

REPRODUCTIVE ASSISTANCE IN COUPLES WITH DISCORDANT HIV INFECTION

A.E. Semprini

Research Fellow of the University of Milan Medical School and University College of London, UK

In industrialized countries there is a large reservoir of heterosexual men infected with HIV. They often establish long-term relationship with a HIV-negative woman and, in most cases, sexual transmission of the virus does not occur and the couples remain serodiscordant as for their HIV status. Most of these couples want to have a child without exposing the woman to the risk of sexual acquisition of HIV. Fifteen years ago a simple seminal processing method was devised by the author to obtain spermatozoa washed free from cell-free and cell-associated HIV, which are both present in the ejaculate, respectively in the seminal plasma and in the non-spermatozoa cellular fraction. The method is a three-step procedure which includes a gradient centrifugation to remove seminal lymphocyte and two washing steps, one under centrifugation and the other bound to spontaneous sperm migration. One fraction of the aliquot of spermatozoa obtained after semen washing must be tested for the absence of residual HIV contamination. Washed spermatozoa can be used for insemination or extra-corporeal fertilization. Couples offered this type of reproductive assistance must be informed of and accept a minimal risk of infection, even if no transmission of HIV has ever been reported with this seminal processing method. Create, the European network of centres providing reproductive assistance to HIV-discordant couples has information on more than five thousands cycles of treatment without transmission. We conclude that women partners of HIV-positive men can conceive healthy children and remain uninfected by accepting the discomfort of reproductive assistance and a minimal risk of infection.