3.16: Antimalarials

Malaria is a prevalent protozoal disease impacting individuals across the world. According to the Centers for Disease Control, approximately 1,700 cases of malaria are diagnosed in the United States each year.[1]

**Indications:** Antimalarials are used for the prevention or treatment of malaria.

**Mechanism of Action:** Antimalarial agents work by targeting specific intracellular processes that impact cell development.[2]

**Special Administration Considerations:** Antimalarial medications may impact hearing and vision so patients should be monitored carefully for adverse effects. Additionally, antimalarial medications may cause GI upset, so patients should be instructed to take these medications with food.

**Patient Teaching & Education:** Patients should receive instruction to take medication as prescribed and adhere to the full prescription regimen. Patients should minimize additional exposure to mosquitoes using preventative means such as repellents, protective clothing, netting, etc. Patients on chloroquine therapy should also avoid alcohol. Chloroquine can be extremely toxic to children and should be safely stored and out of reach. Patients receiving antimalarial therapy may have increased sensitivity to light and should be counseled to wear protective glasses to prevent ocular damage. Treatment often requires sustained regimens of six months or greater so patients should be monitored carefully for adherence and compliance.[3]

Now let’s take a closer look at the medication grid on chloroquine in Table 3.16.[4]

**Table 3:16 Chloroquine Medication Grid**

<table>
<thead>
<tr>
<th>Subclass</th>
<th>Prototype/ Administration</th>
<th>Therapeutic</th>
<th>Side/Adverse Effects</th>
</tr>
</thead>
</table>

[1] Source: Centers for Disease Control and Prevention

[2] Source: [Antimalarial Agents](https://med.libretexts.org/Bookshelves/Nursing/Nursing_Pharmacology_(OpenRN)/03%3A_Antimicrobials/3.16%3A_Antimala...)

[3] Source: [Chloroquine](https://med.libretexts.org/Bookshelves/Nursing/Nursing_Pharmacology_(OpenRN)/03%3A_Antimicrobials/3.16%3A_Antimala...)

### Critical Considerations

<table>
<thead>
<tr>
<th>Generic</th>
<th>Antimalarials</th>
<th>chloroquine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Check for allergies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contraindicated in patients hypersensitive to drug and in those with retinal or visual field changes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use cautiously in patients with severe GI, neurologic, or blood disorders; hepatic disease or alcoholism; or G6PD deficiency or psoriasis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Take with food to prevent GI upset</td>
<td></td>
<td></td>
</tr>
<tr>
<td>In severe or resistant cases, artesunate IV may be prescribed</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Effects

- Prevention of malaria or improvement of an acute attack of malaria
- Changes in vision
- Changes in hearing
- Monitor renal function closely
- Monitor patient for overdose, which can quickly lead to toxic symptoms: headache, drowsiness, visual disturbances, nausea and vomiting, cardiovascular collapse, shock, and convulsions

### Critical Thinking Activity 3.16a

**Using the above grid information, consider the following clinical scenario question:**

A nurse is providing medication teaching to a patient who is planning on visiting a country with high rates of malaria to do mission work. The patient states, “I’m glad I only have to take this medication for a week. The side effects sound horrific!” What is the nurse’s best response regarding the length of therapy?

Note: Answers to the Critical Thinking activities can be found in the “Answer Key” sections at the end of the book.

3. uCentral from Unbound Medicine. [https://www.unboundmedicine.com/ucentral](https://www.unboundmedicine.com/ucentral)