

Reproductive Options for HIV-Serodiscordant Couples

The study by James L. Chen and coauthors recently published in *Family Planning Perspectives* [Fertility desires and intentions of HIV-positive men and women, 2001, 33(4): 144–152 & 165] shows that many HIV-infected adults desire and expect to have children. This is the first study about HIV-positive men's desire to have children that is based on a nationally representative sample of HIV-infected adults receiving treatment. The results demonstrate that individuals' social and demographic characteristics, as well as health factors related to the desire to have children, have important implications for family planning counseling and access to medical care.

Because a majority of HIV-positive men and women who expect to have children have a partner or spouse who is HIV-negative or whose HIV status is unknown, medical counseling to help them to avoid or reduce the risk of heterosexual transmission of HIV is necessary. When an HIV-infected woman is inseminated with sperm collected from a noninfected partner (either by injecting the sperm herself during ovulation or by using a medically assisted reproductive method), the risk of HIV transmission to the male is avoided. In serodiscordant couples with an HIV-infected male partner, the risk of heterosexual transmission could be avoided or dramatically reduced through the use of insemination with prepared and virologically tested spermatozoa. Insemination with "washed spermatozoa" in such couples was first reported in 1992 in the *Lancet*,¹ at a time when sperm virology testing was not available. In recent years, dramatic advances in virological methods have led to efficient detection of HIV nucleic acid (RNA and proviral DNA) in seminal plasma and sperm cells.²

Using two successive methods of sperm

preparation—density gradient method followed by swim-up method—we are able to obtain motile spermatozoa with no HIV nucleic acid detected. In 101 prepared sperm samples, HIV nucleic acid was detected in no final motile spermatozoa, regardless of whether it was present in native sperm.³ These methods are currently used in several centers.⁴ In our group, we have performed 93 insemination cycles on 39 couples, which resulted in 18 pregnancies without HIV transmission to the female partner.⁵

We think these possibilities should be explained to serodiscordant couples planning their family, in order to avoid the risk of heterosexual transmission. Service providers must offer or refer these methods to serodiscordant couples. As a matter of health policy to reduce the risk of sexual HIV transmission, this counseling should be offered along with counseling that serodiscordant couples use condoms during every act of intercourse.

Louis Bujan
Myriam Daudin
CECOS Midi-Pyrénées
Research Group on Human Fertility
University Hospital
Toulouse, France

Christophe Pasquier
Department of Virology
University Hospital
Toulouse, France

REFERENCES

1. Semprini AE et al., Insemination of HIV-negative women with processed semen of HIV-positive partner, *Lancet*, 1992, 340(8831):1317–1319.
2. Pasquier C et al., Sperm washing and virus nucleic acid detection to reduce HIV and hepatitis C virus transmission in serodiscordant couples wishing to have children,

AIDS, 2000, 14(14):2093–2099.

3. Ibid.; and Pasquier C et al., Sperm washing and virus nucleic acid detection to reduce HIV and HCV transmission in serodiscordant couples (male partner infected) wishing children, *Fertility and Sterility*, 2000, 74(3, suppl. 1):S68–S69.

4. Semprini AE et al., 1992, op. cit. (see reference 1); Marina S et al., Human immunodeficiency virus type 1-serodiscordant couples can bear healthy children after undergoing intrauterine insemination, *Fertility and Sterility*, 1998, 70(1):35–39; Gilling-Smith C et al., Assisted reproduction in HIV serodiscordant couples, *AIDS Reader*, 2000, 10(10):581–587; Daudin M et al., Le protocole ANRS 096: prise en charge en assistance médicale à la procréation des couples sérodifférents dont l'homme est infecté par le VIH, *Reproduction Humaine et Hormones*, 2001, 14(6):365–369; and Jouannet P et al., Assisted reproduction for HIV- and/or HCV-infected patients, in: Healy DL et al., *Reproductive Medicine in the Twenty-First Century*, London: Parthenon, 2001.

5. Daudin M et al., 2001, op. cit. (see reference 4).

A Perspective on the New Perspectives

I was pleasantly stunned to see the publication of a very good qualitative study in the newly titled *Perspectives*. As a researcher who does both quantitative and qualitative work in adolescent sexuality, it is very heartening to see a very well written and relevant piece like this. I had always thought of *Family Planning Perspectives* as a demographically oriented publication and never considered submitting. As a former research assistant at The Alan Guttmacher Institute, I find it especially exciting to think that I may in fact be able to one day publish in its journal. Congratulations!

Deborah L. Tolman
Center for Research on Women
Wellesley College
Wellesley, MA