Side Effects

WHAT ARE SIDE EFFECTS?

Drugs approved by the U.S. Food and Drug Administration (FDA) for sale in the U.S. must be safe—which means that the benefits of the drug appear to be greater than the known risks—and effective. However, both prescription and over-the-counter (OTC) drugs have side effects. Side effects, also known as adverse events, are unwanted or unexpected events or reactions to a drug. Medications are prescribed for a specific purpose, such as to treat HIV. Anything else the drug does is a side effect.

Side effects can vary from minor problems like a slight headache to life-threatening events, such as liver damage. Some side effects go on for just a few days or weeks, while others might continue for as long as you take the medication or even after you stop taking it. Some occur within days or weeks of starting a drug. Others may only show up after months or years of therapy.

CAN HIV MEDICINES CAUSE SIDE EFFECTS?

Modern antiretroviral medications (ARVs) help people with HIV live longer, healthier lives and reduce the risk of HIV transmission. But ARVs can sometimes cause side effects. Most side effects from ARVs are manageable, but a few can be serious. Some side effects become worse if the drug is taken on an empty stomach. Others may increase if the drug is taken with fatty foods or drinks such as whole milk.

Overall, the benefits of ARVs far outweigh the risk of side effects. In addition, newer ARVs cause fewer side effects than medicines used in the past. As antiretroviral therapy (ART) continues to improve, people are less likely to have side effects from ARVs.

Each medication comes with information on its most common side effects. **Don’t assume that you will get every side effect that’s listed!** Most people have few or only minor side effects when they take their ARVs as directed.

Before starting ARVs, discuss the possible side effects with your healthcare provider. They will work together with you to select an ART regimen based on your individual needs.

DO ALL ARVs CAUSE THE SAME SIDE EFFECTS?

Different ARVs can cause different side effects. In addition, people taking the same ARV can have different side effects.

Side effects from some ARVs may last only a few days or weeks. For example, nausea, fatigue, and trouble sleeping are some short-term side effects of ARVs. Other side effects from some ARVs can lead to problems that may not appear for months or years after starting a medicine. For example, high cholesterol can be a side effect of some ARVs. High cholesterol is a risk factor for heart disease.

Having another medical condition or taking other medicines can increase the risk of side effects from ARVs. Drug interactions between ARVs or with other medicines a person is taking can also cause side effects.

HOW TO DEAL WITH SIDE EFFECTS

There are several steps you can take to prepare yourself to deal with side effects. First, learn about the common side effects for the medications you’re taking. The drug fact sheets on this website list common side effects for each drug.

Before starting any ARV regimen, talk to your healthcare provider about possible side effects. Depending on the ARVs in your HIV regimen, your healthcare provider will:

- Tell you which specific side effects to look out for.
- Give you suggestions on how to deal with side effects that are manageable. For example, to manage nausea and vomiting, eat small meals and avoid spicy foods.
- Tell you about the signs of life-threatening side effects that require immediate medical care. One example is swelling of the mouth and tongue.

Ask your pharmacist for the patient prescribing information when you receive your prescription. This document includes possible common and serious side effects. Read the pharmacy label and any stickers that may be attached to the prescription bottle. The label and stickers have information on how to take the drug and possible side effects.

Should you experience a side effect, you may be able to lessen or eliminate the effects. Work with your healthcare provider to see if adjusting the dosage or switching to a different medication will ease or eliminate the side effect. Sometimes simply switching from two separate medications to a combination product, if available, will make a difference. Other options, such as a lifestyle or dietary change, may be suggested by your healthcare provider. In addition, your healthcare provider can recommend

ways to treat or manage side effects with home remedies or OTC medications. In some cases, your healthcare provider may write you a prescription for something you can take to deal with a side effect if it gets severe.

Sometimes it may become necessary to change ARVs because of side effects.

However, do NOT cut down on, skip, or stop taking your HIV medicines unless your healthcare provider tells you to.

Doing so can allow the virus to develop resistance and you might not be able to use some ARVs. ***BEFORE*** **side effects make you skip or reduce doses, talk to your healthcare provider about changing drugs!**

Fortunately, there are many ARVs available to include in ART regimens. The choice of ARVs to replace those causing side effects will depend on your individual needs.

