diaminodiphenyl sulfone (Dapsone)

WHAT IS DAPSONE?

Diaminodiphenyl sulfone (Dapsone) is an antibiotic. Antibiotics fight infections caused by bacteria. Dapsone is also used to fight opportunistic infections (OIs) in people with HIV.

WHY DO PEOPLE WITH HIV TAKE DAPSONE?

Dapsone is usually used to fight leprosy or a skin problem called *dermatitis herpetiformis*.

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 (OIs). People with advanced HIV disease can get opportunistic infections.

One opportunistic infection in people with HIV is pneumocystis pneumonia (PCP). People who have a CD4 cell count of less than 200 cells/mm^3 may develop PCP.

Healthcare providers sometimes use a combination of trimethoprim/sulfamethoxazole (TMP/SMX, Bactrim, Septra) and diaminodiphenyl sulfone (Dapsone) to treat PCP. Dapsone can also be used to prevent PCP. If your CD4 cell count is below 200 cells/mm^3, ask your healthcare provider if you should be taking Dapsone or another drug to prevent PCP.

Another OI in people with HIV is toxoplasmosis (toxo), which affects the brain. People who have a CD4 cell count of less than 100 cells/mm^3 may develop toxo. Dapsone can be used with the drug pyrimethamine (Daraprim) to treat cases of toxo. This combination can also be used to prevent toxo.

WHO SHOULD NOT TAKE DAPSONE

Some people are allergic to Dapsone. Be sure to tell your healthcare provider if you are allergic to any antibiotics.

Dapsone can cause anemia. People who are anemic should talk to their healthcare provider about whether Dapsone is the best drug for them.

Some people have low levels of an enzyme known as glucose-6-phosphate dehydrogenase or G6PD. Up to 15% of African American and Mediterranean people assigned male at birth (AMAB) have this shortage and should not take Dapsone. They could develop sudden, severe anemia.

Taking Dapsone during pregnancy may increase the risk of birth defects. People who are pregnant or breastfeeding should avoid taking Dapsone if possible.

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 dapsone to fight PCP and you miss too many doses, the PCP in your body could develop resistance to dapsone. Then you would have to take a different drug or combination of drugs to fight it.

HOW IS DAPSONE TAKEN?

Dapsone is available in tablets of 25 or 100 milligrams (mg). It is normally taken once a day or 3 times a week. The dose you take depends on the type of infection you are trying to treat or prevent.

The treatment continues as long as your CD4 cell count is low enough for you to develop toxo or PCP.

Dapsone can be taken with or without food. If your stomach gets upset when you take dapsone, take it with food.

WHAT ARE THE SIDE EFFECTS?

The main side effect of Dapsone is anemia, a loss of red blood cells (RBCs). Stomach upset is also common. A few people get leg or back pain, nausea, vomiting, headache, dizziness, or peripheral neuropathy.

Dapsone can make you sensitive to sunlight. If this occurs, use sun block on your skin and/or wear sunglasses.

Tell your healthcare provider if your skin gets pale or yellowish, or you get a sore throat, fever, or rash, even after a few weeks of taking Dapsone. These might indicate a serious drug reaction.

HOW DOES DAPSONE REACT WITH OTHER DRUGS?

Dapsone is broken down by the liver. It can interact with other drugs that also use the liver. Scientists have not yet studied all the possible interactions. Dapsone probably interacts with some blood thinners, heart medications, seizure medications, and other antibiotics. **Be sure your healthcare provider knows about all the medications you are taking.**

Your healthcare provider should watch carefully for drug interactions if you are taking Dapsone along with the non-nucleoside reverse transcriptase inhibitors (NNRTI) etravirine (Intelence).

Blood levels of Dapsone can be reduced if you take rifampin, a drug used to treat tuberculosis (TB). Also, didanosine (Videx) can reduce absorption of Dapsone. Take Dapsone at least 2 hours before or after you take didanosine.

The risk of developing peripheral neuropathy is higher if you take Dapsone at the same time as other drugs that can cause neuropathy, such as didanosine.

THE BOTTOM LINE

Dapsone is used to treat leprosy, PCP, and toxoplasmosis, opportunistic infections in people with HIV. It can prevent new infections or treat active infections. If your CD4 cell count is below 300 cells/mm^3, talk to your healthcare provider about taking drugs to prevent these infections.

MORE INFORMATION

MedlinePlus: Dapsone

Drugs.com: Dapsone

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