New test offers improved detection of syphilis antibodies

The Clinical Virology lab now offers the TrepSure™ *Treponema pallidum* antibody assay (Phoenix Bio-Tech Corp.), replacing the Rapid Plasma Reagin (RPR) assay for syphilis screening. The lab receives specimens from all Fairview hospitals and clinics.

TrepSure, an enzyme immunoassay, offers improved sensitivity and specificity over RPR. Automation will eliminate technologists' subjective interpretations.

Ninety-nine percent accurate, TrepSure results will be reported as positive, negative or equivocal. More likely to be a true positive, TrepSure will reduce the need for confirmatory testing and will calm patient anxiety.

Antibodies are produced in response to *Treponema pallidum*, the causative agent for syphilis. RPR detects the non-specific anticardiolipin antibody; TrepSure detects the specific

anti-treponemal IgG and IgM antibodies. TrepSure can detect anti-treponemal antibodies for a lifetime, even after syphilis infection is resolved; RPR is reactive only during an active infection.

The RPR assay may portray a false positive during pregnancy, after recent immunization and in the presence of autoimmune diseases or acute viral infections.

Most people become seronegative on the RPR following adequate treatment for syphilis. A positive TrepSure result in conjunction with a reactive RPR indicates an active syphilis infection.

The Fairview Virology lab will continue to perform RPR reflex testing. In the event of a positive TrepSure and a negative RPR, the lab will send out the specimen for FTA-ABS (Fluorescent Treponemal antibody) testing to confirm.



A technologist at the Clinical Virology laboratory performs a TrepSure antibody assay.

Acceptable specimens include serum or plasma. Refer to the Fairview Labguide Collection Guide on Fairview intranet for specimen handling, test code TREPAB. The lab will perform TrepSure assays Monday through Friday.

Questions, please contact the Clinical Virology laboratory, 612-273-5195.

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