Hello, my name is Leslie Ludka. I’m a certified nurse midwife and Senior Technical Advisor at the American College of Nurse-Midwives. Today I’d like to teach you how to do a sterile speculum exam. This skill can be used when gathering information to help make a clinical diagnosis. Presentation of this learning tool is brought to you by the American College of Nurse-Midwives. It’s supported by an unrestricted educational grant from Hologic, Inc. At the completion of this presentation you may elect to take a post-test to receive continuing education credits.
The examination technique that you will be learning today is specific to the intrapartum period and is to be used by registered nurses during the evaluation of the pregnant woman. Funding for development of this program was provided by the A.C.N.M. Foundation, through an unrestricted educational grant from Hologic.
Overview

- Increased triage visits
- Nurse conducted exams save time
- Improve care of women

There are an ever-increasing number of triage visits to labor and delivery units throughout the United States. This increase in visits has caused an increased burden on hospitals and health care providers. Nurses, and the women they care for, often have to wait long periods of time for the health care provider to evaluate the patient. Nurse conducted speculum exams are useful to help ease these burdens. The goal is to improve care to women.
Our objectives today are:
To identify the indications for doing a Sterile Speculum Examination (SSE)
To review the anatomy of the vulva and perineum
To identify equipment needed
To identify proper technique for insertion & removal
To identify important behavioral aspects of nurse-patient interaction
The examination is done following a written or verbal order from a midwife or doctor and carried out according to institutional policies and procedures. A sterile speculum examination is indicated when there is suspicion of ruptured membranes, premature labor or vaginal infection.
The Sterile Speculum Exam is just one of many tools that can be used during the thorough assessment of the mother and fetus. Other tools that might be used during an individualized assessment include: doptone, fetoscope or electronic fetal monitoring to assess fetal heart rate; the tools used for monitoring contraction patterns; and tools used to monitor maternal vitals signs. Today, we are only concentrating on the registered nurses role in the Sterile Speculum Examination of the pregnant woman.
The purpose of the sterile speculum exam that you are learning today is to collect specimens from the vagina. Providers use the results gathered from analyzing these specimens to make a clinical diagnosis. For example; when trying to determine if the membranes are ruptured, a slide may be prepared for microscopic analysis to assess for ferning, or a swab sample collected to test Nitrazine paper for increased alkaline.

Or perhaps a provider may order a swab for Fetal Fibronectin assessment when there is a suspicion of premature labor.
Contraindications include: not having a verbal or written order for the procedure, the patient’s refusal to participate, or a medical contraindication such as vaginal bleeding.
Some possible adverse affects are: the exam itself may cause rupture of the membranes or trauma to the tissue, or the introduction of contaminants, such as bacteria, into the vagina.
It is important to educate the woman regarding why this procedure was ordered, what specimens will be collected, and how they will be processed. For example you might say; “Your midwife has requested that I collect some specimens from the vagina to rule out ruptured membranes. I would like to do a sterile speculum exam. During this exam, I will collect a small sample with a cotton swap and then send it to the laboratory for analysis.”

Explain the procedure including the potential adverse effects. Give the woman the opportunity to ask questions. Then ask her if she’s ready for you to proceed.
In addition to education and consent, informed cooperation is important. A woman must understand, completely agree to, and be an active participant for the Sterile Speculum Exam procedure to be successful. Minimize distractions in the environment as much as possible. If the woman is having contractions, do the exam in between them. Respect the woman and her body at all times. Talk to the woman throughout the speculum exam, explaining what you are doing and what she will feel at every step. If you anticipate that the procedure will be uncomfortable, say so. If the woman experiences discomfort during the exam, acknowledge it. “I know that was uncomfortable. We will be finished with the exam in just one minute.”
Organize all of your equipment before you begin. Remember to use universal precautions at all times.

- Organize all equipment in advance
- Always use “universal precautions”
Sterile speculums come in several sizes. When you are trying to decide what size to use, take into account if the vagina is that of a petite woman, a large woman, a woman who has never had a baby, a woman who has had one baby or one who has had many babies.
Familiarize yourself with the mechanics of the speculum. Can you identify the thumb pad in the pictures on the left hand side of this slide? It looks like an upside down metal thumb. This thumb pad has a small round nut located just above the pad. Speculums open by squeezing the thumb pad and handle grip together. Now let’s look at the two speculums on the right hand side of this slide. Do you see the differences?

The position of the person’s thumb, the position of the thumb pad and the position of the thumb pad nut are all very different. The speculum on the upper right is closed. The thumb pad is away from the handle, the thumb is off the pad and the nut is loose.

