Seroprevalence of *Chlamydia trachomatis*, Cytomegalovirus, Herpes simplex virus 1&2 in Saudi women with normal and abnormal early pregnancy: A pilot study

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**Objectives:** To measure the prevalence of *Chlamydia trachomatis*, Cytomegalovirus, Herpes simplex virus-1&2 in Saudi women with normal and abnormal pregnancy, and secondary infertility.

**Subjects and methods:** This was a case control study and serum samples were collected from 220 women as follow: 92 normal pregnancies, 63 ectopic pregnancies, 40 abortions and 25 with secondary infertility. IgG and IgM antibodies against candidate organisms were measured using ELISA.

**Results:** The prevalence of *C. trachomatis* IgG was significantly higher in abnormal pregnancy (13.6%) compared to normal pregnancy (5%). The frequency of HSV-1 IgG and IgM, but not HSV-2, was also higher in the abnormal pregnancy (88.3% and 49.5%) than in normal pregnancy (70.3% and 21.7%), respectively. Similarly, the frequency of CMV IgG was significantly lower in the abnormal (71%) compared to normal pregnancy (93.5%). However, IgM antibodies against CMV were significantly higher in the abnormal pregnancy (75.7%) and infertility (60%) groups compared to control (19.5%).

**Conclusions:** Candidate organisms appear to be common by serology in Saudi females with abnormal early pregnancy. Additionally, the high frequency rate in normal pregnancy alarms the potential high risk of congenital infection. Further studies are needed to measure the true prevalence of these STIs and their associated reproductive complications in Saudi Arabia.

**Biography**

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