



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, see fact sheet 535) or Dapsone, see fact sheet 533, 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 (see fact sheet 124) 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, see fact sheet 515) 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 are around 50.

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 (toxoplasma, see fact sheet 517) 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.

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

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

The first signs of toxo include fever, confusion, headache, disorientation, personality changes, tremor, and seizures. Toxo 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 toxo, then a blood test can help to confirm the diagnosis. The blood test is also helpful to see if you have been exposed to toxo in the past and might benefit from prophylaxis against toxo; that is, taking medications to prevent toxo.

HOW IS ATOVAQUONE USED?

Atovaquone is not the first choice for treatment of PCP or toxo. However, your doctor may decide to use it if you have

certain allergies or bad side effects. Your doctor will recommend a specific dosage. Atovaquone is also used against malaria in a combination pill called Malarone.

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 and as part of a combination drug used to fight malaria. Atovaquone can increase blood levels of etravirine (see fact sheet 434) and saquinavir (see fact sheet 443.)

In addition, several drugs used to fight HIV appear to significantly reduce blood levels of atovaquone. Be sure your health care provider knows if you are taking Malarone and HIV medications at the same time.

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.

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