Stopping antiretroviral therapy, part 2.

Whatever the reasons for stopping ART, pharmacological and virological issues must be considered in order for a clinician to give guidance, says S. Taylor et al review article published in *AIDS* on August 20th. Anti-HIV activity relies on the presence of all components in the regimen; resistance develops more readily when replicating virus is exposed to only one or two drugs. The half-life of each antiretroviral is therefore critical.

**Unplanned stopping of therapy and stopping in special situations**

Sometimes stopping ART will be unplanned and will be the result of unpredictable circumstances such as emergency surgery, intercurrent illness, or severe drug toxicity. Clearly, the overall safety of the patient is foremost over the need to preserve future treatment options. Generally, stopping all the drugs simultaneously would be recommended; however, there may be differences according to the situation

1. **Stopping therapy after pregnancy**

2. **Patient taking an unbalanced regimen with unplanned stop**

3. **Severe or life-threatening situations caused by drug toxicity and Short-term interruption of therapy: surgical or medical conditions**

4. **Discontinuation of Emtricitabine, Lamivudine or Tenofovir in Hepatitis B co-infected patients**

1. **Stopping therapy after pregnancy**

Some women receive ART in pregnancy to prevent mother-to-child transmission, but may not require therapy for their own health. If the regimen taken by the mother does not lend itself to simultaneous stopping, deferring the stop until after the mother and baby have established a stable routine may be preferable. This is only advisable if it is anticipated that the mother will take therapy until a planned stop date is agreed.

2. **Patient taking an unbalanced regimen with unplanned stop**

Either a simultaneous stop or a limited staggered stop could be considered, depending upon the severity of the illness. The ‘exchange stop’ or ‘protected stop’ are probably best avoided as it would mean starting a new drug of which the patient has had no previous experience in an emergency situation.

3. **Severe or life-threatening situations caused by drug toxicity**

We recommend stopping all agents simultaneously irrespective of the drug half-life.

**And short-term interruption of therapy: surgical or medical conditions**

With balanced half-life drugs that do not require food for absorption, a simultaneous stop is advised with recommencement of the same regimen as soon as possible.
If the patient is allowed water then these drugs may be continued if it is anticipated that drug absorption can occur. If the drug requires food for optimal absorption and all components have similar half-lives, then temporary discontinuation of all drugs simultaneously is warranted, with recommencement of the same regimen as soon as the patient can resume food.

4. Discontinuation of Emtricitabine, Lamivudine or Tenofovir in Hepatitis B co-infected patients

If patients are hepatitis B surface antigen or e antigen positive, then discontinuation of these agents may lead to an exacerbation of hepatitis or a 'hepatitic flare'. These patients require close monitoring. Some suggest replacing the agents with activity against both HIV and hepatitis with drugs with a predominantly hepatitis B activity, i.e. adefovir, entecavir or telbivudine. In such cases expert opinion should be sought. It would not be recommended to continue lamivudine/emicitrabine or tenofovir alone for their antihepatitis B activity because of the risk of selecting HIV-resistant variants.

Reference