

***Trichomonas vaginalis* Rapid Antigen Test - FACT SHEET**

SAMPLE PROCESSING

Swabs collected from the vaginal cavity can be used directly. Sterile rayon swabs from the kit are recommended by the manufacturer since other types of swabs haven't been validated. A new swab can be prepared from the solution remaining in the test tube for the wet mount.

According to the manufacturer's instructions, specimens may be held at room temperature for no longer than 24 hours or stored at 4°C or -20°C for up to 36 hours before processing (1).

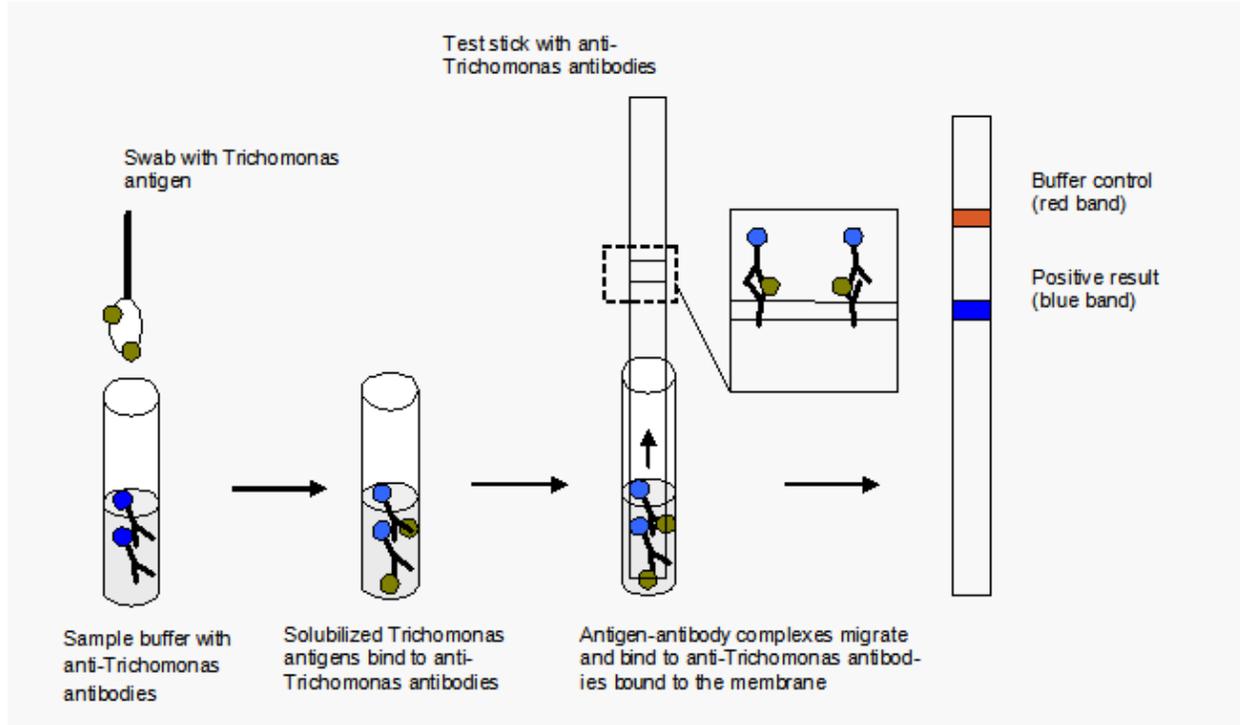
ANTIGEN TEST

Antigen tests have become commercially available and have the advantage of not requiring the presence of viable organisms. The OSOM *Trichomonas* Rapid test is an immunochromatographic capillary-flow enzyme immunoassay dipstick test.

Trichomonas proteins from the vaginal swab are solubilized in a sample buffer that contains primary anti-*Trichomonas* antibodies conjugated to colored particles. If *Trichomonas* proteins are present, they will form a complex with the antibody.

A Test Stick is then placed in the sample mixture which migrates along the membrane surface. Antigen-antibody complex will be bound by a second anti-*Trichomonas* antibody coated on the nitrocellulose membrane revealing a colored line which indicates a positive test (see figure 1).

Figure 1. *Trichomonas* antigen test - Graphic representation



CLINICAL RELEVANCE

Trichomoniasis is a sexually transmitted infection caused by the protozoa *Trichomonas vaginalis*. Microscopic examination of wet mounts of vaginal secretions has been the main method of diagnosis of trichomoniasis however, microscopy has a relatively poor sensitivity (60 - 70%) when compared with culture (2).

Many laboratories have incorporated antigen-based tests to the diagnosis of trichomoniasis; these tests have higher sensitivity, are easy to perform, and the results are usually available in approximately 10 minutes.

Campbell et. al. (3) tested the *Trichomonas* antigen kit and found an improved sensitivity (94.7%) compared to that of the wet preparation. The antigen test also had very good specificity which is important for screening patient groups with a low prevalence of infection (3).

REFERENCES

1. Osom - Genzyme, ed. Osom *Trichomonas* Rapid Test Manual.
2. Van Der Pol B. *Trichomonas vaginalis* infection: The most prevalent non-viral sexually transmitted infection receives the least public health attention. *Clinical Infectious Diseases*. 2007;44:23-25.
3. Campbell L, Woods V, Lloyd T, Elsayed S, Church DL. Evaluation of the OSOM *Trichomonas* rapid test versus wet preparation examination for detection of *Trichomonas vaginalis* vaginitis in specimens from women with a low prevalence of infection. *J Clin Microbiol*. 2008;46:3467-3469.