

Safety and efficacy of sperm washing in HIV-1-serodiscordant couples where the male is infected: results from the European CREAThE network

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Objective: To examine the safety and effectiveness of assisted reproduction using sperm washing for HIV-1-serodiscordant couples wishing to procreate where the male partner is infected.

Design and methods: A retrospective multicentre study at eight centres adhering on the European network CREAThE and involving 1036 serodiscordant couples wishing to procreate. Sperm washing was used to obtain motile spermatozoa for 3390 assisted reproduction cycles (2840 intrauterine inseminations, 107 in-vitro fertilizations, 394 intra-cytoplasmic sperm injections and 49 frozen embryo transfers). An HIV test was performed in female partners at least 6 months after assisted reproduction attempt. The outcome measures recorded were number of assisted reproduction cycles, pregnancy outcome and HIV test on women post-treatment.

Results: A total of 580 pregnancies were obtained from 3315 cycles. Pregnancy outcome was unknown in 47 cases. The 533 pregnancies resulted in 410 deliveries and 463 live births. The result of female HIV testing after assisted reproduction was known in 967 out of 1036 woman (7.1% lost to follow-up). All tests recorded were negative. The calculated probability of contamination was equal to zero (95% confidence interval, 0–0.09%).

Conclusion: This first multicentre retrospective study of assisted reproduction following sperm washing demonstrates the method to be effective and to significantly reduce HIV-1 transmission risk to the uninfected female partner. These results support the view that assisted reproduction with sperm washing could not be denied to serodiscordant couples in developed countries and, where possible, could perhaps be integrated into a global public health initiative against HIV in developing countries.

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