

## PERINATAL EDUCATION PROGRAMME

### SCREENING TESTS FOR HIV

#### SKILLS WORKSHOP 1-5

##### OBJECTIVES

When you have completed this skills workshop you should be able to:

1. Screen a patient for HIV.
2. Interpret the results of the screening test.

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At the first antenatal visit each woman should be offered screening for HIV. An HIV rapid test can be used in any antenatal clinic as no sophisticated equipment is required. Prior to testing, patients need to be counselled and consent must be obtained.

The correct method of pretest and post test counselling is explained in Unit 1 of the Perinatal HIV/AIDS Manual of the Perinatal Education Programme.

#### **1-5 A EQUIPMENT NEEDED TO PERFORM AN HIV RAPID TEST.**

1. The Abbott Determine HIV-1/2 Whole Blood Essay. Each kit contains 10 cards with 10 tests. The Chase Buffer (2.5 ml bottle) is supplied with the kit.
2. EDTA capillary tubes marked to indicate 50µl, lancets, alcohol swabs and sterile gauze swabs. These are not supplied with the kit.

The kit need to be stored at room temperature between 2°C and 30°C. Storage in a fridge is required during summer time. The kit cannot be used after the expiry date.

#### **1-5 B THE METHOD OF PERFORMING THE HIV RAPID TEST.**

1. Clean a fingertip with an alcohol swab and allow the finger to dry.
2. Remove a test strip from the foil cover.
3. Prick the skin of the finger tip with a lancet. Wipe the first drop of blood away with a sterile gauze swab.
4. Collect the next drop of blood with the EDTA tube. Either side of the tube can be used to collect blood. Fill the tube from the tip to the first black circle (i.e. 50 µl of blood). Avoid the collection of air bubbles.
5. Apply the 50 µl of blood from the EDTA tube onto the sample pad marked with an arrow on the test strip.
6. Wait one minute until all the blood has been absorbed in to the sample pad and then apply one drop of Chase Buffer. The bottle must be held vertically (upside down) above the test strip when a drop of the buffer is dropped on the sample pad.
7. Wait a minimum of 15 minutes and then read the results. The maximum waiting time for reading the test is 24 hours. After 24 hours the test becomes invalid.

#### **1-5 C READING THE RESULTS OF THE HIV RAPID TEST.**

##### **1. POSITIVE**

A red bar will appear within both the Control window and the Patient window on the test strip. Any visible red bar in the Patient window must be regarded as positive. The result is positive even if the patient bar appears lighter or darker than the control bar.

##### **2. NEGATIVE**

A red bar will appear within the Control window and but no red bar is seen in the Patient window.

##### **3. INVALID**

If no red bar appears in the Control window, even if a red bar is visible in the Patient window. The result is invalid and the test must be repeated.

**1-5 D THE INTERPRETATION OF THE HIV RAPID TEST.**

The test is a specific test for HIV and will become positive when there are antibodies against HIV (the virus that cause AIDS) in the blood.

1. A positive test indicates that a person has antibodies against HIV (HIV positive). Therefore the person is infected with HIV.
2. A negative test indicates that a person does not have antibodies against HIV (HIV negative). Therefore the person is not infected with HIV, unless infected very recently and the HIV antibodies have not appeared yet.

**1-5 E MANAGEMENT IF THE HIV RAPID TEST IS POSITIVE.**

1. Explain to the patient that the first screening test for HIV is positive but that this should be confirmed with a second test.
2. Proceed with a second test using a different kit.
3. If the second test is also positive, the patient is HIV positive.
4. Proceed with post test counselling for a patient with a positive test.

**1-5 F MANAGEMENT IF THE FIRST HIV RAPID TEST IS POSITIVE BUT THE SECOND IS NEGATIVE.**

1. A blood sample for an ELISA test must be send to the laboratory.
2. The patient must be informed that the results of the HIV rapid tests are inconclusive and that a laboratory test is required to finally determine her HIV status.
3. If the ELISA test is positive the patient is HIV positive (i.e. HIV infected).
4. If the ELISA test is negative the patient is HIV negative (i.e. not HIV infected).
5. Proceed with appropriate counselling.