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Commented [AS9]: The authors asked to take a photo during the video shoot.

Commented [AS10]: The authors asked for a “still from video showing how to use one hand to retract labia to view urethra over inserted finger.”

Vulva

