

Skin Rash

What kinds of skin rash can anti-HIV medications cause?

Anti-HIV medications can cause mild skin rashes as well as serious, even life-threatening rashes. The vast majority of skin rashes are mild to moderate. They usually appear within a few weeks of starting a new medication, and often go away with continued use of the medication. However, because some rashes can be serious, you should contact your doctor if you notice a skin rash. He or she will advise you about how best to manage the rash.

Which anti-HIV medications cause skin rash?

Skin rash may occur with medications from any of the three main HIV drug classes: **NNRTIs**, **NRTIs**, and **PIs**.

NNRTIs cause the majority of skin rashes, with Viramune (nevirapine) causing the most severe rashes. If you and your doctor decide to use Viramune in your HIV treatment regimen, you will likely be instructed to take only one pill a day for the first 14 days, then to increase to two pills a day. This dosing schedule may decrease your risk of developing a severe skin rash. Women appear to be at higher risk for developing Viramune-associated skin rashes than men.

NRTIs may also cause skin rashes. Ziagen (abacavir) may cause a rash that is a symptom of a severe drug hypersensitivity (allergic) reaction. If you develop a rash while taking Ziagen, notify your doctor right away. If you and your doctor decide that you need to stop taking the drug, you should never again take Ziagen; any exposure to the drug could result in an even more severe hypersensitivity reaction.

Agenerase (amprenavir) is the PI most likely to cause skin rash. If you are allergic to sulfa drugs, your doctor should monitor you carefully if you start taking Agenerase as part of your HIV treatment regimen.

Terms Used in This Fact Sheet:

Eosinophilia: an increased number of eosinophils, a type of white blood cell. Eosinophils are a part of the body's immune system that can damage healthy tissue if they malfunction.

Nucleoside reverse transcriptase inhibitor (NRTI): class of anti-HIV medication. NRTIs are faulty versions of the building blocks (nucleosides) used by reverse transcriptase, a protein that HIV needs to make copies of itself. The NRTIs approved by the FDA are Combivir, Emtriva, Epivir, Epzicom, Hivid, Retrovir, Trizivir, Truvada, Videx, Viread, Zerit, and Ziagen.

Non-nucleoside reverse transcriptase inhibitor (NNRTI): class of anti-HIV medication. NNRTIs work by blocking reverse transcriptase, a protein that HIV needs to make copies of itself. The NNRTIs approved by the FDA are Rescriptor, Sustiva, and Viramune.

Protease inhibitor (PI): class of anti-HIV medication. PIs work by blocking protease, a protein that HIV needs to make copies of itself. The PIs approved by the FDA are Agenerase, Crixivan, Fortovase, Invirase, Kaletra, Lexiva, Norvir, Reyataz, and Viracept.

What characterizes a severe skin rash?

Severe skin rashes cause significant damage to the skin and can result in serious complications, even death. The severe skin rashes that may occur with the use of anti-HIV medications are *Stevens-Johnson syndrome* (SJS) and *toxic epidermal necrolysis* (TEN), which are two different forms of the same kind of skin rash. TEN differs from SJS in the extent of skin damage—TEN involves at least 30% of the total body skin area. Both SJS and TEN are severe conditions that must be treated by a doctor.

What are the symptoms of SJS and TEN?

The symptoms of SJS and TEN include:

- flat or raised red spots on the skin that develop blisters in the center
- blisters in the mouth, eyes, genitals, or other moist areas of the body
- peeling skin that results in painful sores
- fever
- headache
- general ill feeling

Skin Rash (continued)

Are there any other drug-associated skin rashes I should know about?

Another rare but life-threatening rash occurs as part of the *DRESS syndrome* (drug rash with eosinophilia and systemic symptoms). DRESS is characterized by a drug-related rash with **eosinophilia** and whole-body symptoms, such as fever, blood abnormalities, and organ inflammation.

How are skin rashes treated?

If you have a mild or moderate skin rash, you and your doctor may decide to change the medications in your HIV treatment regimen. Alternatively, your doctor may treat you with an antihistamine drug while you continue on the same HIV treatment regimen. Be sure to talk with your doctor before stopping or making any changes to your medications.

In cases of severe rash (SJS, TEN, or DRESS), your doctor will stop your anti-HIV medication and may admit you to the hospital. While in the hospital, you may be treated with intravenous (IV) fluids and medications such as anti-inflammatories and antibiotics. Patients with TEN and significant skin loss may need to be in a hospital's burn unit for specialized care.

If you have a severe rash while taking anti-HIV medications, you and your doctor must identify which medication likely caused the rash, and you should never take that medication again, even as part of a future HIV treatment regimen. Exposure to the problem medication could result in an even more severe, and perhaps fatal, drug reaction. Be aware that if you experienced a reaction to a drug in a particular class (for example, an NNRTI), you may be at risk of a serious reaction to another drug in that class. This is referred to as *cross-hypersensitivity*.

For more information:

Contact your doctor or an *AIDSinfo* Health Information Specialist at 1-800-448-0440 or <http://aidsinfo.nih.gov>.