

9 <sup>th</sup> March, 2007	Crysal – B	Session - I	Duration 15 minutes
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**Title:** Infection during embryo development in relation to seminal and vaginal microbiological profile.

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#### Abstract:

**Objective:** To determine the role of microbiological profiles of seminal fluid and high vaginal flora obtained during preparation for assisted reproductive technologies (ART) on infections of embryo culture material. **Material and method:** couples undergoing ART between April 2003 and April 2006 (n=243) were assessed by seminal (n=232) and high vaginal cultures (n=282). Those subjects with infections were treated as per antibiotic profiles. Routine procedures for follicular development, ovum retrieval and insemination were performed. During embryo culture if bacterial infection was noted by medium turbidity and direct microscopic observation embryo isolation from the infected medium was attempted by repeated washing. Suitable embryos were replaced in utero. **Results:** Pathogens were grown from seminal fluid samples in 37.86% (n=87) and vaginal pathogens were present in 30.7% (n=70). Infection in embryo culture medium occurred in 4.15% (n=10). Prior seminal infection was noted in 60% (n=06) while vaginal infection occurred in 40% (n=04). In the embryo culture medium 20% (n=5) had *Escherichia coli* while 20% (n=2) grew *Pseudomonas aeruginos*. One each of the subjects had *Klebsiella, coliforms* and *Staphylococcus aerogenosa*. The organism matched those in the pre ART seminal and vaginal cultures in 50% (n=5) cases. Embryo replacement was possible in 60% (n=06) while in the rest embryo demise occurred. **Conclusions:** Selective antibiotic therapy in male and female genital tract infection was in effective in a small proportion of cases in the prevention of infection during embryo growth. This pre ART procedure however was an effective way of predicting the potential organism which could cause embryo infection.