Nursing Process Focus: Clients Receiving Pharmacotherapy for Superficial Fungal Infections

Assessment

- Obtain a complete health history including allergies, drug history, and possible drug interactions.
- Obtain a culture and sensitivity of suspected area of infection to determine need for therapy.
- Obtain baseline liver function tests.

Potential Nursing Diagnoses

- Injury, Risk for, rash related to side effect of drug
- Knowledge, Deficient, related to lack of experience with drug therapy
- Skin Integrity, Impaired

Planning: Client Goals and Expected Outcomes

- Report a reduction in symptoms related to the diagnosed infection and have negative results for laboratory and diagnostic tests for the presenting infection.
- Demonstrates an understanding of the drug’s action by accurately describing drug side effects and precautions.
- Immediately report hepatitis, GI distress, rash, or decreased urine output.
- Demonstrate correct technique for application of medication.

Implementation

**Intervention and (Rationales)**

- Monitor for possible side effects or hypersensitivity. (Symptoms of hypersensitivity may require immediate interventions.)
- Encourage compliance with instructions when taking oral antifungals. (Medication effectiveness increases.)
- Monitor topical application and avoid occlusive dressings. (Dressings increase moisture in the infected areas and encourage development of additional yeast infections.)
- Monitor for contact dermatitis with topical formulations. (This side effect is related to the preservatives found in many of the formulations.)

**Client Education/Discharge Planning**

- Instruct client to report:
  - Burning, stinging, dryness, itching, erythema, urticaria, angioedema, and local irritation to superficial drugs.
  - Symptoms of hepatic toxicity—jaundice, dark urine, light-colored stools, and pruritus.
  - Nausea, vomiting, and diarrhea.
  - Signs and symptoms of hypoglycemia or hyperglycemia.
- Instruct client to:
  - Cleanse mouth by rinsing before inserting lozenge or solution.
  - Swish the oral suspension to coat all mucous membranes, and then swallow medication.
  - Spit out medication instead of swallowing if GI irritation occurs.
  - Allow lozenges to dissolve completely, rather than chewing or swallowing; it may take 30 minutes for it to completely dissolve.
  - Avoid food or drink for 30 minutes following administration.
  - Remove dentures prior to using the oral suspension.
  - Take ketoconazole with water, fruit juice, coffee, or tea to enhance dissolution and absorption.

- Instruct client to:
  - Cleanse the affected area with soap and water before applying medication.
  - Avoid using the drug near open wounds and active lesions.
  - Insert vaginal suppositories, creams, and tablets high into the vagina and remain recumbent for 1 to 15 minutes after insertion.
  - Avoid wearing tight-fitting undergarments if using ointment in the vaginal or groin area.

- Instruct client to report any redness or skin rash.

Protozoal Infections

Protozoa are single-celled animals. Although only a few of the more than 20,000 species cause disease in humans, they have a significant health impact in Africa, South America, and Asia. Travelers to these continents may acquire these infections overseas and bring them back to
NURSING PROCESS FOCUS  Clients Receiving Pharmacotherapy for Superficial Fungal Infections  (Continued)

Implementation

Interventions and (Rationales)

- Encourage infection-control practices. (This prevents the spread of infections.)

Client Education/Discharge Planning

Instruct client to:

- Clean affected area daily.
- Apply medication with a glove.
- Wash hands properly before and after application.
- Wear clean, dry socks, and change daily or more frequently if needed, if infection is on the feet.

Evaluation of Outcome Criteria

Evaluate the effectiveness of drug therapy by confirming that client goals and expected outcomes have been met (see “Planning”).

- The client reports a reduction in symptoms and has improved laboratory results.
- The client demonstrates an understanding of the drug’s action by accurately describing drug side effects and precautions.
- The client verbalizes correct application of lotion, creams, lozenges, and other topical drugs.

See Table 35.3, as well as the oral and topical systemic drugs in Table 35.2, for a list of drugs to which these nursing actions apply.

The United States and Canada. These parasites often thrive in conditions where sanitation and personal hygiene are poor and population density is high. In addition, protozoal infections often occur in clients who are immunocompromised, such as those in the advanced stages of AIDS or who are receiving antineoplastic drugs. Agents for malarial infections are listed in Table 35.5.

TABLE 35.5  Selected Drugs for Malaria

<table>
<thead>
<tr>
<th>Drug</th>
<th>Route and Adult Dose (max dose where indicated)</th>
<th>Adverse Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>atovaquone and proguanil (Malarone)</td>
<td>PO; 1 tablet/day starting 1–2 days before travel, and continuing until 7 days after return</td>
<td>Nausea, vomiting, abdominal pain, diarrhea, headache, myalgia, Neutropenia</td>
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<tr>
<td>chloroquine hydrochloride (Aralen)</td>
<td>PO; 600 mg initial dose, then 300 mg/wk</td>
<td>Nausea, vomiting and diarrhea; visual changes, including blurred vision, photophobia and difficulty focusing, Hemolytic anemia in clients with G6PD deficiency; irreversible retinal damage</td>
</tr>
<tr>
<td>hydroxychloroquine sulfate (Plaquenil)</td>
<td>PO; 620 mg initial dose, then 310 mg/wk</td>
<td>Nausea, vomiting and diarrhea; visual changes, including blurred vision, photophobia and difficulty focusing, Hemolytic anemia in clients with G6PD deficiency; irreversible retinal damage</td>
</tr>
<tr>
<td>mefloquine (Lariam)</td>
<td>PO; Prevention: begin 250 mg once a week for 4 wk, then 250 mg every other week. Treatment: 1,250 mg as a single dose</td>
<td>Vomiting, nausea, diarrhea, myalgia, dizziness, anorexia, abdominal pain, AV block, bradycardia, tachycardia, psychosis</td>
</tr>
<tr>
<td>primaquine phosphate</td>
<td>PO; 15 mg/day for 2 wk</td>
<td>Vomiting, nausea, diarrhea, myalgia, headache, anorexia, abdominal pain, Hemolytic anemia in clients with G6PD deficiency</td>
</tr>
<tr>
<td>pyrimethamine (Daraprim)</td>
<td>PO; 25 mg once a week for 10 wk</td>
<td>Vomiting, nausea, diarrhea, myalgia, abdominal pain, Megaloblastic anemia, leukopenia, thrombocytopenia</td>
</tr>
<tr>
<td>quinine (Quinamm)</td>
<td>PO; 260–650 mg tid for 3 day</td>
<td>Vomiting, nausea, diarrhea, Cinchonism (tinnitus, ototoxicity, vertigo, fever, visual impairment), hypothermia, coma, cardiovascular collapse, agranulocytosis</td>
</tr>
</tbody>
</table>

Italics indicate common adverse effects; underlining indicates serious adverse effects.