AIDS InfoNet www.aidsinfonet.org Fact Sheet Number 531

WHAT IS CIPROFLOXACIN?

Ciprofloxacin, also called Cipro[®], is an antibiotic drug. Antibiotics fight infections caused by bacteria. Cipro fights many different bacteria. It is also used to fight some opportunistic infections in people with HIV. Bayer Corporation manufactures it.

NOTE: In 2004, the Centers for Disease Control noted an increase in strains of gonorrhea that are resistant to Cipro among men who have sex with men. Using Cipro may be ineffective for gonorrhea, and might actually increase the spread of drug-resistant gonorrhea. For this reason, the CDC recommends the use of other antibiotics by men who have sex with men for treatment of gonorrhea.

WHY DO PEOPLE WITH HIV TAKE CIPRO?

Cipro is used for a wide range of bacterial infections. It works against many different bacteria. Cipro works against some bacteria that are resistant to other antibiotics, including penicillin.

Many germs live in our bodies or are common in our surroundings. A healthy immune system can fight them off or keep them under control. However, HIV infection can weaken the immune system. Infections that take advantage of weakened immune defenses are called "opportunistic infections." People with advanced HIV disease can get opportunistic infections. See Fact Sheet 500 for more information on opportunistic infections.

Cipro is often used along with other antibiotics to treat *mycobacterium avium complex* (MAC), an opportunistic infection in people with HIV. See Fact Sheet 514 for more information on MAC.

People who have a CD4 cell count of less than 75 may develop MAC. If your CD4 cell count is below 75, talk to your health care provider about using Cipro. Some people are allergic to Cipro and similar antibiotics. Be sure to tell your health care provider if you are allergic to any antibiotics.

WHAT ABOUT DRUG RESISTANCE?

Whenever you take medication, be sure to take all of the prescribed doses. Many people stop if they feel better. This is not a good idea. If the drug doesn't kill all of the germs, they might change (mutate) so that they can survive even when you are taking medications. When this happens, the drug will stop working. This is called "developing resistance" to the drug.

For example, if you are taking Cipro to fight MAC and you miss too many doses, the MAC in your body could develop resistance to Cipro. Then you would have to take a different drug or combination of drugs to fight MAC.

HOW IS CIPRO TAKEN?

Cipro is available in several different strength tablets. They contain between 100 milligrams (mg) and 750 mg of Cipro. It is also available in a liquid form. Cipro is taken every 12 hours, except for a 500 mg once-daily formulation called Cipro XR. The dose of Cipro and the length of time you will take it depend on the type of infection you have.

Cipro tablets can be taken with or without food. Take them with plenty of water. Drink lots of water while you are taking Cipro to make sure the drug doesn't accumulate in your kidneys.

Do not take Cipro at the same time as antacids that contain aluminum or magnesium. They will reduce the amount of Cipro in your blood.

WHAT ARE THE SIDE EFFECTS?

The most common side effects of Cipro are nausea, diarrhea, vomiting,

abdominal pain or discomfort, headache, rash and restlessness. It can also cause dizziness and drowsiness. Very few people who take Cipro get these side effects. However, most antiretroviral medications (ARVs) also cause problems in the digestive system. Cipro could make these problems worse.

Cipro makes some people very sensitive to sunlight. It increases the effects of caffeine and can make you very jittery and nervous. In rare cases, Cipro causes an allergic reaction that can be serious.

Antibiotics kill some helpful bacteria that normally live in the digestive system. You can eat yogurt or take supplements of acidophilus to replace them.

HOW DOES CIPRO REACT WITH OTHER DRUGS?

Cipro is not broken down by the liver. This means that it does not have many interactions with ARVs. However, it is still a good idea to tell your doctor about all the medications you are taking.

Antacids that contain aluminum or magnesium can lower blood levels of Cipro. Do not take antacids at the same time as Cipro.

Supplements that contain calcium, iron, or zinc can also reduce levels of Cipro. Do not take them while you are taking Cipro. Ask your health care provider whether you should keep taking multivitamins that contain iron, calcium or zinc while you are taking Cipro.

Probenecid is a drug used to lower uric acid levels. This is a treatment for gout. Probenecid causes large increases in the blood levels of Cipro.

Cipro can increase methadone levels, possibly causing a serious overdose.

Revised April 3, 2006

A Project of the New Mexico AIDS Education and Training Center. Partially funded by the National Library of Medicine Fact Sheets can be downloaded from the Internet at http://www.aidsinfonet.org