6 HIV and pregnancy

Answers

1. What percentage of babies will be born HIV-positive if their mothers receive no treatment?

About 25% – 1 in 4.

2. What is the most important factor in preventing mother to child transmission?

The mothers viral load at delivery. The lower the viral load, the lower the risk. The risk is less than 1% when viral load is undetectable.

3. Does the father's HIV status relate to the baby being born HIV positive?

No, the fathers HIV status does not directly affect the HIV status of the baby. An HIV-negative mother cannot have an HIV-positive baby.

4. Does pregnancy influence the CD4 count of the pregnant woman? If yes, how?

Pregnancy may cause a drop in a woman's CD4 count. This is usually about 50 cells/mm^3 but it can vary a lot.

5. What would you tell an HIV-positive pregnant woman who plans to use AZT monotherapy to prevent mother to child transmission about (1) resistance (2) delivery?

There is a risk of resistance from using AZT monotherapy (this is not very high). 2. A C-section is strongly advised for delivery.

6. What is the current mother to child transmission rate when a pregnant woman receives a combination therapy with 3 or more drugs?

Less than 1% of babies born to mothers who use combination therapy with 3 or more drugs are HIV-positive.

7. What advice would you give about combination therapy to an HIV-positive pregnant woman who does not need ARVs for her own HIV infection?

Even though she does not need treatment herself, a short course of triple combination therapy after the second trimester at 24 to 28 weeks is recommended to prevent mother to child transmission.

8. List the pros and cons of a C-section as a means of delivery for an HIV positive pregnant woman.

Pros include:

- Reduced risk of HIV transmission when the pregnant woman uses AZT monotherapy.

Cons include:

- Complications, particularly infections, are more common in woman having C-sections
- Having a natural birth after a C-section is more complicated and difficult
- Babies delivered by C-section are more likely to receive ventilatory support

Whether or not an elective C-section offers any benefit to babies born to mothers using combination therapy is unknown.

9. Which ARVs, or combinations of ARVs, are not recommended in pregnancy, or in particular circumstances in pregnancy. List them and explain why.

- efavirenz – avoid in pregnancy, the caution is strongest during the first trimester (12 weeks)
- nevirapine – not recommended for women with a high CD4 count (above 250) because of risk of liver toxicity
- d4T + ddI – together as they can cause fatal side effect in pregnant women

10. Say which of these conditions can come from (1) pregnancy (2) ARVs (3) both:

- **morning sickness**
- **nausea**
- **anaemia**
- **diabetes**
- **lactic acidosis**
- **lipoatrophy (fat loss)**

Morning sickness - pregnancy

Nausea – both.
Many ARVs can cause nausea. This can be confused with morning sickness early in a pregnancy.

Anaemia – both.
Anaemia is common side effect of pregnancy and AZT.

Diabetes – both.
There is a risk of developing diabetes during pregnancy. Taking PIs may lead to type 2 diabetes.

Lactic acidosis – both.
Pregnancy may be an additional risk factor for raised levels of lactic. Lactic acidosis is a serious side effect of nukes, especially ddI and d4T used together (this combination is not recommended).

Lipoatrophy (fat loss) – ARVs.
AZT and d4T can lead to fat loss from arms, legs, face and buttocks.

11. Which tests should an HIV-positive pregnant woman avoid?

HIV-positive woman who are pregnant should avoid amniocentesis, chorionic villus sampling, foetal scalp sampling, cordocentis, percutaneous umbilical cord sampling, and internal foetal labour monitoring.

12. When would you recommend prophylaxis with acyclovir during pregnancy?

During labour, if the mother has a herpes coinfection. Acyclovir prophylaxis during labour will reduce the risk of transmitting herpes to the baby.

13. When and how should the baby's HIV status be checked?

The day the baby is born, one month after that and three months after that, using an HIV PCR DNA test.

14. Can HIV-positive women breastfeed?

HIV-positive mothers should not breastfeed. The risk of transmitting HIV from mother to baby can be as high as 28%.

15. For how long should a baby take ARVs ?

The baby should take ARV prophylaxis for 4-6 weeks following his or her birth.

16. What is particularly important for an HIV-positive mother to remember after her baby is born if she is taking treatment for her own HIV ?

After the birth, the mother has to be especially careful of her own adherence and health.