

FIRST AID GUIDELINES FOR MACAQUE BITE/EXPOSURE

Cleanse the exposed area by thoroughly washing and scrubbing the area or wound with soap, concentrated solution of detergent, povidone-iodine, or chlorhexidine and water, and then irrigate the washed area with running water for 15-20 minutes.

WARNING: a specimen for PCR testing should not be obtained from the wound area prior to washing the site because it could force virus more deeply into the wound, reducing the effectiveness of the cleansing protocol. After the site is cleansed, a serum specimen should be obtained from the patient to provide a baseline antibody level. (See Specimen Collection and B virus Detection)

*RABIES PROPHYLAXIS INFORMATION ON REVERSE NOTE: SPECIFIC ANTIVIRAL DRUGS/DOSES ON REVERSE

** B VIRUS PROPHYLAXIS ADMINISTRATION CRITERIA

TREATMENT RECOMMENDED

- 1. Type and physical condition of the implicated animal. Only monkeys of the macaque family serve as the natural reservoir for B virus infection. No other primates carry any risk of B virus transmission unless they have had the opportunity to become infected by a macaque. Infected macaques will not ordinarily be shedding B virus. Animals with lesions consistent with B virus infection (fluid-filled blisters on the skin) and animals that are immunocompromised or stressed are far likelier to be excreting virus.
- **2.** Thoroughness and timeliness of wound cleansing procedure. Wounds that have been cleansed within 5 minutes of exposure and that have been cleansed for at least 15 full minutes are less likely to lead to B virus infection. Delay in cleansing or inadequate cleansing of the wound increases the risk of infection.
- **3. Nature of the wound**. Bites or scratches that penetrate the skin, and particularly deep puncture wounds, are considered higher risk than wounds that are superficial and thus more easily cleansed. Wounds to the head, neck, or torso provide potentially rapid access to the CNS and thus should be considered higher risk. Prophylaxis is recommended for this type of wound regardless of its severity. Superficial wounds to the extremities are less likely to lead to fatal disease, and antiviral treatment is considered less urgent in such exposures.
- **4.** Exposure to materials that have come into contact with macaques. Needlesticks with syringes that have come into contact with the CNS, eyelids, or mucosa of macaques are considered to carry a high risk of infection. Accidental punctures from needles exposed to the peripheral blood of macaques are considered relatively low risk. Scratches resulting from contact with possibly contaminated objects, such as animal cages, are considered to carry a lower risk for infection. It should be stressed, however, that in none of these potential exposures, can the risk of infection be considered zero. As such, the decision to treat with antivirals should be made at the physician's discretion, with liberal consideration of the patient's wishes and concerns.

TREATMENT SHOULD BE CONSIDERED

- 1. Mucosal splash that has been inadequately cleaned.
- 2. Laceration (loss of skin integrity) that has been adequately cleaned.
- ${\bf 3.}\ Needlestick\ involving\ blood\ from\ an\ ill\ or\ immunocompromised\ macaque.$
- 4. Puncture or laceration occurring after exposure to (a) objects contaminated with body fluid (other than that from a lesion) or (b) a possibly infected cell culture.

TREATMENT IS NOT RECOMMENDED

- 1. Skin exposure in which the skin remains intact.
- 2. Exposure associated with non-macaque species of non-human primates, unless they were in a situation where they could have been infected by a macaque.

B Virus Resource Center Contact Information



**B Virus Antiviral Therapy

Administration of B virus—specific immunoglobulin, if available, may be effective, and ganciclovir or acyclovir may be effective. The proposed use of specific immunoglobulin is based solely on the effectiveness of i.v. immunoglobulin as a safe prophylactic against other alphaherpesvirus infections, notably varicella-zoster virus.

Recommended dosages for specific antivirals are as follows:

Prophylaxis for exposure to B virus

Valacylovir—1g by mouth every 8 hours for 14 days, or

Acyclovir—800 mg by mouth 5 times daily for 14 days

Treatment of B virus infection

With no CNS symptoms

Acyclovir—12.5-15 mg/kg intravenously every 8 hours, or

Ganciclovir—5 mg/kg intravenously every 12 hours

With CNS symptoms

Ganciclovir—5 mg/kg intravenously every 12 hours

*Rabies post exposure prophylaxis

Unless the monkey can be euthanized and tested rabies post exposure prophylaxis (PEP) should be administered as follows:

Human Rabies Immune-Globulin (HRIG) on day 0, plus a series of Human Rabies Vaccines (HRV) on days 0, 3, 7, and 14 (immune compromised patients should receive 5th dose on day 28 and subsequent titer check

RESOURCES:

Viral Immunology Center at Georgia State University, B Virus Resource Center www.gsu.edu/bvirus
Centers for Disease Control and Prevention, http://www.cdc.gov/herpesBvirus/firstaid-treatment

Selected Links from the B Virus Resource Center Website:

B Virus Exposure Mini-Protocol: http://www2.gsu.edu/~wwwvir/PDFs/2007%20Mini-SOP.pdf
B Virus Lab Submission Form: http://www2.gsu.edu/~wwwvir/PDFs/2007%20Submission%20Form.pdf
Complete B Virus Guidelines: http://www2.gsu.edu/~wwwvir/PDFs/2002%20B%20Virus%20Guidelines.pdf

