

2014 ALERT # 2

New case of neonatal herpes infection following ritual Jewish circumcision

Please Share this Alert with All Emergency Medicine, Pediatric, Pediatric Infectious Diseases, Dermatology, Infection Control, and Microbiology Laboratory Staff

- A new case of neonatal herpes following ritual Jewish circumcision with direct orogenital suction was reported in New York City.
- Infants suspected of having herpes simplex virus infection should be hospitalized and treated with intravenous acyclovir.
- Health care providers are required to report diagnoses of neonatal herpes (with or without laboratory confirmation) to the New York City Department of Health and Mental Hygiene.
- Health care providers evaluating an infant ≤ 60 days of age for suspected neonatal herpes are required to collect a swab specimen from vesicles and submit the specimen to the New York State Wadsworth Center Laboratories.
- Laboratories detecting herpes simplex virus in specimens from infants < 60 days of age are required to submit all such specimens to Wadsworth Center Laboratories.

January 28, 2014

Direct orogenital suction during ritual Jewish circumcision (also known as *metzitzah b'peh*) has been documented to transmit herpes simplex virus (HSV) type 1 to newborn males (1-4). In January 2014, the New York City (NYC) Department of Health and Mental Hygiene received a report of a new case of HSV-1 infection in a newborn male infant following direct orogenital suction. To date, a total of 14 laboratory-confirmed cases of HSV-infection attributable to direct orogenital suction have been reported to the Health Department since 2000. Two of these infants died, and at least two others suffered brain damage (4).

In the most recent case, the infant was the term product of a full-term pregnancy and normal vaginal delivery. He had ritual Jewish circumcision including direct orogenital suction on day of life 8. On day of life 13, at a well-child visit, a rash was noted on and around genitals. The baby was treated with topical antibacterial ointment. On day of life 16, the baby returned to his provider for worsening rash, and a topical anti-fungal was added to the regimen. On day of life 18, lesions progressed to include the perineum and the right foot. HSV infection was suspected, and the infant was referred to a pediatric dermatologist. The next day, upon evaluation of the baby, the dermatologist, also suspecting HSV, collected specimens for direct visualization and for viral culture, and the baby was admitted to a hospital for treatment. The location of herpes lesions (on the genitals and on the foot, a dermatomal distribution reflecting involvement of sacral nerves), viral type (HSV type 1, which is commonly found in the mouth of adults), and timing of infection (5 days after circumcision) are consistent with transmission during direct contact between the mouth of the ritual circumciser (*moהל*) and the newly circumcised infant penis.

When evaluating an ill infant male in the weeks following circumcision, providers should inquire whether direct orogenital suction was performed during circumcision and consider infection with HSV or other oral pathogens. If a provider suspects HSV infection, the baby should be immediately admitted to a hospital and be treated presumptively with intravenous acyclovir. Providers should also consult with a pediatric infectious disease specialist for guidance regarding the diagnosis and management of an infant with suspected herpes infection; also, see reference #6 under “References and resources” at the end of this alert.

Health care provider requirements for reporting and specimen collection

Reporting

Providers diagnosing herpes infection in infants aged 60 days or younger are required by law (5) to report the infection to the Health Department within 24 hours of diagnosis. Providers must report cases even if laboratory confirmation has not been obtained. Diagnoses must be reported using the Health Department case report form, the “Universal Report Form (URF),” that can be found at: <http://www.nyc.gov/html/doh/downloads/pdf/hcp/reporting-outbreaks.pdf>. Hospital infection control practitioners and provider practices with access to the Health Department’s electronic reporting system (Reporting Central) may report through that interface.

Diagnostic evaluation for suspected neonatal HSV

A complete diagnostic evaluation for suspected neonatal HSV includes collection of multiple specimen types, including: specimens from skin vesicles for culture and PCR; swab specimens from the mouth, nasopharynx, conjunctivae, and anus for culture; cerebral spinal fluid for PCR; whole blood for PCR and liver function tests (6). Physicians should follow good clinical practice and collect specimens appropriate to diagnose HSV or other causes of illness under consideration and submit these to their usual clinical laboratory.

