TEST

Endocervical culture

An endocervical culture checks a cervical swab for germs that can grow in a laboratory.

WHAT IT MEASURES
Growth of germs collected from inside the cervical canal

SAMPLE
Swab from the endocervical canal

FASTING NEEDED?
No

HOW LONG IT TAKES
About 5-10 minutes for the examination

RESULTS IN
Usually 2-3 days; specialized cultures may take longer

USED FOR
Diagnosing cervical infection and sometimes checking antibiotic susceptibility

MAIN LIMITATION
Lower detection than molecular tests, especially after antibiotics

Overview

An endocervical culture is a laboratory test performed on a swab from the endocervical canal, the narrow passage just inside the cervix.

The sample is placed under conditions that allow certain bacteria or other germs to grow. The laboratory identifies any growth and may test which antibiotics like amoxicillin or doxycycline can stop the organism. This is called antibiotic susceptibility testing.

Culture was once commonly used for sexually transmitted infections such as gonorrhea. Molecular tests called nucleic acid amplification tests, or NAATs, now detect gonorrhea and chlamydia more reliably in most situations. They can use a vaginal or cervical swab or a urine sample.

An endocervical culture is not cervical screening. It does not check for abnormal cervical cells or human papillomavirus, known as HPV.

Why the test is ordered

A healthcare professional may order this test to investigate inflammation or infection around the cervix, called cervicitis. Reasons include:

Culture is particularly useful when susceptibility information is needed. A standard NAAT can detect gonorrhea or chlamydia but usually cannot show which antibiotics will work.

Pelvic pain may require additional tests. A cervical result alone cannot confirm or exclude infection higher in the reproductive tract, such as pelvic inflammatory disease.

- Unusual vaginal or cervical discharge
- Bleeding between periods or after sex
- Possible exposure to a sexually transmitted infection
- Symptoms that continue after treatment
- A need to check gonorrhea for antibiotic resistance

Who should have the test

An endocervical culture may be appropriate if symptoms or examination findings suggest cervicitis, or if another test identifies an infection requiring culture and susceptibility testing.

It may also be used after suspected gonorrhea treatment failure. Whenever possible, the sample should be collected before additional antibiotics are started.

Culture is not usually the first choice for routine chlamydia or gonorrhea screening. A NAAT using urine or a vaginal swab generally detects more infections and may not require a speculum examination.

The best test depends on symptoms, sexual exposure, previous results, antibiotic use, pregnancy status, and local availability.

How to prepare

You do not need to fast. Food and drinks do not affect the culture.

Tell the healthcare professional about antibiotics you are taking or recently finished. Antibiotics can suppress living bacteria and cause a negative culture even when infection was recently present. Also mention vaginal creams, gels, suppositories, and antimicrobial products.

The clinic may ask you not to douche or use vaginal medicines before the appointment. Follow its instructions, but do not stop prescribed treatment unless told to do so.

Tell the person performing the test if you are pregnant or may be pregnant, have significant

pelvic pain, or have found speculum examinations difficult. You can request a smaller speculum, ask for a support person, or have the examination stopped at any time.

What happens during the test

You usually undress from the waist down and lie on an examination table with a sheet or gown provided.

A healthcare professional gently places a speculum into the vagina so the cervix can be seen. They may remove mucus from the cervix, then pass a small sterile swab a short distance into the endocervical canal and rotate it to collect cells and fluid. The swab is sealed in a container and sent to the laboratory.

You may feel pressure, mild cramping, or brief discomfort. Sampling usually takes less than a minute, although the full examination takes about 5-10 minutes. More than one swab may be collected if culture, NAAT, or other tests are needed.

Understanding your results

A negative result means the laboratory did not grow the organism being tested for. It does not always exclude infection. Too few living organisms, recent antibiotics, sampling technique, or transport conditions can affect growth.

A positive result means an organism grew from the specimen. Its significance depends on what was found because bacteria normally present in the vagina can sometimes contaminate a cervical sample.

