Effect of Human T-cell Lymphotrophic Virus type 1(HTLV-1) in seropositive infertile women on Intracytoplasmic Sperm Injection (ICSI) outcome

Khalighi A R1, Kouhestani S H2, Mansouri M3, Fadavi Islam M4, Aram R4, Sabouri E4, Khalilifar H3, Rafatpanah H4 and Roustae H6

1Infectious diseases specialist, Internal Medicine Department, Quaem Hospital, Mashhad University of Medical Sciences (MUMS), Iran
2Internal medicine specialist (Internist), Internal Medicine Department, Quaem Hospital, Mashhad University of Medical Sciences (MUMS), Iran
3Gynecologist, Novin Infertility Center, Mashhad, Iran
4Embryologist, Novin Infertility Center, Mashhad, Iran
5Virologist, Immunology Department, Quaem Hospital, Mashhad University of Medical Sciences (MUMS), Iran
6Medical student, Mashhad University of Medical Sciences (MUMS), Iran

Background: Northeast of Iran, Mashhad, the capital of Khorasan Province, is endemic for HTLV-1 with a prevalence of 3% among general population. So, we evaluated the ICSI outcome in our program for (HTLV-1) serodiscordant couples (SDCs) on the infected females in comparison with control group.

Materials & Methods: This study was performed between September 2007 and August 2011 in Novin Infertility Treatment Center (Mashhad, Iran). We examined 32 ICSI cycles of HTLV-1 infected women in comparison with an age matched control group (n=62). Then results analyzed by the Chi-square & student t test.

Results: ICSI outcome was compared regarding fertilization rate (FR), embryo quality parameters, implantation rate (IR), clinical pregnancy rate (PR) and abortion rate (AR). Fertilization, implantation and pregnancy rate were similar between the groups. No difference was found regarding the number of transferred embryos (on day 2 or 3) and cryopreserved embryos, multiple pregnancies, or abortion rates between the groups (all the P-values were > 0.05).

Conclusion: Our results suggest that the embryo quality and ICSI outcome are not affected by HTLV-1 infection in serodiscordant couples. Therefore, there is no limitation for sharing of such as these couples in fertility or infertility programs.