

# MedLink

## Herpes simplex virus DNA qualitative PCR assay added to its test menu

University of Minnesota Medical Center's Clinical Virology Laboratory has added the herpes simplex virus (HSV) DNA qualitative PCR assay to its test menu.

The Qiagen Real Time PCR assay targets the glycoprotein B gene of HSV and differentiates between HSV1 and HSV2 subtypes. The results are reported as positive or negative for each subtype. This test is an expansion of the virology test menu; the classic HSV cell culture will still be available.

Herpes simplex virus produces a wide array of clinical manifestations, from relatively mild mucocutaneous lesions to life-threatening encephalitis. Immunocompromised patients can have severe clinical outcomes. HSV can be transmitted to a newborn during the birthing process and cause severe disseminated infection. When the viral load is high, HSV can be detected in a culture within 24-72 hours. However, a PCR-based assay is the reference standard for HSV detection in CNS infections because of its increased sensitivity and specificity over viral culture. While the assay is very sensitive, a negative result does not absolutely exclude HSV encephalitis.

Molecular methods are not recommended for a test of a cure, such as a recurrent genital infection, because they will detect a non-replicating virus. In other words, it is possible for a person to have a positive PCR result and not be contagious.

The Mysis test code is HSDNA and will be performed two to three times a week. The minimum specimen volume is 0.4 mL, and the specimen is submitted refrigerated or frozen. Acceptable specimens include genital, oral, dermal or ocular swabs, CSF and bronchial specimens. Swabs may be

submitted in culturettes with the ampule broken or in Viral Transport media. Tissue specimens will be sent out for molecular HSV testing. Feces and specimens submitted in heparin are unacceptable specimens for this assay.

If you have questions, contact the Clinical Virology Laboratory, 612-273-5195.