



ATOVAQUONE (Mepron)

WHAT IS ATOVAQUONE?

Atovaquone is an antibiotic. Sometimes it is prescribed to treat pneumocystis pneumonia (PCP, see Fact Sheet 515). It is also sometimes used to treat toxoplasmosis (See Fact Sheet 517).

Atovaquone can be given to prevent PCP or toxoplasmosis. It is also given in cases where a patient is allergic to Sulfa drugs (Bactrim or Septra) or Dapsone, or when other therapies have been ineffective.

Atovaquone is as effective as more commonly-prescribed drugs. It has fewer and different side effects. However, it is very expensive. Because of its cost, it is usually only considered for people who cannot tolerate TMP/SMX or dapsone.

Combination antiretroviral therapy (ART) can make your CD4 cell count go up. If it goes over 200 and stays there for 3 months, it may be safe to stop taking PCP medications such as atovaquone. Talk to your health care provider before discontinuing any medication.

WHAT IS PCP?

PCP (or pneumocystis pneumonia) is the most common opportunistic infection in people with HIV. Without treatment, over 85% of people with HIV would eventually develop PCP. It has been the major killer of people with HIV. PCP is now almost entirely preventable and treatable.

Unfortunately, PCP is still common in people who are infected with HIV for a long time before getting treatment. In fact, 30% to 40% of people with HIV have PCP if they wait to get treatment until their CD4 cell counts (see Fact Sheet 124) are around 50. Fact Sheet 515 has more information about PCP.

PCP is caused by a fungus. A healthy immune system can control the fungus. However, when the immune system is

weak or damaged, PCP causes illness in children and in adults.

Pneumocystis almost always affects the lungs, causing a form of pneumonia. People with CD4 cell counts under 200 have the highest risk of developing PCP. People with counts under 300 who have already had another opportunistic infection are also at risk. Most people who get PCP become much weaker, lose a lot of weight, and are likely to get PCP again.

The first signs of PCP are difficulty breathing, fever, and a dry cough. Anyone with these symptoms should see a doctor **immediately**. However, everyone with CD4 counts below 300 should discuss PCP prevention with their doctor, *before* they experience any symptoms.

WHAT IS TOXOPLASMOSIS?

Toxoplasmosis (toxoplasmosis) is an infection caused by the parasite *Toxoplasma gondii*. Protozoa are single-celled animals. A parasite lives inside another living organism (the host) and takes all of its nutrients from the host. See Fact Sheet 517 for more information on Toxoplasmosis.

Up to 60 million Americans are infected with toxoplasmosis. A healthy immune system will keep toxoplasmosis from causing any disease. However, a weakened immune system cannot always keep toxoplasmosis in check. It does not seem to spread from person to person. Pregnant women who are exposed to toxoplasmosis may pass it to their newborn child.

The most common illness caused by toxoplasmosis is an infection of the brain (encephalitis). Toxoplasmosis can also infect other parts of the body. Toxoplasmosis can lead to coma and death. The risk of toxoplasmosis is highest when your CD4 cell counts are below 100.

The first signs of toxoplasmosis include fever, confusion, headache, disorientation, personality changes, tremor, and seizures. Toxoplasmosis is usually diagnosed by

a brain scan such as a CAT or MRI scan. If the brain scan shows changes that might be due to toxoplasmosis, then a blood test can help to confirm the diagnosis. The blood test is also helpful to see if you have been exposed to toxoplasmosis in the past and might benefit from prophylaxis against toxoplasmosis; that is, taking medications to prevent toxoplasmosis.

HOW IS ATOVAQUONE USED?

Atovaquone is not the first choice for treatment of PCP or toxoplasmosis. However, your doctor may decide to use it if you have certain allergies or bad side effects. Your doctor will recommend a specific dosage.

WHAT ARE THE SIDE EFFECTS?

The most common side effects of atovaquone are fever and skin rash. Other side effects may occur that usually don't require medical attention. However, if they become severe, talk to your health care provider. These include cough, diarrhea, headache, nausea, vomiting, and trouble sleeping.

HOW DOES ATOVAQUONE INTERACT WITH OTHER DRUGS?

Atovaquone can interact with rifampin (Rifadin®), a drug used to treat tuberculosis. The interaction decreases the amount of atovaquone in the blood. This may also occur with a related drug, rifabutin. It is also used to treat tuberculosis.

THE BOTTOM LINE

Atovaquone is used to treat PCP and toxoplasmosis. It can prevent new infections or treat active infections. Atovaquone is not the first choice for these situations. Therefore it is normally used only when other drugs have failed or cannot be used.

If your CD4 cell count is below 300, talk to your doctor about taking drugs to prevent PCP. **Everyone** whose CD4 cell count is below 200 should be taking anti-PCP medication.