Purpose and Background

Stem cell transplant patients are at risk for fungal diseases. Because these fungal diseases can sometimes be fatal, it is critical to prevent or treat empirically these complications.

Objectives

To establish uniform guidelines for prevention, diagnosis, and treatment of fungal diseases.

Procedure

I. Pre-transplant

A. Prophylaxis:

1. Allogeneic transplant patients will receive prophylactic therapy to prevent fungal disease. Prophylactic posaconazole (400 mg po bid with cola and meals) will be started on day +1 and continued until day 100 after transplant. Patients need to take the posaconazole with cola to increase absorption. Patients with chronic GVHD and those who are on steroids or prolonged immunosuppression should continue on posaconazole after day 100 until immunosuppression is discontinued.

2. Autologous stem cell transplant patients will receive prophylactic nystatin and clotrimazole for antifungal prophylaxis from the time of admission to the time of discharge from the hospital.

B. Persistent fevers on antibiotic therapy:

1. Allogeneic transplant patients:

If a patient on broad-spectrum antibiotics continues to be febrile despite continuation of prophylactic posaconazole and has a suspected fungal infection, switching to empiric intravenous amphotericin or caspofungin may be considered.
after fungal cultures of the blood and other suspected sites of infection are performed.

2. Autologous transplant patients:
   If a patient has persistent fever and neutropenia after 4 or more days of therapy with broad spectrum antibiotic therapy, empiric anti-fungal therapy (IV voriconazole, amphotericin, or caspofungin), may be started and continued until the fever and neutropenia have resolved. Use of oral posaconazole for empiric antifungal therapy is unproven.

C. For a patient with suspected fungal pneumonia, bronchoscopy with bronchoalveolar lavage should be considered. An open-lung biopsy may also be done in certain patients. Biopsies and fungal cultures of skin lesions and other suspected sites of fungal infection should also be considered.

D. If patients are enrolled in experimental studies, the study protocol takes precedence over the SOP guidelines.

II. Post transplant prophylaxis:

A. Allogeneic transplant patients who are on steroids or who have active GVHD post transplant will receive prophylactic posaconazole (400 mg po bid with cola and meals) until they are off of immunosuppression. Patients need to take posaconazole with cola to increase absorption. Alternative agents, (voriconazole, caspofungin) can be considered for patients with intolerance to posaconazole.

B. Allogeneic transplant patients who are not on steroids for the control or prevention of GVHD post transplant will receive prophylactic posaconazole for at least 100 days post transplant.

C. Patients with chronic GVHD being treated with prolonged immunosuppression will continue on posaconazole prophylaxis until the immunosuppression is discontinued.

D. Autologous transplant patients will not routinely be placed on fungal prophylaxis post transplant due to their very low risk for serious fungal infections.
References:


ATTACHMENTS:

Attachment A: Procedure History
Attachment B: New/Revised Procedure Checklist

APPROVAL:

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## PROCEDURE HISTORY

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Attachment A