

Hematologic Malignancies/Stem Cell Transplantation Program
Clinical Section
UCLA Health System
Los Angeles, CA 90095

DIAGNOSIS AND MANAGEMENT OF OTHER VIRAL INFECTIONS
CS 6.5 IN IMMUNOCROMPROMISED HOSTS

Location: Clinical Section
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Purpose and Background

Bone marrow and stem cell transplant patients are at risk for viral infections caused by herpes simplex and varicella-zoster. Less commonly, viral infections caused by respiratory syncytial virus, influenza virus, parainfluenza virus, adenovirus, BK virus and other viruses may occur. Because these viral infections can cause morbidity and some mortality in bone marrow and stem cell transplants, it is critical to prevent or treat these complications.

Objectives

To establish uniform guidelines for prevention, diagnosis, and treatment of other viral infections.

Procedure

1. Bone marrow and stem cell transplant patients with a history of recurrent herpes simplex infection will receive prophylactic acyclovir. The prophylactic acyclovir will be started at time of admission and continued until there is recovery of the granulocyte count after transplant, or longer if patient is on very high doses of immunosuppressive drugs or has severe GVHD.
2. Relatives and medical personnel with active upper respiratory tract infections will be advised not to visit patients until the infection has resolved.
3. If a patient develops a suspected viral infection, viral cultures of mucocutaneous lesions, throat, nasopharynx, respiratory secretions, urine and other suspected sites of infection should be done. Direct antigen tests for herpes simplex, varicella-zoster, and respiratory syncytial virus (RSV) can also be done of culture specimens.
4. Acyclovir will be used to treat herpes simplex or varicella-zoster infection. Valacyclovir may also be used for the treatment of herpes zoster. Aerosolized ribavirin can be used to treat RSV and parainfluenzae infections. Cidofovir can be used in patients with adenovirus infections or BK virus in the urine.

References:

- 1) Winston, DJ: Prophylaxis And Treatment Of Infection In The Bone Marrow Transplant Recipient. Current Clinical Topics in Infectious Diseases, Vol. 13 (Remington JS, Swartz MN, eds.). Blackwell Scientific Publications, Inc., Boston 1993. p. 293-321.
- 2) Winston, DJ: Infections in bone marrow transplant recipients. Principles and Practice of Infectious Disease, Fourth Edition, (Mandell GL, Besett JE, Nolin R, eds). Churchill Livingstone, Inc, New York 1995. p.2717-2722.

ATTACHMENTS:

Attachment A: Procedure History

Attachment B: New/Revised Procedure Checklist

APPROVAL:

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PROCEDURE HISTORY

Date	Initials	Page	Item and Summary of Changes
8/4/09		1	Added BK Virus
8/4/09		1	Added: Patients on acyclovir for herpes simplex infection may remain on it "longer if patient is on very high doses of immunosuppressive drugs or has severe GVHD."
8/4/09		1	Added: Cidofovir can be used in patients with BK virus in the urine.
8/4/09			Format changed
8/4/09			SOP number changed