Guidelines on safer conception in fertile HIV infected individuals couples

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Patient-provider communication

- Patient-provider communication about fertility is an important part of HIV prevention
- Fertility intentions change over time
- Speak to both male and female patients
- Don’t ignore adolescents...
Special Groups

Perinatally Infected Women/Youth
• UK Ireland cohort of 252 women >12 year
• 42 pregnancies among 30 women
• Median age 18 (14-22 years)
• 81% unplanned
• >50% of partners unaware of HIV status
• 36% elected termination of pregnancy
• 33% had detectable VL
• 1/21 infants infected with HIV

Towards a Solution

• Health care workers working with HIV infected people need to talk to their patients about fertility intentions regularly.

• Integration of family planning services into HIV services.
Aim to establish patients own informed choice

• Wanting to become pregnant immediately (i.e. actively trying to conceive)
• Not now, but considering a possible pregnancy in the future
• Do not want to become pregnant at all.
Different approaches to supporting fertility in HIV infected couples

- **Resources Available**
  - Infected woman → Uninfected man
  - Uninfected woman → Infected man
  - Infected woman → Infected man

- **Resources Not available**
  - Infected woman → Uninfected man
  - Uninfected woman → Infected man
  - Infected woman → Infected man
Pre-conception counselling

- Reasons for reproductive desire
- Disclosure of status
- Reproductive options, including risks, risk reduction, costs and chances of success
- Balance the risk of natural conception with established risk-reduction methods
- Consequences of failure to prevent transmission to partner and child and importance of regular testing
- Health of infected partner and woman
Pre-conception work-up

Minimum
• syphilis serology and clinical assessment
• Exclude AIDS: Medical examination and CD4 cell count
• Those on ART - viral load
• Screen for infertility through history
• Pregnancy: RH, haemoglobin

Well resourced
• Viral hepatitis; syphilis, CMV, rubella, HSV, toxoplasmosis clinical assessment
• Exclude AIDS: CD4 and medical examination
• HIV viral load
• Screen for infertility through history *If difficulty conceiving:* LH referral for fertility assessment
• full blood count;
Medical management

- Optimise medical condition including HIV
- Treat any current infection
- Treat co-morbid illnesses
- Determine ovulatory cycle
Fertility and HIV

**Scenario 1: Negative woman and positive man**
- The man should be on ART and have suppressed viral load

- Assisted techniques – sperm washing, insemination

OR in “Resource limited” settings

- The couple practice safe sex for most of the woman’s cycle using condoms.
- Use ovulatory method and have sex without condom on alternate days during ovulation
Criteria for Natural Conception

• The responsibility of adherence rests with HIV positive partner
• The decision of consenting to unprotected intercourse lay with the HIV negative partner
• Limited to 6 months during ovulation period only
• Condoms should be used at all other times
  – HIV positive partner on ART for ≤ 6 months
  – VL undetectable
  – Perfect adherence to treatment and medical follow-up
  – Mutually faithful relationship
  – No concomitant STI

Barreiro, Human Reproduction 2007
Fertility and HIV

Scenario 2: Positive woman and negative man
Ideally woman on ARTs with suppressed viral load

• No need to expose man to risk of becoming HIV infected
• Conception: sperm collection with insemination at the time of ovulation
  – Man ejaculates in clean receptacle
  – Semen drawn up into a large syringe (10 - 20ml)
  – Syringe placed about 4 – 6 cm in woman’s vagina in prone position and semen pushed out of the syringe
  – Can be done at home or in clinic.
Fertility and HIV

Scenario 3: Concordant positive couple

- Optimise health
- Ensure not on any teratogenic drugs
- Risk of horizontal transmission not a concern
- Vertical transmission needs to be considered
- Natural conception
Unsuccessful

• After attempting 6 ovulation cycles unsuccessfully, consider reduced fertility. Risk of continuing naturally exposes the partner to risk of HIV infection and may not result in conception

• Counsel and if appropriate refer for further work-up

• Repeat HIV testing of exposed partner
Successful
• Repeated HIV antibody testing for exposed partners

• If woman seroconverts during pregnancy, provide ART as soon as possible as seroconversion is associated with high rates of mother-to-child transmission
Important to protect partner after conception

Increased risk of HIV-1 transmission in pregnancy: Prospective study among African serodiscordant couples

- HIV viral load in genital secretions during pregnancy is increased
- Increased risk of HIV transmission from a pregnant woman to her sexual partner

Mulago NR et al, AIDS 2011
PMTCT

• If woman HIV infected, ideally she was on ART prior to conception. She should continue ART throughout pregnancy.

• If the woman was not on ART, provide ART if feasible (guideline limitations in some settings), or else provide PMTCT as per local guidelines.
Thank-you