

Nonhuman Primate Bite, Scratch, Splash Health Care Provider Treatment Checklist

Significant exposure to Simian B virus can cause human morbidity and mortality. Cercopithecine herpesvirus 1 or herpesvirus simiae (B virus) is a naturally occurring infectious agent which is endemic in rhesus, cynomolgus and other Asiatic monkeys of genus *Macaca*. Human infections have typically occurred after bites, scratches, or splash accidents, or after mucosal contact. It is important to adequately clean the wound, take appropriate cultures, and treat with prophylactic antiviral medication as indicated.

- 1. **Confirm that the wound or exposure is related to macaque monkey species.** For non-macaques, follow normal animal bite procedures.
- 2. **Regardless of prior cleaning, immediately clean the wound again for 15 minutes using a viricidal soap (e.g., prepackaged hexachlorophene scrub brush).** For eye exposure or mucous membrane exposure, irrigate the exposed area with sterile saline or running water for at least 15 minutes.
- 3. **Wound culturing is generally not indicated and may be done at the discretion of the treating physician on an as-needed basis.** Use the standard viral swab when culturing is indicated.
 - a. Place the swab in the vial containing the viral transport media, break off the end of the swab shaft and replace the screw cap so that it is tightly sealed.
 - b. Place the specimen in a biohazard transport bag and seal.
 - c. All swabs should be marked regarding employee name, birthdate, time of exposure, and site of exposure.
 - d. Collect baseline blood specimen for antibody titers to simian B virus.
 - e. Send blood specimen and swab to HealthPartners Laboratory.
- 4. **Determine tetanus status of patient. If not current, administer tetanus booster.**
- 5. **Document history of exposure, including date, time, location, description of injury and type of fluid contacted. Perform complete physical examination, including neurologic and wound exam.**
- 6. **If wound (bite, needlestick, scratch, or splash) has any potential to be exposed to herpes virus simiae, even if remote or minor, the patient should be started on Valacyclovir 1 gram po tid for 14 days (500 mg tabs 2 tabs po tid #84) (*see reverse*). Consider adding Augmentin or Keflex prophylaxis for bites.**
- 7. **Eye exposures should be treated with trifluridine (Viroptic). One drop every hour when awake, up to nine drops per day. The patient should then be referred to an ophthalmologist.**
- 8. **Confirm that University of Minnesota Research Animal Resources has been contacted (612-624-9100) to take swabs and serum samples from the animal involved. Instruct RAR to communicate results to HealthPartners Occupational Medicine.**
- 9. **Counseling**
 - a. Educate the exposed patient regarding significance of injury and B virus symptoms. B virus disease incubation period is 2 days to 5 weeks (most cases present 5-21 days after exposure). Instruct patient to seek care in the ER if the following symptoms develop: any unusual illness, flu-like symptoms (fever, muscle aches, fatigue and headaches, nausea, vomiting), skin lesions, vesicular rash, lymphadenopathy, abdominal pain, hiccups, PNS or CNS symptoms like numbness or tingling, double vision, agitation, trouble walking, troubling breathing, and ascending paralysis.
 - b. Advise exposed patient to avoid activities that involve exchanging body fluid with others.
- 10. **Instruct patient to schedule follow-up appointments with HealthPartners Occupational Medicine at 952-883-6999 for 1 week and 3 weeks post exposure. If the eyes are affected, follow-up should occur within 3 days.**
- 11. **If patient has additional questions/concerns he/she should call 952-883-6999 during normal hours, and call the HealthPartners CareLine after hours at (612)-339-3663.**

Nonhuman Primate Bite, Scratch, Splash Prophylaxis Recommendations

Determine patient's risk of exposure to B virus using the grid below. Start prophylaxis if indicated:

- **Valacyclovir 1 gram po tid for 14 days (500 mg tabs 2 tabs po tid #84)**
- **Alternative medication: Acyclovir 800 mg po five times a day X 14 days.**

If you are unable to assess severity of risk, start prophylactic medication if there was a potential exposure. Prophylaxis can be started up to 5 days after exposure.

B VIRUS PROPHYLAXIS GRID		
Recommendations	Sources	Exposures
Prophylaxis Strongly Recommended	High Risk: <ul style="list-style-type: none"> ▪ Ill macaque ▪ Immunocompromised macaque ▪ Macaque known to be shedding virus ▪ Macaque with visible lesions compatible with B virus ▪ Recently acquired macaque ▪ Breeding macaque 	High risk: <ul style="list-style-type: none"> ▪ Laceration or injury to head, neck, eyes, or torso ▪ Deep puncture, for example from a bite ▪ Needlestick with tissue or fluid from macaque's nervous system, eyelids, mucosa or lesions suspicious for herpesvirus simiae B ▪ Inadequately cleaned skin, with loss of skin integrity or mucosal exposure ▪ Puncture or laceration after exposure to objects contaminated with fluid from macaque with oral or genital lesions ▪ Mucosal exposure to macaque fluid ▪ Needlestick involving blood from any ill or immunocompromised macaque ▪ A post-cleaning culture is positive for B virus in exposed person ▪ Puncture or broken skin integrity from objects contaminated with macaque body fluid or potentially infected cell culture.
Prophylaxis Recommended		<ul style="list-style-type: none"> ▪ Mucosal splash that has been adequately cleaned ▪ Laceration with break in skin that has been adequately cleaned ▪ Puncture or laceration occurring after exposure either to objects contaminated with body fluid (other than from a lesion) or potentially infected cell culture
Prophylaxis Not Recommended	<ul style="list-style-type: none"> ▪ Exposure to non-macaque species of non-human. 	<ul style="list-style-type: none"> ▪ Exposure is to intact skin

Follow-up Treatment

- Clinical symptoms should be assessed weekly for 4 weeks if there is a significant exposure.
- Follow-up antibody titers to B virus should be drawn 3 weeks after exposure, at the discretion of the attending physician.
- Patients with B virus infection must be treated immediately with IV antivirals and closely monitored.
- Patients who receive antiviral treatment should have antibody titer drawn at 3 months.