Required specimen collection and submission to Wadsworth Center Laboratories

Health care providers evaluating infants 60 days or younger with suspected HSV infection are required by law to collect specimens from one or more vesicles (if present) or from any skin lesions suggestive of herpetic disease (7), and to send these swab(s) to the New York State Wadsworth Center Laboratories for diagnostic testing using molecular methods. See instructions for shipping specimens to Wadsworth Center Laboratories below.

Providers are required to send a vesicular swab specimen to Wadsworth Center Laboratories; they may also wish to submit vesicular swabs to their usual clinical laboratory.

To collect a specimen from a vesicle, use a sterile flocked or dacron-tipped swab with a plastic shaft, unroof or open the vesicle with a sterile needle or scalpel, and vigorously rub or twist the swab on the exposed base of the lesion. Place the swab in liquid viral transport medium and send immediately on frozen cold packs to the laboratory. If immediate transport to the laboratory is not possible, the specimen should be refrigerated or frozen (see below).

Requirements for laboratories to submit specimens in which HSV has been detected

Submission to Wadsworth Center Laboratories

Clinical laboratories that detect HSV in a specimen from an infant 60 days or younger are required to send the specimen(s) and all associated materials to Wadsworth Center Laboratories. This regulation applies to any and all specimen types, including HSV-positive cultured viral isolates.

Shipping specimens to Wadsworth Center laboratories

Refrigerated fresh specimens should be shipped on cold packs by overnight service. If transport will be delayed more than two days, specimens should be frozen at -70°C and shipped on dry ice using an overnight service. CSF specimens should always be frozen immediately and shipped on dry ice to the laboratory. Never ship on a Friday or the day before a government holiday. Laboratories submitting specimens should complete a Wadsworth Center Infectious Disease Requisition form, which can be found at http://www.wadsworth.org/divisions/infdis/DOH-4463_061109_fillable.pdf. For submitters with remote on-line access, orders for testing may also be placed electronically.

When submitting specimens to Wadsworth Center Laboratories for HSV testing, page one of the requisition form should be completed. Complete the section of the form entitled “Submitter (Laboratory report will be sent to).” In the section entitled “Laboratory examination requested,” check the box labeled “viral,” and write “HSV” in the space provided following “suspected organism/agent,” and check the box for “identification/confirmation.” Circle “identification” (if submitted directly from provider) or “confirmation” (if HSV-positive specimen being submitted by laboratory), as appropriate.

Specimens should be shipped to the following address:

Virology Laboratory
Wadsworth Center, DAI
120 New Scotland Avenue
Albany, NY 12208

For questions about specimen handling or shipping, please the Wadsworth Virology Laboratory, at (518) 474-4177.

Wadsworth Center Laboratories will test vesicular swabs submitted for diagnostic testing, and/or HSV-positive samples for confirmatory testing, and will report results to the submitter.

Laboratories detecting HSV in specimens from infants should continue to report those results to the electronic clinical laboratory reporting system.

Sincerely,

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References and Resources

1. Rubin L, Lanzkowsky P. Cutaneous neonatal herpes simplex infection associated with ritual circumcision. *Pediatric Infectious Disease Journal* 2000;19(3):266-7.
2. Distel R, Hofer V, Bogger-Goren S, Shalit I, Garty BZ. Primary genital herpes simplex infection associated with Jewish ritual circumcision. *Israeli Medical Association Journal* 2003;5:893-4.
3. Gesundheit B, Grisaru-Soen G, Greenberg D, et al. Neonatal genital herpes simplex virus type 1 infection after Jewish ritual circumcision: modern medicine and religious tradition. *Pediatrics* 2004;114 (2):259-63.
4. Centers for Disease Control and Prevention. Neonatal herpes simplex virus infection following Jewish ritual circumcisions that included direct orogenital suction – New York City, 2000-2011. *MMWR* 2012;61:405-409.
5. Section 11.03 of Article 11, New York City Health Code
6. American Academy of Pediatrics. *Red Book: 2012 Report of the Committee on Infectious Diseases*. Pickering LK, ed. 29th ed. Elk Grove Village, IL: American Academy of Pediatrics; 2012.
7. Section 11.10 of Article 11, New York City Health Code