

# because you asked

## Burning belly

**I've had frequent heartburn ever since I started on antiretrovirals. What can I do to relieve this?**

— *Burnt in Banff*

**Deborah Yoong replies:** Acid reflux — commonly known as heartburn — is when acid normally present in your stomach backs up into the esophagus (the tube leading from the mouth to the stomach). Antiretrovirals (ARVs) can cause or increase acid reflux and there are many over-the-counter (OTC) and prescribed medications available to effectively manage it. But some ARVs need an acidic stomach for proper absorption. Drugs that reduce or neutralize stomach acid can lead to decreased absorption of some ARVs, and possibly treatment failure, so they must be used with caution.

Antacids, like Tums®, Roloids® or Amphogel®, available OTC, neutralize stomach acid and offer temporary relief of acid reflux for about one to two hours. Some ARVs (like the older buffered-version of didanosine [Videx™]) are co-formulated with antacids, and if taken with fosamprenavir (Telzir™), atazanavir (Reyataz™), indinavir (Crixivan®), tipranavir, or delavirdine (Rescriptor®), can lead to decreased levels of your ARVs. If taking an OTC antacid or buffered Videx™, it's advised to separate dosing times of these meds from other ARVs by at least one to two hours to minimize the drug interaction.

Acid suppressing drugs like H<sub>2</sub> receptor antagonists (H<sub>2</sub>RA) and proton-pump inhibitors (PPIs) (see the table for common brand names) are generally more effective than antacids and reduce acid production for longer periods of time,

so separating dosing times becomes more difficult and the risk of drug interactions increases. The addition of ritonavir (Norvir®) can often compensate for the reduced protease inhibitor level, but it's not always sufficient as in the case with atazanavir (Reyataz™). If an H<sub>2</sub>RA must be used, it should be separated from the ARV by at least 12 hours.

Because PPIs significantly reduce the levels of atazanavir (Reyataz™) and delavirdine (Rescriptor®), which may lead to treatment failure, the manufacturers recommend that PPIs *not* be taken with a drug regimen that includes these ARVs.

Aside from pharmacologic measures, you can also make some lifestyle changes to help reduce acid reflux. Try eating smaller, more frequent meals, and never eat or drink within two hours before going to bed. Some foods can make acid reflux worse because they irritate the stomach or loosen the valve that allows the acid to pass back up. Fatty or spicy foods, orange and tomato juice, chocolate, coffee and alcohol are best avoided. Finally, raising the head of your bed can also help.

Whatever you decide to take, be sure it's not interacting with your ARVs. It's always a good idea to check with your doctor or pharmacist before starting any new medications to minimize possible interactions.

## Superinfection

**My partner and I are both HIV+. Can we have sex without condoms or should we be worried about this 'superinfection'?**

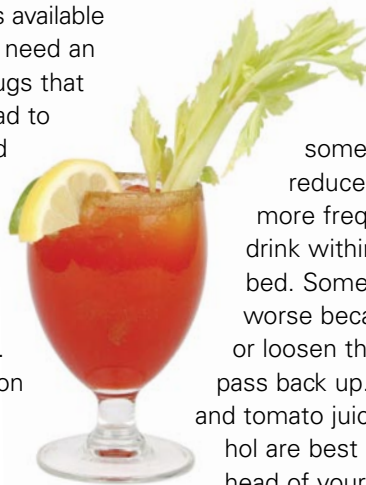
— *Monogamous in Moncton*

**Dr. Wainberg replies:** Superinfection — or re-infection — can occur and it's probably much more common than previously thought. Condom use is now recommended between people who are both HIV+.

A number of case reports have now shown that people living with HIV can become infected by a different strain of HIV than that which caused their initial infection. This is called superinfection or reinfection. It's estimated that 12% of new HIV infections are resistant to at least one antiretroviral. In fact, there's been considerable dispute on this

**Deborah Yoong** is a clinical pharmacist who works at St Michael's Hospital in Toronto. She cares for people living with HIV in the out-patient clinic and when they're admitted to hospital. She also works with physicians to construct effective HIV treatment regimens, monitor response to therapy and provide strategies to manage drug-related issues.

**Dr. Mark Wainberg** is Director of the McGill University AIDS Centre and Professor of Medicine and Microbiology at McGill University in Montreal. He's an internationally recognized scientist in the field of HIV/AIDS, and has made important contributions to the study of antiretroviral drug development and HIV drug resistance. He also served as President of the International AIDS Society between 1998-2000.



## H2RAs and PPIs

These are the most commonly prescribed acid-suppressing drugs that can interact with ARVs.

### PPIs

Losec®  
Pantoloc®  
Prevacid®  
Pariet™  
Nexium®  
Generic omeprazole

### H<sub>2</sub>RAs

Zantac®  
Pepcid®  
Axid®



## Is there something you need to know?

Please send your questions to:  
[relay@parkpub.com](mailto:relay@parkpub.com)



topic for many years, although consensus now exists that this is a real problem.

Confusion existed because superinfection may have been difficult to document, especially in people who were re-infected with the same sub-type of HIV as that which infected them initially.

Scientists, physicians and people living with HIV were reluctant to accept the possibility of superinfection, especially if this meant that we could no longer relax recommendations of safe sex in couples who are both HIV+.

There was also widespread belief that people who already had HIV might have developed an immune response that would protect against superinfection.

Evidence has now accumulated that superinfection occurs fairly often. In some people, drug resistant mutations — that weren't there initially — can be found in a superinfecting virus. So even if your meds are controlling your viral load, you could be reinfected with a different virus that's resistant to the drugs you're taking. This means your current meds will no longer work to keep your viral load down.

Unfortunately, all people living with HIV might be at risk of superinfection if they engage in unpro-



tected sexual relations with other people who have HIV. It also means that developing a vaccine that might protect against HIV will be much more challenging, given the ever-increasing number of HIV sub-types and variability among strains.

Millions of people worldwide claim to be monogamous and are not. But if you and your partner have been together for a long time, never have sex outside the relationship and you decide to take the risk and not use condoms, you should keep a close eye on your viral load and CD4 count, just in case. **R**