

Circumcision Protocol Regarding the Prevention of Neonatal Herpes Transmission

- I. Since congregants may have heard about the issue pertaining to metzizah b'peh and circumcision, Rabbis should actively inform members of their congregations about this issue on an ongoing basis. The following information will need to be provided.
 - A. Herpes Simplex Virus (HSV) is known to cause rare, but very severe infections in newborns.
 - B. HSV is also known to spread to newborns during delivery by actively infected mothers.
 - C. Any pregnant women with a history of, or signs or symptoms suggestive of, herpes lesions around the birth canal, must inform their obstetricians of this fact. It is standard of care at present for infants to be delivered surgically by caesarean section from mothers suspected of having an active HSV infection around her birth canal.
 - D. While 23% of American women are chronically infected with HSV-2, most adults (~70%) are chronically infected with the other type of HSV (HSV-1) that is primarily associated with infection of the mouth, eyes and hands. Because HSV-1 is known to be shed in saliva even while the person has no lesions or experiences no other signs or symptoms of active infection, there is a theory in some medical literature that, although extremely rare, the practice of metzizah b'peh could be a route of transmission for HSV-1.
 - E. Parents, then, should be fully informed by the Rabbis regarding this.
 - F. When the infants are at home, parents and caregivers should wash their hands thoroughly with soap and water before cleaning the circumcision site.
 - G. Parents should watch for, and bring to the attention of their physician/nurse, any signs such as low grade fever, infection at the circumcision site, skin rash, or one or more blisters or blebs that may develop during the first 2 weeks after circumcision. This is crucial for the early diagnosis and treatment of HSV-1 infection. NYSDOH has provided educational materials (attached) regarding HSV infection in the newborn to be distributed to the congregation.

- II. The following precautions are to be taken every time circumcision with metzizah b'peh is performed, whether by a mohel, by another participant, or by a combination of them:
- A. Both participants must do the following:
1. Wash hands thoroughly immediately before the circumcision. Remove rings, watches, and bracelets before beginning hand washing.
 2. Remove any debris from underneath fingernails using a nail cleaner under running water.
- B. The mohel performing the circumcision must do the following:
1. Using either an antimicrobial soap or an alcohol-based hand scrub, scrub hands for the length of time recommended by the manufacturer, usually 2-6 minutes. If using an alcohol-based hand scrub, pre-wash hands with a non-antimicrobial soap and dry hands completely, then use the alcohol-based product as recommended and again allow hands to dry thoroughly before performing the circumcision (Reference 1).
 2. After circumcision, cover the circumcision area with antibiotic ointment and sterile gauze.
 3. Alert the mother and/or father to watch for fever, rash, blisters or inflammation around the genital area and then report immediately to physician/nurse regarding these findings.
- C. The person performing metzizah b'peh must do the following:
1. Wipe around the outside of the mouth thoroughly, including the labial folds at the corners, with a sterile alcohol wipe, and then discard in a safe place.
 2. Wash hands with soap and hot water for 2-6 minutes.
 3. Within 5 minutes before metzizah b'peh, rinse mouth thoroughly with a mouthwash containing greater than 25% alcohol (for example, Listerine®) and hold the rinse in mouth for 30 seconds or more before discarding it (Reference 2).

- III. A. If an infant becomes infected with HSV on or after April 28, 2006 within a compatible incubation period following metzizah b'peh, the NYSDOH will conduct an investigation without prejudging the cause. Such an investigation would include but not be limited to interviewing, reviewing medical records of, and testing the mohel in question and all pertinent caregivers. The mohel in question must stop metzizah b'peh (up to 45 days) until the NYSDOH investigation is completed.
- B. So long as each local health department in whose jurisdiction such public health investigation is proceeding agrees to be bound by, without addition to or modification of, any and all provisions of this Circumcision Protocol, community Rabbis are expected to lend their support and cooperation in the event of any such public health investigation.
- IV. The investigation described in Section III above will include the following laboratory testing:
- A. The lesion(s) on the baby will be swabbed and tested for HSV by conventional virus culture.
- B. If the culture result on the baby is positive, the virus will be typed to determine whether it is type 1 or type 2 HSV.
- C. The primary caregivers (up to four) and the mohel will be serologically tested (Western Blot) for evidence of herpes virus infection. If found to be infected, further serologic testing will be done to identify the virus type: HSV-1 or HSV-2.
1. If the serologic test (Western Blot) on the mohel is negative or is a different type (HSV-1 or 2) from the type found in the newborn, the mohel will be ruled out as the source of herpes infection in the newborn. He may resume practice of metzizah b'peh following the precautions described in Section II, above.
 2. If, on the contrary, the mohel's virus type matches the virus type of the newborn (type 1 or type 2), then the mohel, and any other care givers whose virus type also matches the newborn's virus type will undergo viral culturing to attempt to recover the virus. The sample for viral culture will be obtained by daily mouth swabs. Since viral shedding can occur between 9 and 15 days per month, recovery of the virus may take as long as a month of swabbing. When HSV is isolated, it will undergo further testing by restriction fragment length polymorphism (RFLP). RFLP will be arranged by the NYSDOH and the sample will be sent to a world-renowned laboratory capable of state-of-the-art RFLP testing and analysis, satisfactory to the NYSDOH. RFLP testing

will take an additional time period of up to two weeks. All RFLP testing will be conducted in a blinded fashion such that the testing laboratory does not know the identity of the subjects' specimens.

- D. The following actions will be taken, based on the RFLP results:
1. If the herpes viral DNA of the newborn and the mohel are identical, as determined by RFLP (the best scientific method available), then the mohel is implicated as the source of herpes infection in the infant.