The speculum on the bottom right is open. The thumb is on the thumb pad and it is squeezing the thumb pad and handle together to open the speculum. The small nut is screwed tight to secure the speculum in the open position.

If you want to increase the circumference or opening of the speculum, you may unscrew the large lower nut located on the handle and slide the speculum blades up and down. This is seldom, if ever necessary.
Think through all of the materials that you will need to complete this exam. Be sure that you have the right size sterile gloves, the right size speculum, collection swabs or devices, and sample collection containers.
Non-sterile Equipment

- Non-sterile sample containers
- Plastic precaution “Red Bag”
- Disposal area for contaminants
- Light source
- Stool

You might also need things such as non-sterile sample containers and plastic bags marked “Precaution” to transport the samples to the laboratory. Know where you will dispose of any used equipment, and be sure you have a light source and a place to sit.
Do Not Use the Following

- Lubricants
- Jellies
- Water

These may skew test results.

Do not place lubricants, jellies or water on the speculum. These may skew results.
Ask the woman to empty her bladder. When she returns, be sure that you have given her a drape to cover herself. Then help her to find a comfortable position.
If she’s on an exam table, ask her to place her feet in the stirrups. Have her move her buttocks down until she is slightly beyond the end of the table. If she is in a bed, elevate the bed and find a comfortable position for yourself. Inserting a speculum while a woman is in a bed rather than on an exam table can be difficult because the bottom of the handle will hit the mattress. Some clinicians place a bedpan under the woman’s buttocks to create room for the speculum handle. Another option is to simply turn the speculum upside down before inserting it.
Insertion Technique

- Show her the small end of speculum
- Ask the woman to open her knees as far as possible
- Do not push her legs apart
- Proceed at her pace & offer encouragement
- Do not remove the speculum unless requested

Give the woman control. Show her the small end of the speculum so that she can see how much goes into the vagina. Ask the woman to relax her legs and open her knees as far as possible. Do not push her legs apart under any circumstances. This is intrusive. Allow her to proceed at her own pace. It’s helpful to offer instructional encouragement. Tell her that if she asks you to stop, you will stop advancing the speculum immediately and will not proceed until she says it’s okay. If she does ask you to stop advancing the speculum, stop immediately, but do not remove the speculum unless she asks you to. Otherwise you will need to begin all over again. Tell her that you have stopped. Ask her to let you know when it’s okay to continue.
Women who bear down a little bit when the speculum is being inserted usually have less discomfort. Explain this technique before starting the exam. Say, “I’m going to teach you a helpful technique. When I advance the speculum, I want you to try to gently push it out. It doesn’t have to be hard. You just need to push a little bit.” If a woman bears down when the speculum is being introduced, like she is trying to push the speculum out, the pelvic floor muscles are forced to relax, and this helps to make the exam more comfortable. Be sure to let the woman know when it’s time to bear down.
SSE May Be Stressful

- Brings her history & her fears
- Takes away experience & knowledge
- Acutely aware of your attitude
- Verbal approach: gentle & professional
- Physical approach: gentle & steady

Remember that a speculum exam is stressful for many women. Every woman brings her history and her fears. She'll take away the experience and knowledge that you give to her.

Your approach is extremely important. The woman is acutely aware of your attitude of respect, or lack of respect, for her body. Your verbal approach should be gentle and professional. Your physical approach should be gentle and steady. Take the necessary time to make sure she feels comfortable and that you do the job correctly.
Examination

- Wash your hands
- Double check that all equipment needed is within reach
- Sit on stool or at end of bed
- Adjust light
- Put on sterile gloves
- Warm the speculum in your gloved hand
- Explain what you are doing

Wash your hands in front of the woman. Double check your equipment to be sure you have everything that you need, and that you can reach it easily. Seat yourself comfortably. Remember that once you don your gloves you won’t be able to touch non-sterile equipment. Position the light to shine on the perineum. Put on your sterile gloves. Warm the speculum in your sterile gloved hand while you explain to the woman what you are doing. Say, “You are just going to feel my fingers pressing on the muscle we talked about down here. I’m just looking at the skin. The speculum is way over here”. Hold the speculum in your dominant hand.
When you are doing the exam, use a gentle, smooth and steady touch. Do this exam as quickly and efficiently as possible. Do not hesitate. Do not use nervous, repetitive or jerky motions.
This is the anatomy of the female vulva, please especially note the mons pubis, the clitoral hood, the clitoris, the labia majora, the labia minora, the opening of the vagina, the opening of the urethra, the perineum and the anus.
First, I'll explain the technique for insertion and removal of the speculum, and then I’d like to show you a video of the procedure. First take a moment to inspect the vulva. Using your smallest finger and thumb, open the labia and inspect the perineum. You will continue to hold the labia open to avoid catching the skin or pubic hair when you are inserting the speculum. If you see anything of concern such as: lesions, frank bleeding, trauma or if you are uncomfortable for any reason, do not proceed with this exam. Report your findings to the doctor or midwife immediately.

