



# VADEMECUM FOR HIV PATIENTS ON ARV TREATMENT

The aim of this communication is to increase awareness in people with HIV of their state of health and to improve communication between them and their health providers.

With the exception of particular circumstances (for example coinfection and/or other illnesses) normally the HIV patient should have periodic checkups (every 3-4 months) and discuss his condition with his health care provider.

## **EVALUATION OF THE STATE OF HEALTH IN RESPECT TO HIV**

The main examinations are 'normal blood tests'. The "indicator" examinations of a patient's state of health in respect to HIV infection are the following:

- Absolute CD4 count: the number of T CD4+ lymphocytes per micro litre of blood.
- Viral load: the number of copies of the virus per millilitre of blood. Each patient in treatment should have a viral load of <50cp/mL (considered "zero", or the absence of viral replication in the blood). If the count rises, the treatment may no longer be effective and the cause has to be found (for example: not being adherent to treatment schedules? Another infection in present? See the following...)

The connection between the absolute CD4 count is very strong but not absolute. Generally, the more the viral load increases the more the CD4 count decreases, since the CD4 are the main target of the virus in the blood. Consequently it will be the combination of the two counts that will determine the continuation or change in treatment. A CD4 count higher than 500 and a viral load <50 cp/mL is a good treatment result, but it is the combined result and the pre-treatment counts that must be fully taken into consideration.

Even in the "good conditions" of viral load and CD4 count, a change in treatment should be considered if the patient demonstrates important perceived toxicity (side effects such as diarrhoea, nausea, vomiting, etc..) or non perceived toxicity (high cholesterol or triglycerides, glycaemia not in the norm, etc) because these conditions may indicate future complications.

### **IF THE VIRAL LOAD INCREASES...**

When a treatment no longer works, it is important to have blood tests in order to act as a guide in the choice of the new combination of drugs:

- **Resistance test,** to discover if the viral strain has mutated in such a way as to exclude the use of certain drugs in present and/or future treatment.
- Genetic test of the allele HLA-B\*5701, if it has not already been carried out, to find out the possible hypersensitivity to abacavir (and therefore include it or not as a future option).
- Viral Tropism, to consider the future use of "CCR5 inhibitors" if this is a viable treatment option.

It is likewise fundamental to faithfully follow the treatment prescribed by the health provider (see following) and verify the motivation for continuing treatment.

### **ADHERENCE: THE KEY TO WELL BEING**

Being adherent (taking the drugs at the prescribe time and under the required nutritional norms) is a fundamental aspect to follow.

Not faithfully following the treatment favours the immediate onset of resistance to the treatment. That is why it is important to evaluate the life style of the patient at the time of prescribing a treatment program.

#### **PERIODIC EVALUATION**

Even if the treatment is effective, it is important to make evaluations through blood tests and/or specific techniques:

- The risk of developing cardiovascular problems
- The predisposition to developing diabetes.
- The tendency of developing bone disease.
- The study of body type (through *periodic* specific blood tests and measuring devices) in order to monitor the possible onset of lipodystrophy at the time the patient begins treatment and therefore be able to make future comparisons.

Kidney, liver and heart functions make up part of the routine monitoring of the treatment due to the fact that certain drugs interact with these organs. That is why it is highly important to understand the variations connected to the prescribed treatment.

### **IT IS GOOD PRACTICE...**

- Receive information regarding vaccinations advised for people with HIV to prevent other infections such as hepatitis A and/or B, flu or pneumococcus.
- Undertake the principal diagnostic exams for hepatitis (after the initial tests through specific markers, and the monitoring of hepatic functioning to furnish the necessary information for understanding possible future infection) and/or syphilis (testing is advised at least once a year). Attention should also be paid to the genital organs for the presence of vaginal, anal, penal condyloma.
- At the time of medical check-up also check: oral cavity, lungs, the skin, etc. All of which are necessary to check for the appearance of any possible complications.
- Communicate to your health provider the appearance of any side effects: from the most obvious, nausea, vomiting, diarrhoea, or any pain; to the more "intimate types", such as sexual, psychological or emotional problems.
- Communicate to your health provider any difficulty found in following the treatment: modify the treatment with viremia <50 copies/mL to improve adherence is a possible option.
- Conduct a healthy lifestyle: adequate physical activity, a balanced diet and moderation in alcohol consumption and do not smoke.

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