Mother-to-child transmission

HIV can be transmitted from an HIV-positive woman to her child either during pregnancy, during labour and delivery or through breast-feeding. In most cases, HIV is thought to be transmitted during the last weeks of pregnancy or during delivery.

However, the risks of mother-to-child transmission of HIV can be reduced to about 1% through the appropriate use of antiretroviral agents during pregnancy and labour, by having a caesarean delivery or planned birth if the mother has a detectable viral load, and also by not breast-feeding the child.

Factors that increase the risk

A child is more likely to contract HIV from its mother if she is in advanced stages of the HIV infection or has AIDS; if she has a high viral load or a low CD4 count; if her waters break at least four hours before delivery; if she has a vaginal delivery (as opposed to a planned caesarean section); if the labour is difficult, requiring episiotomy or forceps; if she has a genital infection (e.g. Chlamydia, see *InfoVIHtal #37 Chlamydia*); if she uses recreational drugs during pregnancy; or if she breastfeeds her child. Becoming infected, or re-infected, by HIV during pregnancy is also likely to increase the risk of transmission.

Breastfeeding

The risk of infection during breast-feeding ranges from 9 to 29% when the woman's viral load is high, which is why mothers are highly recommended not to do so. In this case the safer option is bottle-feeding the child using formula milk. You will find further information on this issue in your local clinic.

Treatments for prevention of mother-to-child transmission

It is advisable to include your doctor and health workers in all stages of this process. However, if you have a good CD4 count, low HIV viral load and you are not ill as a result of the HIV infection, therapeutic guidelines recommend that you start taking AZT (zidovudine) in the final three months (third trimester) of your pregnancy. You will also need to receive an intravenous injection of AZT during delivery and have a caesarean, rather than vaginal delivery. Another option is to take a short course of combination antiretroviral therapy during the last few months of pregnancy in order to achieve a viral load below 50 copies/mL. In this case, you may have the option of a planned vaginal delivery and your baby will receive treatment with AZT syrup for the first four weeks after birth.

If you are in good health at the beginning of your pregnancy, but you become ill later because of HIV and you have to start taking antiretroviral therapy then the aim should be to get your viral load back to undetectable. It is highly recommended that you continue the treatment following the birth and that your child receives AZT therapy.

If HIV has significantly damaged your immune system, or if you have a high viral load, then you are advised to take an antiretroviral therapy that includes two nucleoside analogues (NRTIs), ideally AZT and 3TC (lamivudine, Epivir®) and either the non-nucleoside analogue (NNRTI) nevirapine (Viramune®) or a protease inhibitor (PI). During pregnancy, the higher your viral load, the sooner you should start anti-HIV treatment. If you still have a detectable viral load before giving birth, then you need to have a caesarean delivery, but if your viral load is below 50 copies/mL and there have been no complications during pregnancy, you may be able to have a planned vaginal birth.

If you become pregnant while undergoing antiretroviral therapy, you are advised to continue with the treatment. Between weeks 18 to 20 of your pregnancy you will need to have a special anomaly scan to check for any abnormalities in the foetus development.

If you become pregnant while taking antiretroviral drugs, but they are not suppressing your viral load to undetectable levels, then you should have a resistance test to determine your best drug options and then change to these anti-HIV agents. The aim should be to attain an undetectable viral load at the moment of giving birth. You will need to have an anomaly scan between weeks 18 and 20 to check that the foetus is developing normally. Your child will receive antiretroviral treatment (to which your virus is not resistant) in the form of syrup for four weeks after birth.

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POR FAVOR, FOTOCÓPIALO Y HAZLO CIRCULAR

Generalitat de Catalunya Departament de Salut
TROPICAL DRASSANES
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GOBIERNO DE ESPAÑA MINISTERIO DE SANIDAD Y CONSUMO
Secretaría del Plan Nacional sobre el Sida

If you are diagnosed with HIV very late into your pregnancy, then you will need to start antiretroviral therapy straight away. A blood test will help to determine any resistance your virus may have in order to choose the most suitable medication. The most commonly used drugs in this case are AZT, 3TC and nevirapine, as they are able to pass through the placenta to the foetus. Your child will receive the same treatment in the form of syrup for four weeks after birth.

If you are diagnosed with HIV during delivery or directly afterwards, you should receive a dose of AZT via injection and oral doses of 3TC and nevirapine. Your baby will also need to take a triple combination of antiretroviral drugs for a period of four weeks.

Because of the risk of birth defects, you should not take the antiretroviral drug efavirenz (Sustiva®) during the pregnancy or if you are thinking of having a baby.

Caesarean delivery

The risk of transmission is reduced when the baby is delivered by planned caesarean section, rather than by vaginal delivery. This is known as "elective caesarean" and is scheduled for the 38th week of pregnancy, or performed sooner if labour begins early. Caesarean delivery itself may involve some risk for the mother.

If a woman is taking highly active antiretroviral therapy and has an undetectable or very low viral load at the time of delivery, she will be given the option of having a planned vaginal delivery.

For further information you can contact the following (Spanish) organisations:

gTt: 93 458 26 41

Creación Positiva: 93 431 45 48

Red2002: 93 458 49 60

ADHARA: 954 981 603

UNAPRO: 922 63 29 71

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