

Microbiology Reader	Document No. MICR 6350 R Page 1 of 5
Genital Cultures	Origination: 08/2004 Version 3

POLICY STATEMENT	Specimen from genital sites are sent to the Microbiology laboratory from females presenting with clinical syndromes relative to the specific anatomic site such as cervicitis, vulvovaginitis, urethritis, vaginosis, salpingitis, endometritis, pelvic inflammatory disease or genital ulcers and from males with urethritis, epididymitis, prostatitis or genital ulcers. Specimens are also sent from pregnant females to detect organisms which may be harmful to the fetus. Because specific agents cause infections in specific sites, "routine" genital culture with the intent to "detect what is there" is rarely indicated. Nevertheless, many specimens with the "routine" request will be received in the laboratory. This procedure provides guidelines for appropriate interpretation of organisms isolated from the genital tract. The microorganisms colonizing the female genital tract include lactobacilli, diptheroids, Gardnerella, coagulase negative Staph, Staph aureus, Group B Strep, Enterococcus, E. coli, anaerobes and yeast. The male urethra normally contains skin flora such as coagulase negative Staph, Micrococcus, Diptheroids, and Viridans Strep
PURPOSE	This procedure provides technical instruction for the performance of Genital Cultures.
SCOPE	This procedure applies to testing personnel authorized to perform testing. This group includes, but is not limited to Laboratory Technologists as well as leads and supervisory personnel.
RESPONSIBILITY	All the above personnel are responsible for following the Genital Cultures procedure without exception. In addition, testing personnel are also responsible for evaluating the results and taking proper remedial action.
RELATED DOCUMENTS	MICR 6140 R Specimen Processing MICR 6305 R Bacterial Cultures

Microbiology Reader	Document No. MICR 6350 R Page 2 of 5
Genital Cultures	Origination: 08/2004 Version 3

SPECIMEN HANDLING

See *MICR 6140 R Specimen Processing*

CULTURE WORK UP

Routine cultures

1. Examine all plates for macroscopic growth at 24 and 48 hours.
2. All Martin Lewis plates are held for 72 hours before discarding as negative.
3. Do not identify normal flora to genus or species level
 - Female genital tract – normal vaginal flora
 - Staphylococcus coagulase negative
 - diphtheroids,
 - Lactobacillus
 - alpha streptococci
 - Male genital tract – normal urogenital flora
 - Staphylococcus coagulase negative,
 - Enterococcus,
 - alpha streptococcus
 - diphtheroids
4. Identify all organisms and perform antimicrobial susceptibility testing (AST) if appropriate.
 - Identify any amount and perform AST if appropriate
 - Group B Strep - *Streptococcus agalactiae*
 - Group A Strep - *Streptococcus pyogenes*
 - *Listeria monocytogenes*
 - *Neisseria gonorrhoeae*
 - Check to see if the patient had a GC probe requested.
 - If the GC Probe is positive and the isolate is Gram negative diplococci and oxidase positive, document the probe result in the workcard with no further work up necessary.

Microbiology Reader	Document No. MICR 6350 R Page 3 of 5
Genital Cultures	Origination: 08/2004 Version 3

- If the GC Probe is negative, perform RapID NH panel for identification.
- Identify if heavy growth **and** predominate **and** in quantities greater than the normal flora. Perform AST if appropriate. Lesser amounts are reported as normal flora.
 - *Staphylococcus aureus*
 - *Gardnerella vaginalis*
 - *Streptococcus pneumoniae*
 - *Hemophilus species*
 - Yeasts, identified as *Candida albicans* or *Candida sp.*, not *albicans*.
 - Gram negative rods, if there is only one gram negative rod isolated. If there multiple types of gnrs and all are heavy and predominate, report as mixed gram negative rods.

Group B screen

To detect the presence or absence of *Streptococcus agalactiae* (GBS-Group B Strep)

1. After incubating overnight, sub culture the LIM broth to BAP
2. Incubate the BAP for 16 to 24 hours.
3. Examine BAP at 24 and 48 hours for β -hemolytic Strep colonies
4. If β -hemolytic Strep colonies are observed, perform the Pathodx strep grouping test.
5. Perform antimicrobial susceptibility testing (AST) on all positive Group B Screens at the request of the OB service.

GC Screen

To detect the presence or absence of *Neisseria gonorrhoeae* (GC)

1. Examine all plates for macroscopic growth daily.
2. If no visible growth, reincubate plates until final at 72 hours.
3. If Gram negative diplococci are observed, perform oxidase.
4. If oxidase positive, perform beta lactamase testing and check to see if the patient had a GC probe requested.

Microbiology Reader	Document No. MICR 6350 R Page 4 of 5
Genital Cultures	Origination: 08/2004 Version 3

- If the GC Probe is positive document the probe result in the workcard with no further work up necessary.
- If the GC Probe is negative, perform RapID NH panel for identification.

REPORTING

Routine cultures

- Enter preliminary report daily until final at 72 hours.
- Enter preliminary report of “No growth after <24 hours” or “Culture in Progress” if the culture was processed after 4pm.
- Report all normal flora with quantitation.
- Report individually significant pathogenic organisms with quantitation and AST
- Add GV comment for *Gardnerella vaginalis* “Gardnerella vaginalis has been found in up to 69% of women without signs or symptoms of vaginal infection, but is found in nearly 100% of women with bacterial vaginosis and in the urethra of a majority of male partners of women with that diagnosis. Clinical correlation suggested.”
- Add the GBS comment for *Streptococcus agalactiae* “Recommendations for antibiotic use for intrapartum prophylaxis for Group B Streptococcus are penicillin or ampicillin. While cefazolin is recommended for penicillin-allergic women at low risk for anaphylaxis, those of high risk for anaphylaxis may receive clindamycin or erythromycin.”
- Enter all results in the appropriate spot in the Meditech workcard.

Group B screen

- If negative, report as “Negative for Group B Strep”
- If positive for Group B, report *Streptococcus agalactiae*
- Add the GBS comment “Recommendations for antibiotic use for intrapartum prophylaxis for Group B Streptococcus are penicillin or ampicillin. While cefazolin is recommended for penicillin-allergic women at low risk for anaphylaxis, those of high risk for anaphylaxis may receive clindamycin or erythromycin.”

Microbiology Reader	Document No. MICR 6350 R Page 5 of 5
Genital Cultures	Origination: 08/2004 Version 3

- Enter all results in the appropriate spot in the Meditech workcard.

GC Screen

- If negative, report as “No *Neisseria gonorrhoeae* isolated”
- If positive, report as *Neisseria gonorrhoeae*
- Enter all results in the appropriate spot in the Meditech workcard.

REFERENCES

Garcia, Lynne, *Clinical Microbiology Procedure Handbook*, 3rd Edition, 2010, Volume 1, Section 3.9 Genital cultures