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Making a Wet Smear Slide of Vaginal Secretions

Procedure

- 1. Put on gloves.
- 2. Obtain the specimen of vaginal discharge during the speculum examination.
- 3. Do one of the following:
 - **a.** Put one drop of normal saline on the middle of a clean microscope slide.
 - **b.** Put one drop of normal saline on the left third of a clean microscope slide and one drop of potassium hydroxide (KOH) on the right third of the slide.
 - c. Use two clean microscope slides and put one drop of normal saline on the middle of one slide and one drop of potassium hydroxide on the middle of the second slide.
- **4.** Roll the plain wooden end of a cotton-tipped applicator in the specimen of vaginal discharge.
- 5. Mix the sample of vaginal discharge on the wooden end of the cotton-tipped applicator with the drop of normal saline on the slide. Repeat Step 4 and mix the sample with the drop of potassium hydroxide if both solutions are being used. Use both a rolling and a stirring motion to mix the vaginal discharge with the drop of solution.

Rationale

- **1.** This is a universal precaution to protect yourself from any possible body fluid/discharge or bloodborne pathogens.
- **2.** The vaginal discharge in the concave posterior blade of the speculum is a good source for a specimen. Plaques of *Candida* on the vaginal walls are exposed during the speculum examination and are a good specimen source.
- 3. Candida (monilia), Trichomonas, and bacterial vaginosis can all be identified microscopically when mixed with a drop of normal saline. Normal saline is used for detection of motile trichomonads. Use of potassium hydroxide facilitates identification of Candida because potassium hydroxide dissolves trichomonads, white blood cells, bacteria, and foreign objects.

Some clinicians prefer to start with Step 3(a) and, after evaluating the slide for trichomonads and the clue cells of bacterial vaginosis, add a drop of potassium hydroxide at the edge of the coverslip. This diffuses under the coverslip, destroys the other organisms, and facilitates identification of *Candida*.

- **4.** Do *not* use the cotton-tipped end, as cotton filaments may be added to the specimen and be confused with or misidentified as *Candida*.
- **5.** Microscopic evaluation of the slide is facilitated if the sample of vaginal discharge is well mixed throughout the drop of solution, thereby avoiding thick areas of sample.

Procedure

- 6. Cover the mixture of specimen sample and solution with a coverglass (coverslip) by sliding the coverslip onto and over the specimen. This is accomplished by putting the edge of one side of the coverslip into the mixed specimen/solution and drawing it to the longitudinal edge of the slide. When the specimen/solution is under the entire edge of the side of the coverslip, slide the coverslip over the rest of the mixed specimen/solution on the slide.
- **7.** The wet smear slide of vaginal secretion is now ready for microscopic evaluation. (See Chapter 60, Using a Microscope.)

Rationale

6. If the coverslip is simply dropped onto the specimen, air bubbles will be trapped between the coverslip and the specimen/solution on the slide, making microscopic evaluation difficult.