



## **Aid for AIDS NEWSLETTER TO PROVIDERS - AUGUST 2001**

### **1. TUBERCULOSIS AND ANTIRETROVIRAL DRUGS**

TB drugs and antiretroviral therapy (ART) share many side effects. In addition, the enzyme induction caused by rifampicin dramatically affects the metabolism of many HIV drugs leading to sub-optimal serum levels with the development of resistance. The following guidelines should be followed when starting TB drugs in an HIV-infected patient:

- If the patient is on ART already, changes in either the TB drugs or ART will often need to be made. Please contact Afa.
- If the patient is not on ART, it is preferable to delay starting ART until after the 6-month course of TB therapy. Provided the CD4 count is >250, this option should be followed (CD4 count generally rises when TB is treated).
- If the patient is not on ART and the CD4 is <250 then ART should only be commenced after a few weeks of TB therapy, once it is clear that the patient is tolerating TB drugs. ART can cause paradoxical deterioration of TB due to immune reconstitution.
- The following ART regimens may be given with conventional TB therapy:
  - Triple nucleoside reverse transcriptase inhibitors (e.g. Zerit®, Videx® and 3TC® OR Combivir® and Videx®). This regimen should not be used with a high viral load (> 100 000 copies/ml).
  - Dual nucleoside reverse transcriptase inhibitors plus Stocrin® 600mg or 800mg nocte.
  - Norvir® 400 mg plus Forto-vase® 400 mg 12 hourly (other doses or the use of Crixivan® have not been evaluated).

### **2. TESTING FOR RESISTANCE TO HIV DRUGS**

It is possible to test a patient's HIV isolate for the development of mutations which are known to lead to reduced sensitivity to antiretroviral drugs. Resistance should be suspected if the viral load starts increasing in a patient who is adhering to ART. In most cases a change to another regimen can be made without the need for resistance testing. The test is very expensive and requires pre-authorisation - please contact Afa. The test has several limitations:

- Sometimes the test shows no resistant mutations and the reason for failing is that the patient is not taking their medication - it is essential to ensure adherence before doing the test
- Resistance to drugs which were previously used will not generally be detected (the resistant virus is present and will re-appear on exposure to the old drug)
- The patient must be taking ART when the test is done

### **3. INTENSIFYING ANTIRETROVIRAL THERAPY**

With the recent price reduction in antiretroviral medication it has become possible to treat almost all patients in the Afa programme with triple therapy, which is the internationally accepted standard of care for HIV-infected patients. Clinicians frequently wish to add a drug to patients who are being treated with dual therapy. In this situation it is easy to develop

resistance to the new agent unless strict guidelines are followed. Intensification can ONLY be considered under the following circumstances:

- The patient must be STABLE virologically - it is essential to perform a viral load test to ensure that this is the case prior to considering intensification. If the viral load is rising then a new regimen consisting of at least two "clean" drugs (without cross-resistance to previously used drugs) should be selected
- Drugs with a low genetic barrier to resistance (only a single mutation is required to develop resistance) must NOT be used for intensification. Examples of drugs in this group are 3TC® and the non-nucleoside reverse transcriptase inhibitors Viramune® and Stocrin®. The only exception to this is when the patient has a very low and stable viral load (typically 50 - 400 copies / ml)

As with all cases where antiretroviral therapy needs to be altered, decisions about intensifying therapy must be made in conjunction with the clinical staff at AfA. A third drug should never be added to a failing regimen!

**PLEASE REMEMBER:**

1. Any member of a contracted medical scheme who is HIV-positive should be registered on the programme as soon as possible, even if they do not meet the criteria for antiretroviral therapy. This is important to assist with regular monitoring and to enable the speedy approval of ART when needed. The patients will also have access to our nurse line for advice and help.
2. It is very important to monitor the height and weight of children as the doses of antiretrovirals need to be adjusted as the child grows. Please contact us with this information so that doses can be amended. The formula to calculate surface area is:  
**Body surface area (m<sup>2</sup>) = the square root of ( height (cm) x weight (kg) ) ÷ 60**
3. Please ensure that the results of follow-up CD4 counts, viral loads and other investigations are sent through to AfA timeously. This is important to enable us to assist you in monitoring your patients.

**SOME INTERESTING OUTCOMES:** Currently there are more than 11 000 people registered on the programme, two thirds of whom are on antiretroviral therapy. More than half of these are receiving HAART.

1180 pregnant ladies have been registered on the AfA. Our current mother-to-child transmission prophylaxis programme has reduced HIV transmission to under 2.3%.

Clinical outcome data show a sustained reduction in viral load at 30 months. Significant cost savings have been achieved, primarily by reduction in hospitalization.

The success of our programme depends on collaboration with you, the provider. If you have any suggestions or comments, please do not hesitate to contact us.

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