TEST

FTA-ABS blood test

The FTA-ABS blood test looks for antibodies made in response to the bacterium that causes syphilis.

WHAT IT MEASURES
Antibodies against the bacterium that causes syphilis

SAMPLE
Blood

FASTING NEEDED?
No

HOW LONG IT TAKES
Usually under 10 minutes

RESULTS IN
One to several days, varying by laboratory

USED FOR
Helping confirm current or previous syphilis infection

MAIN LIMITATION
Usually stays positive after treatment, so cannot show active infection

Overview

The fluorescent treponemal antibody absorption test, or FTA-ABS test, is a blood test for antibodies to Treponema pallidum , the bacterium that causes syphilis.

The test does not look directly for the bacterium. It detects evidence that your immune system has encountered it.

FTA-ABS is a treponemal test . It is generally used with other syphilis tests rather than by itself. Many laboratories now use automated treponemal tests or the TP-PA test instead.

A reactive FTA-ABS result may indicate a current infection or one treated in the past. The test cannot show how active an infection is and is not normally used to check whether treatment worked.

Why the test is ordered

Your healthcare professional may order FTA-ABS after another syphilis test is reactive or

unclear.

Syphilis testing commonly uses:

RPR and VDRL results can be reported as titres. Changes in the titre can help assess response to treatment. FTA-ABS usually remains reactive after treatment, so it cannot be used for this purpose.

Testing may also be ordered because of symptoms, possible exposure, pregnancy screening, or another laboratory result. The sequence of tests varies by laboratory.

- Treponemal tests , such as FTA-ABS, which detect antibodies associated with T. pallidum
- Nontreponemal tests , such as RPR or VDRL, which measure antibodies linked to cell damage and inflammation

Who should have the test

FTA-ABS is not usually a stand-alone screening test. It may be appropriate if another syphilis result is reactive, unclear, or inconsistent with the clinical picture.

Testing may be considered if you:

A result alone cannot determine when infection occurred or whether treatment is needed. Symptoms, exposure history, pregnancy status, previous results, and treatment records must also be considered.

- Had sexual contact with someone diagnosed with syphilis
- Have a sore, rash, or other possible symptom
- Are being screened during pregnancy
- Belong to a group offered routine screening
- Have a reactive RPR, VDRL, or automated treponemal test
- Were previously treated and your treatment history needs clarification

How to prepare

You do not need to fast. You can usually eat, drink water, and take your regular medicines before the blood draw.

Tell the healthcare professional if you have previously been diagnosed with or treated for syphilis, because FTA-ABS commonly remains reactive after successful treatment.

Also mention recent antibiotics like amoxicillin or doxycycline , medicines that suppress the immune system, and conditions affecting your immune response. Do not stop prescribed medicine unless specifically instructed to do so.

Wear clothing that allows access to your upper arm. If blood draws make you feel faint, tell the person collecting the sample.

What happens during the test

A healthcare worker places a band around your upper arm, cleans the skin, and inserts a small needle into a vein, usually inside the elbow. Blood is collected into a tube.

The blood draw normally takes less than 10 minutes. You may feel a brief sting or pressure.

In the laboratory, the serum is treated to reduce reactions with similar, non-disease-causing bacteria. It is exposed to T. pallidum material, and a fluorescent marker shows whether specific antibodies have attached.

Understanding your results

FTA-ABS is generally reported as reactive , nonreactive , or equivocal . There is no universal numerical reference range.

A reactive result means antibodies associated with T. pallidum were detected. It may reflect:

It does not show whether infection is active or when it was acquired. Interpretation usually requires an RPR or VDRL result, examination, treatment history, and previous test results.

A nonreactive result means antibodies were not detected. Syphilis is less likely, but a test performed soon after infection may be negative because antibodies have not yet reached detectable levels.

An equivocal result is not clearly reactive or nonreactive. The laboratory may repeat the test or use a different treponemal test.

Pregnancy, immune health, medicines, previous treatment, and the laboratory method can affect interpretation.

- Current syphilis
- Previously treated syphilis
- An untreated infection from the past

- Less commonly, a misleading or cross-reactive result

What affects the results

Timing is important. Early in infection, the body may not have produced enough antibodies, so the test can be nonreactive despite infection.

Previous syphilis is another major factor. FTA-ABS often stays reactive for many years or for life after effective treatment. This does not mean treatment failed.

Other influences include:

Pregnancy does not make a reactive result safe to dismiss. Food, coffee, ordinary exercise, and time of day do not usually affect FTA-ABS.

- Other treponemal infections: Yaws, pinta, and bejel can produce reactive treponemal tests
- Reduced immune response: Severe immune suppression may delay or weaken antibody production
- Very early antibiotic treatment: Treatment before antibodies fully develop may affect later results
- Manual interpretation: Borderline fluorescence may be read differently between laboratories
- Technical problems: Collection, storage, or fluorescence quality can occasionally make results unclear

Accuracy and limitations

Accuracy varies with the stage of infection, population tested, laboratory method, and interpretation of borderline fluorescence. The test is most likely to miss an infection before antibodies have developed.

A reactive result is more likely to represent syphilis when symptoms, exposure history, or another test supports it. Results may be misleading in someone with a very low likelihood of infection or antibodies from another treponemal disease.

FTA-ABS cannot:

If a screening treponemal test is reactive but the RPR is nonreactive, another treponemal test-often TP-PA-may be used. Direct testing of a suspicious sore may be more useful in very early infection where available.

- Distinguish active from previously treated infection
- Show when infection occurred
- Measure response to treatment
- Replace an RPR or VDRL titre
- Always resolve conflicting test results

Risks and complications

The risks are those of a routine blood draw. You may have brief pain, a small bruise, or feel light-headed.

Serious complications are uncommon. Holding pressure over the site for a few minutes can reduce bruising.

What happens next

If the result is nonreactive and there was no recent exposure, no further testing may be needed. If exposure was recent or symptoms continue, repeat testing may be recommended because antibodies take time to develop.

A reactive result is reviewed with your RPR or VDRL result, symptoms, exposure history, and previous treatment. Further assessment is usually needed if you have never been treated, cannot confirm adequate treatment, or may have been exposed again.

Contact your healthcare service promptly if you are pregnant and have a reactive result. Timely assessment and treatment can protect the pregnancy.

Seek urgent medical assessment if possible syphilis is accompanied by new vision changes, eye pain, hearing loss, ringing in one ear, severe headache, weakness, numbness, or balance problems. Call emergency services for sudden stroke-like symptoms, collapse, a seizure, or severe confusion.

Common questions

Can I drink coffee before an FTA-ABS test?

Yes. Coffee does not normally affect the test, and fasting is not required.

Does the time of day matter?

No. Antibody levels do not usually vary enough during the day to affect interpretation.

Can I exercise beforehand?

Ordinary exercise is fine and does not usually alter the result.

How long after exposure will the test become positive?

Timing differs between people. A test soon after exposure may be nonreactive, so repeat testing may be recommended based on the exposure date and other results.

Will it stay positive after treatment?

Often, yes. FTA-ABS commonly remains reactive after successful treatment. RPR or VDRL titres are more useful for monitoring response.

Can FTA-ABS tell whether I have active syphilis?

Not by itself. Other blood tests, symptoms, examination, and treatment history are needed.

Sources

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