This mohel will therefore be banned for life from performing metzizah b'peh in the State of New York.

2. After RFLP:
 - A. If the mohel and newborn have a different HSV viral DNA subtype, then the mohel is determined not to be the source of the infant's infection. He may resume performing metzizah b'peh, adhering to precautions set forth in Section 2, above.
 - B. In the event, however, that it is a caregiver who has an identical HSV viral DNA subtype as the newborn, and that caregiver is a hospital employee, the hospital will be informed by the NYSDOH and directed to develop a plan to prevent further infections. In this circumstance, the mohel may resume performing metzizah b'peh, adhering to precautions set forth in Section 2, above.
 - C. In the event it is a parent or a family member who has an identical HSV viral DNA subtype as the newborn, then the parents or family member will be informed by NYSDOH, given educational materials on HSV and advised to consult his or her physician regarding steps to take to prevent transmission to a newborn in the future. In this circumstance, the mohel may resume performing metzizah b'peh, adhering to precautions set forth in Section 2, above.

3. In the event that the mohel cannot be ruled out as the source of infection in the newborn because 1) herpes virus has not yet been recovered for RFLP subtyping and 2) no other caregiver is shown to have herpes virus identical to the newborn's virus, then, under these circumstances for the mohel to continue the practice of metzizah b'peh, he has to take one of the following options (the choice of which one shall be at his discretion):
 - A. Continue abstaining from practicing metzizah b'peh until such time, if any, as the virus is recovered from the mohel or any other person, through additional swabbing and results are obtained after testing by RFLP. If such results are obtained, then the appropriate actions will be taken as set forth in this Section IV, Subsection D, paragraphs 1 or 2; or
 - B. When the mohel will participate frequently in circumcision with metzizah b'peh, take one 500 mg valacyclovir tablet orally every day of his life (Reference 3); or
 - C. When the mohel will participate only occasionally in circumcision with metzizah b'peh, take one 500 mg valacyclovir tablet orally every day for three days before circumcision.

The NYSDOH reserves the right to do mouth swabs for herpes culture on mohels choosing to go on valacyclovir to confirm that they are herpes culture negative.

References.

- (1) Centers for Disease Control and Prevention. Guideline for Hand Hygiene in Health-Care settings. MMWR 2002/51 (RR16); 32-33.
- (2) Meiller TF et al: Efficacy of Listerine® Antiseptic in reducing viral contamination of saliva. J Clin Periodontol 2005; 32: 341-346.
- (3) There is no information regarding the effects of antiviral prophylaxis on HSV-1 shedding or transmission. However, antiviral prophylaxis has been shown to decrease clinical attacks of oral HSV-1 and to decrease HSV-2 shedding. [Sacks SL et al: HSV shedding. Antiviral Research 63S1 (2004) S19-S26]

HERPES SIMPLEX VIRUS IN THE NEWBORN

What is Herpes Simplex Virus?

Herpes Simplex Virus (HSV) is a virus that usually causes skin infections. There are two types of HSV: HSV type 1 usually causes small blisters on the mouth, eye, or lips (cold sores) and HSV type 2 usually affects the genital area. HSV infection in newborn babies can be very severe and can even cause death. This is because newborns' immune systems are not fully developed.

Who gets HSV and how is it spread?

- About 70% of all adults in the U.S. are infected with HSV-1 and may shed virus in their saliva at any time during their lifetime, even if they don't have symptoms like sores in the mouth or cold sores.
- Anyone can get either type of HSV. HSV-1 infection usually occurs in childhood, before age 5, from close contact with someone shedding HSV-1, often with cold sores.
- Most HSV infections in newborns are caused by HSV-2 that the infant catches from the mother's birth canal.
- Newborns can sometimes get HSV-1 from close contact with someone who is shedding HSV-1 virus in their saliva or has an active HSV-1 outbreak (cold sores).

What are the symptoms of HSV infection?

- Most people with HSV-1 can shed it in their saliva with no symptoms, or they may have a cold sore: a small fluid filled skin blister which breaks open, crusts over, and disappears in about 21 days.
- Infected newborns may have mild symptoms at first, such as low grade fever (100.4 degrees F., or more, rectally), poor feeding, or one or more small skin blisters. This can happen 2-12 days after HSV exposure. If any of these occur, notify your doctor immediately.
- Newborns can become very sick quickly with high fever and seizures, and may become lethargic (floppy).
- HSV infection in newborns can be very severe and can even cause death.

What is the treatment for HSV?

- Cold sores in children and adults don't need to be treated. Creams with anti-HSV medicine can treat cold sore symptoms, if necessary.
- Newborns with HSV require hospitalization for intravenous antiviral medication for 21 days. Even with this treatment, some newborns can suffer death or brain damage from HSV infection.

How can you prevent your newborn from getting HSV?

- If you are pregnant and have a history or signs and symptoms of genital HSV-2 infection, tell your doctor as soon as possible. A C-section delivery is recommended if a mother has an HSV-2 outbreak near the time of birth.
- Everyone should wash their hands before touching the newborn.
- Do not kiss your baby or let others kiss your baby if you or they have cold sores on the mouth or lips.

Care instructions (Recommendations for parents and caregivers):

- Wash hands thoroughly with soap and water before touching the newborn.
- Contact your doctor immediately if there are any signs of HSV infection. These include low grade fever (100.4 degrees F., or more, rectally), poor feeding, irritability, and skin rash in the form of pimples or blisters, seizures or other similar symptoms that may develop within three weeks following birth.
- All newborns should be seen by their healthcare provider between the first and third week of life.