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MOLECULAR PATHOLOGY UPDATE: INTRODUCTION OF A PANEL FOR MOLECULAR DETECTION OF HERPES SIMPLEX VIRUS AND VARICELLA-ZOSTER VIRUS

Thomas Novicki, PhD, DABMM; Timothy Uphoff, PhD, DABMG, MLS(ASCP)CM - Clinical Microbiology and Molecular Pathology Laboratories

NOTICE

Effective June 17, 2013, Marshfield Labs will introduce a panel PCR test combining detection of herpes simplex viruses I and II (HSV12PCR) with the detection of varicella-zoster virus (VZVPCR) from a single sample. The primary advantages of the panel are reducing the amount of specimen required and ease of ordering. Please note that the HSV and VZV components of this panel will continue to be offered individually.

The lab test code will be HSVZVP.
This test can be used in place of ordering HS12PCR and VZVPCR individually.

HOW TO ORDER THIS TEST

Test	Keywords	Lab Test Code	Clinic (Com)	Hospital (Centricity)
HSV	Herpes Simplex Virus	HS12PCR	HSV by PCR	HSV by PCR
VZV	Varicella Zoster Virus	VZVPCR	VZV by PCR	VZV by Rapid PCR
HSV & VZV	Herpes Simplex and Varicella Zoster virus NAT Panel	HSVZVP	HSV-VARICELLA NAT PANEL	HSV-VARICELLA NAT PANEL

DOWNTIME Write-In (Form 1)

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SPECIMEN REQUIREMENTS:

Local -

CSF: 0.5 mL spinal fluid (CSF) collected in a sterile vial.
Swabs (in M4-RT): Vesicular fluid and cellular material from the base of lesion (skin, mucosal, urogenital). Specimens from early stage vesicular lesions rather than ulcerative or crusted lesions should be obtained. Place swabs in M4-RT multi-microbe medium and break off swab at least 0.5 inch below top of tube.

Outreach -

CSF: 0.5 mL spinal fluid (CSF) collected in a sterile vial.
Swabs (in M4-RT): Vesicular fluid and cellular material from the base of lesion (skin, mucosal, urogenital). Specimens from early stage vesicular lesions rather than ulcerative or crusted lesions should be obtained. Place swabs in M4-RT multi-microbe medium and break off swab at least 0.5 inch below top of tube.

MINIMUM:

CSF: 0.5 mL spinal fluid.
Neonatal minimum: 0.2 mL spinal fluid (CSF).
Swabs: One swab.

REJECTION CRITERIA:

Specimens collected on wood-shafted, cotton or calcium alginate swabs are not acceptable. Frozen swab specimens are unacceptable. Urine and body fluids (with the exception of CSF) are not acceptable. Solid tissue samples will not be accepted for PCR detection. Solid tissue samples should be submitted for viral culture.

STORAGE:

Local -

CSF: Refrigerate. Frozen CSF is acceptable - avoid freeze / thaw cycles.
Swabs (in M4-RT): Refrigerate

Outreach -

CSF: Refrigerate. Frozen CSF is acceptable - avoid freeze / thaw cycles.
Swabs (in M4-RT): Refrigerate

AVAILABLE:

Test is set up Monday through Friday; analytic time of 1 day.

QUALITATIVE INTERPRETATION:

Positive or Negative

CPT CODES:

HSV = 87529
VZV = 87798

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CONTACTS

Interpretive questions: Timothy Uphoff, PhD at ext. 1-6189, or 715-221-6189.
Technical questions: Mary Ellen Nedd at ext. 1-6187, or 715-221-6187.

MICROBIOLOGY UPDATE: DISCONTINUANCE OF THE HERPES SIMPLEX VIRUS ANTIGEN, DIRECT FA AND VARICELLA-ZOSTER VIRUS ANTIGEN, DFA TESTS

Thomas Novicki, PhD, DABMM and Thomas Fritsche, MD, PhD - Microbiology Laboratory

Effective June 17, 2013, the following two tests will be discontinued:

- HERPES SIMPLEX VIRUS ANTIGEN, DIRECT FA
- VARICELLA-ZOSTER VIRUS ANTIGEN, DFA

Providers wishing to diagnose HSV or VSV in external ulcers or vesicular lesions should instead use:

- VARICELLA ZOSTER VIRUS BY RAPID PCR
- HERPES SIMPLEX VIRUS (HSV) 1/2 BY RAPID PCR
- HERPES SIMPLEX AND VARICELLA ZOSTER VIRUS NAT PANEL
  (Please see the previous article for ordering information.)

This decision, made in consultation with our Dermatology and Infectious Disease colleagues, was based on the PCR assay's superior sensitivity over direct fluorescent assay (DFA) antigen detection of these viruses, particularly in the latter stages of the lesion, where a paucity of viral antigen hampers detection by DFA.

COMPARISON

	PCR	DFA
Performance	Performed daily Monday - Friday	Performed daily Sunday - Saturday
Lab turn-around time	≤24 hr (up to 72 hr if over a weekend)	≤24 hr
Accuracy	In-house validation comparing the PCR assays to standard Virology practice of culture and/or DFA found: 1. HSV 25% greater sensitivity by PCR 2. VZV 13% greater sensitivity by PCR 3. HSV & VZV 100% specificity by PCR	
Reimbursement	Both PCR and DFA assays are routinely reimbursed by all payers. However, be aware that reimbursement of PCR and DFA testing on a given viral target is mutually exclusive.	

CONTACTS

Questions regarding this change may be directed to:
Dr. Thomas Novicki at ext. 1-6132 or 715-221-6132.
Dr. Thomas Fritsche at ext. 1-6133 or 715-221-6133.