WHAT SIDE EFFECTS ARE MOST COMMON?

When you start ART, you may get headaches, hypertension, or a general sense of feeling ill. These usually improve and disappear over time.

Anemia: is caused by having low red blood cell (RBC) counts and can cause fatigue.

Digestive problems: Many ARVs can make you feel sick to your stomach. They can also cause nausea, vomiting, gas, or diarrhea. Home remedies include:

- Instead of 3 big meals, eat smaller amounts more often.
- Avoid spicy foods.
- Ginger ale or ginger tea might settle your stomach. So can the smell of fresh lemon or peppermint.
- Exercise regularly.

Don't skip meals or lose too much weight! Marijuana or the prescription drug dronabinol can reduce nausea. Be careful with OTC or prescription nausea drugs because they may interact with your ARVs.

Gas and bloating can be reduced by avoiding foods like beans, some raw vegetables, and vegetable skins.

Stock up! If you're having stomach problems, make sure you have plenty of food that you like to eat and that's easy on your stomach.

Diarrhea: can range from a small hassle to a serious condition. Tell your healthcare provider if diarrhea goes on for more than a few days or if it's serious. Drink lots of liquids.

Fatigue: People with HIV can feel tired at least part of the time. It's important to find the cause of fatigue and treat it accordingly.

High levels of fats and sugar in the blood: including cholesterol, triglycerides, and glucose. These can increase the risk of heart disease and stroke.

Lipodystrophy (body shape changes): includes fat loss in arms, legs, and face and fat gain in the stomach or behind the neck.

Skin problems: Some medications cause rashes. Most are mild and temporary, but in rare cases they indicate a serious reaction. Talk to your healthcare provider if you have a rash. Other skin problems include dry skin or hair loss. Moisturizers help some skin problems.

Osteoporosis: bone problems are common in people with HIV. Bones can lose their mineral content and become brittle. Get enough vitamin D and calcium from food or, if needed, supplements. Smoking cessation and weight-bearing exercise like walking or weightlifting can be helpful.

Peripheral neuropathy: is a painful condition caused by nerve damage. Peripheral neuropathy normally starts in the feet or hands. It can also be caused by other medical conditions.

Weight gain: Some antiretrovirals, especially those based on integrase strand transfer inhibitors (INSTIs) and tenofovir alafenamide (TAF) have been associated with modest weight gain in some patients.

REPORTING SIDE EFFECTS

When side effects do occur, you may report report them to FDA's MedWatch, a program for reporting serious problems with human medical products including drugs.

MedWatch has a consumer reporting form, FDA 3500B. Written in plain language and designed to be consumer friendly, the form starts off with a page of some commonly asked questions and answers to help guide the user in submitting the form, and then asks simple questions about the problem. In addition to formal reports, MedWatch has a toll-free line (1-800-332-1088) to

answer questions.

THE BOTTOM LINE

Some people who take antiretroviral medications (ARVs) have side effects. However, don't assume you will get every side effect you hear about!

Get information on the most common side effects and how to treat them. Read the fact sheets on individual drugs and their side effects. Stock up on home remedies and other items that can help you deal with side effects.

Be sure you know when to go back to your healthcare provider because a side effect may have gone on too long or gotten severe.

Don't let side effects keep you from taking your medications! Do not assume that taking ARVs means you have to put up with the side effects. If you can't deal with them, if they continue for more than a few weeks, or they affect your quality of life, talk to your healthcare provider about changing your drugs.

Be an active member of your healthcare team. By taking time to learn about the possible side effects of a drug and working with your healthcare provider and pharmacist, you will be better prepared to reduce your chance of experiencing a side effect or coping with any side effect that you may experience.

MORE INFORMATION

NIH: DailyMed (Detailed information about FDA-approved drugs. Enter the drug name, click on that medication, and then scroll down to "Adverse Reactions.")

ClinicalInfo.HIV.gov: Drug Database (For help using the Drug Database, contact a ClinicalInfo health information specialist by phone 1-800-448-0440 or email ContactUs@HIVinfo.NIH.gov)

Department of Health and Human Services (DHHS): Guidelines for the Use of Antiretroviral Agents in Adults and Adolescents with HIV: Adverse Effects of Antiretroviral Agents

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