

LOUISIANA STATE UNIVERSITY HEALTH SCIENCES CENTER-SHREVEPORT
PHYSICIAN PERFORMED TESTING/MICROSCOPY

WET PREP PROCEDURAL GUIDELINES

Principle:

The wet prep procedure is used to detect *Trichomonas vaginalis*, yeast cells, yeast pseudohyphae, or clue cells in vaginal secretions.

Specimen Requirements:

Patient Preparation: Typical vaginal collection procedure

Type and Collection of Specimen:

1. Collect a specimen from the mucosal surface of the vagina utilizing a swab.
2. Place swab into a sterile tube containing approximately 1 ml of sterile saline, cap, and transport to microscope area for review.

NOTE: Test is dependent on demonstrating motility for *Trichomonas vaginalis* which lose their motility rapidly after leaving the vaginal environment. Wet prep examination should be performed within one (1) hour of collection for optimal results.

Reagents And Supplies:

1. Swab
2. Sterile screw top tube
3. Saline @ 0.5 mls.
4. Microscope
5. Slides
6. Cover-slip
7. 10% KOH with dropper

Calibration:

Not Applicable.

Quality Control:

Not Applicable. Note: Saline may be checked for contamination as required by Medical Director.

Procedure:

NOTE: Always wear gloves when performing procedure.

1. Swirl swab gently in tube.
2. Ream on side of tube to expel fluid. Discard swab in appropriate container.
3. Using a plastic pipette, place one drop of solution on slide. Cover drop with cover-slip.
4. Examine slide under low and high power.
5. For yeast and clue cell determination, add a drop of 10% KOH to delineate any budding yeast (not to be confused with RBC's), and more clearly visualize clue cells.

Calculations:

Not Applicable.

Reporting Results:

1. Any yeast, trichomonads, or clue cells seen should be enumerated (few, moderate, many).
Record results in the patients chart.
2. **Record** patient name and medical record number (can adhere addressograph label), date, test results, and initials of person performing the test on the **Wet Prep Testing Log for Provider Performed Testing.**

Organisms detectable:

1. Motile trichomonads, pseudohyphae, budding yeast, and clue cells.
2. Clue cells are epithelial cells covered with small, coccobacillary bacteria which are consistent with the diagnosis of vaginosis.
3. Trichomonas vaginalis is a pear-shaped organism about the size of a white blood cell that has a jerky motility, and an undulating membrane extending half the length of the body. When the organism loses viability, and thus motility, it can be mistaken for a white blood cell.

Procedural Notes:

1. Test is dependent on demonstrating motility for Trichomonas vaginalis which lose their motility rapidly after leaving the vaginal environment.

Limitations of Procedure:

1. Wet prep examination should be performed within one (1) hour of collection for optimal results.

References:

1. LSUHSC Outpatient Clinical Laboratory Wet Prep Procedure