INTRODUCTION AND AIM OF WORK

INTRODCTION

Chlamydia is obligatory intracellular parasite, replicates in the cytoplasm producing intracytoplasmic inclusion bodies (***(Mahony et al.,2003).***

The genus Chlamydia contain three species,*C.trachomatis* ,*C.pneumoniae* and *C.psittaci*,which resemble each other in their morphology, and replication cycle. They differ in their host range, and organ specificity. *C.trachomatis* infect the eye and urogenital tract of human, *C.pneumoniae* causes respiratory tract infection in human whereas *C.psittaci* causing psittacosis in human, ornithosis in birds, feline pneumonitis, and other animal diseases ***(Brooks et al., 2004).***

Chlamydia trachomatis is the most common sexually transmitted pathogen of humans, with an estimated 89 million new cases occurring world wide each year ***(Gerbase et al., 1998).***

The prime target of *Chlamydial* infection in the lower genital tract of women is the columnar epithelial cells lining the endocervical canal lead to cervicitis characterized by pain in passing urine, frequency, soreness, cervical discharge and cervical erosion ***(Sellors et al., 2000).***

Risk factors associated with *Chlamydial* infection included: being less or equal to 25 years old, previous episodes of pelvic inflammatory disease(PID) or sexually transmitted diseases(STDs), multiple sex partners, douching and women who have an intrauterine device inserted may have a slightly increased risk of PID ***(Morrison et al., 1999)***.

Genital infections (in both sexs) may be followed by serious complications such as epididymitis, salpingitis, PID, ectopic pregnancy and can harm new born by causing serious eye and lung infections. An association between cervical Chlamydial infection and cervical hyperplasia has been suggested ***(Herieka & Dhar., 2001)***.

The diagnosis of *C. trachomatis* infections has relied on the isolation of the organism in tissue culture. This method is time-consuming and requires considerable technical expertise and a suitable cell culture facility. Molecular biology-based tests, such as polymerase chain reaction (PCR) and ligase chain reaction (LCR), are firmly established as sensitive and specific techniques for detecting Chlamydia in clinical specimens. However, the advent of direct antigen detection methods has provided more rapid and less expensive alternatives to these molecular biology approaches. An important advantage of the antigen detection assay is that it can greatly increase the availability of Chlamydia diagnostic services ***(Davies and Ridway., 1997)***.

AIM OF THE WORK:

Assessment of Chlamydia infection in female genital tract in selected groups.