If everything appears normal, place your index finger and your second finger just at the edge of the introitus on the vaginal floor. Apply gentle downward pressure and spread your fingers to slightly open the introitus.
Ask the woman to let her bottom drop into the table. You'll see and feel the pelvic floor muscle relax. Place the speculum just above your fingers at the opening of the introitus. Before introducing the speculum, turn it to a slightly oblique angle to avoid trauma to the urethra and peri-urethral structures. As you introduce the speculum, ask the woman to give a gentle push or to gently bear down as if she’s trying to push the speculum out.
Gently introduce the speculum into the vagina. Point the tip of the blades toward the tailbone. Keep the tension of the entire instrument down toward the vaginal rectal floor to avoid trauma to the urethral structures on the top of the vaginal wall. Do not force the speculum. Let the walls of the vagina guide the speculum.
This slide shows a speculum being inserted into the vagina of a non-pregnant woman. Please notice the angle of the speculum in relation to the woman’s anatomy. When in place, the speculum slants downward toward the tailbone.
As you insert the speculum, rotate the handle down to 6 o’clock. Once the speculum is fully inserted, let the woman know that you are going to opening it. Slowly open the speculum by holding it steady and squeezing the handle & thumb pad together. Open the speculum as wide as necessary to visualize the vagina. You may see the cervix but this is not necessary for most sample collection. Once the speculum is in place, tighten the thumb pad nut to secure the blades of the speculum in the open position.
This slide depicts the speculum in place. Note the handle is at 6 o’clock and the thumb pad nut is screwed tight.
Sample Collection

- Dominant hand is used to collect samples and insert them into culture medium or slides
- Maintain sterile technique

Collect the samples according to package directions. Use your dominant sterile hand to handle the sterile equipment. Be aware of sterile technique at all times. If not, you may introduce bacteria or skew the results.
When you are finished collecting your samples, tell the woman that you are going to remove the speculum. Place your fingers back on the handle and thumb pad to hold the blades open initially. Unscrew the thumb pad nut to loosen the speculum blades. Keep the speculum open as you begin to remove it in order to avoid the possibility of compressing the cervix. Once away from the cervix, release the thumb pad and allow the blades to close on their own as you slowly withdraw the speculum. Be careful not to pinch the skin or catch the pubic hair. Deposit the used speculum in the proper container.
Now I’d like to demonstrate the technique for doing a speculum exam.

Mary thank you for allowing nurses to observe this procedure. If you’re ready to begin, please open your knees all the way. Just let them drop to the side. Good!

Let’s review the relaxation technique we discussed. The speculum is way over here.

When I say the word speculum, some women tense up and everything down here tightens up….

This technique will help to make the exam more comfortable for you…..

When I advance the speculum in, I’d like you to give a little push out like you’re trying to gently push it away. This forces the muscles to relax and then it shouldn’t hurt.

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Okay, now you’re just going to feel my hand as I look at the skin down here.

Nurses: use your thumb and small finger to gently open the labia and inspect the area. Place your index & second finger just inside the introitus.

Okay Mary, please let the muscle drop into the table. Good.

Nurses: you will see and feel that muscle relax.

As I introduce the speculum, please try to gently push it out. It doesn’t have to be much just a little bit. Perfect!

Okay, the speculum is all the way in. Are you doing alright? Okay?

I’m going to open the speculum a little, secure the nut in place & then gather the sample.

Nurses: out of consideration for this pregnant model, I’m not actually touching the swab to the vagina as we normally would. Please take your time to collect an adequate sample & prepare it correctly for analysis.

Okay we’re finished. I’m going to unscrew the nut and remove the speculum. Please give another little push away. Great! Okay, we’re all done.

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When you are finished, re-drape the woman, reassure her that everything is finished and she did a great job. And let her know when she’ll get the test results.
Thank you for taking the time to view this presentation. I hope you’ve enjoyed it, and I hope that it will be helpful to you as you care for women. There is a mandatory post-test for those wishing to receive continuing education credits. Please follow the links.
If you’d like more information please visit the American College of Nurse-Midwives website at: www.midwife.org, and please feel free to contact me at any time.