If susceptibility testing was performed, the report may call the organism susceptible or resistant to particular antibiotics. "Susceptible" means an antibiotic is expected to work under appropriate clinical conditions. "Resistant" means it may not work reliably.

There is no universal numerical reference range. Interpretation depends on the organism, laboratory method, pregnancy status, medicines, symptoms, and other clinical findings.

What affects the results

Culture requires living organisms to be collected and kept alive until the sample reaches the laboratory. Results can be affected by:

Pregnancy can change normal vaginal bacteria. Recent sexual activity may introduce semen,

lubricants, or bacteria, although there is no universal abstinence rule. Food, coffee, exercise, and time of day do not usually affect the test.

- Recent antibiotics: These can suppress growth and cause a false-negative result.
- Collection technique: Too little material or contact with vaginal secretions can alter the result.
- Transport conditions: Fragile organisms may die if transport is delayed or the temperature is unsuitable.
- Low organism numbers: An infection may be present but missed by the swab.
- Vaginal medicines or douching: These can reduce or change the organisms collected.
- Menstrual blood or heavy discharge: These can make sampling more difficult.
- Normal vaginal bacteria: Their growth can complicate interpretation.

Accuracy and limitations

Accuracy depends on the organism, culture method, specimen quality, and transport conditions. No single accuracy figure applies to every endocervical culture.

For gonorrhea and chlamydia, NAATs usually detect more infections. Culture may miss infection when organism numbers are low, antibiotics were recently used, or the organism does not survive transport.

Contamination or growth of bacteria normally found nearby can occasionally produce a misleading result. A repeat sample or different test may be needed if the result does not fit the symptoms or examination.

Culture remains valuable when a living gonorrhea organism is needed for antibiotic susceptibility testing. NAAT is generally preferred for routine screening and initial detection.

A negative cervical culture does not rule out infection in the throat, rectum, urinary tract, or upper reproductive tract. Each relevant site must be assessed separately.

Risks and complications

The speculum and swab may cause brief discomfort, mild cramping, or light spotting. Serious complications from collection are not expected.

Contact the clinic if discomfort or light bleeding does not settle. Heavy bleeding, severe or worsening pelvic pain, fever, fainting, or feeling very unwell is not an expected response and

requires prompt medical assessment.

What happens next

If the result is negative and you have no continuing concerns, no further testing may be necessary. If symptoms persist, follow-up may include a NAAT, evaluation for other causes of discharge or bleeding, or testing from another body site.

If a significant organism is found, a healthcare professional will explain whether treatment is needed. Treatment depends on the organism, susceptibility findings, allergies, pregnancy status, previous medicines, and local guidance.

For some sexually transmitted infections, recent partners may need testing and treatment. Follow instructions about avoiding sexual contact and returning for repeat testing.

Seek urgent medical assessment for fever with worsening lower abdominal pain, repeated vomiting, fainting, or pain and bleeding during pregnancy. Call emergency services for severe pain, collapse, difficulty breathing, or other immediately life-threatening symptoms.

Common questions

Can I drink coffee before an endocervical culture?

Yes. Coffee and other drinks do not affect the culture, and fasting is not required.

Does the time of day matter?

Usually not. The test can generally be scheduled whenever the clinic collects and transports samples.

Can I exercise beforehand?

Yes. Exercise does not usually affect the result, although you may avoid activity that worsens pelvic discomfort.

Can the test be done during my period?

Sometimes. Light bleeding may not prevent collection, but heavy bleeding can make sampling or interpretation more difficult. Ask the clinic whether to keep your appointment.

Should I avoid sex before the test?

There is no universal rule. Your clinic may recommend avoiding vaginal sex, lubricants, or spermicides beforehand because they can affect specimen collection.

Can I have this test while pregnant?

Yes, when clinically appropriate. Tell the healthcare professional if you are pregnant or may be pregnant so the examination and interpretation can be adapted.

Sources

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