I have HIV, but I also have diabetes. Are there any concerns with drug interactions?

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As treatment continues to improve and patients are living longer, age-related diseases have started to become a problem. Insulin resistance occurs when the insulin that is created naturally by the body is unable to cause normal absorption of the insulin in the cell causing increased levels of sugar in the blood stream called hyperglycemia. Another cause of diabetes is impaired sugar metabolism, which can be caused by fat redistribution or lipodystrophy.

A few classes of antiretrovirals can cause issues with blood sugar. The protease inhibitor class of medications can cause insulin resistance and a decrease of insulin released in the body. This mainly occurs in the older protease inhibitors. The body is able to regain the insulin sensitivity when the medication is stopped. The nucleoside reverse transcriptase inhibitor (NRTI) class of medication can also cause insulin resistance, most likely caused by the fat redistribution. The older medications in the class are the most likely causes, which include stavudine, zidovudine and didanosine.

Patients who have diabetes at diagnosis or multiple risk factors for diabetes should be carefully monitored when started on antiretrovirals. There are many different types of medications that patients with HIV can use to treat diabetes. Depending on the likely cause of the diabetes the physician can choose medications from multiple classes of medications. Insulin does not have any drug interactions with any antiretroviral medications and can be used in diabetic patients. Other anti-diabetic medications need to be checked by the pharmacist or HIV provider to make sure that they can be taken with the antiretrovirals.

Additional writing by Amanda Wong, student pharmacist at the St. Louis College of Pharmacy.