# CHLAMYDIA TRACHOMATIS INFECTION IN PATIENTS WITH TUBAL INFERTILITY

### **Thesis**

Submitted for Partial Fulfilment of the M.D. Degree in Clinical and Chemical Pathology

## By

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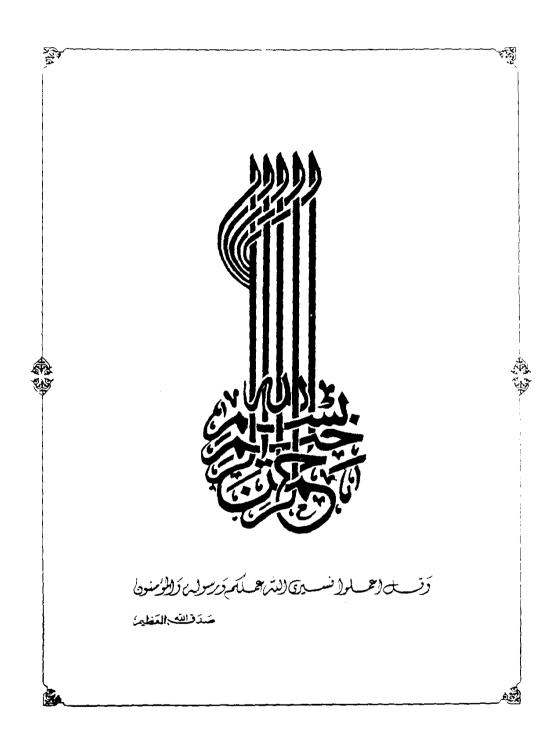


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To My Dear Family

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### LIST OF ABBREVIATIONS

Ab	Antibody
Ag	Antigen
CA	Chlamydial Antibody
CFT	Complement Fixation Test
CIN	Cervical Intraepithelial Neoplasia
DFA	Direct Fluorescent Antibody
EB	Elementary Body
EIA	Enzyme Immunoassay
ELISA	Enzyme Linked Immunosorbent Assay
GC	Gonococci
HRP	Horseradish-Peroxidase
HSG	Hysterosalpingography
IFA	Indirect Fluorescent Antibody
IgA	Immunoglobulin A
IgG	Immunoglobulin G
IgM	Immunoglobulin M
IUCD	Intrauterine Contraceptive Device
LGV	Lymphogranuloma Venereum
MIF	Microimmunofluorescencee
NGU	Non gonococcal Urethritis
NT	Nontubal
PBS	Phosphate Buffered Saline
PEB	Premenstrual Endometrial Biopsy
PGU	Post gonococcal Urethritis
PID	Pelvic Inflammatory Disease
PLT	Psittacosis-Lymphogranuloma - Trachoma
RB	Reticulate Body
RIA	Radio immunoassay
RIP	Radioisotope Precipitation
STD	Sexually Transmutted Disease
TF	Tubal Factor
TRIC	Trachoma Inclusion Conjunctivitis

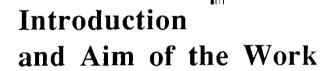
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### INTRODUCTION

Infertility is an increasingly significant health problem in many areas of the world. The increasing incidence of infertility is presumably consequent to the increasing incidence of tubal infection with Neisseria gonorrheae, Chlamydia trachomatis and other sexually transmitted pathogens. Chlamydia trachomatis has been implicated in up to 60% of cases of pelvic inflammatory disease. The infertility rates after one, two, and three episodes of pelvic inflammatory disease are 13%, 20% and 75% respectively (Kane et al., 1984).

Tubal occlusion produced by peritubal adhesions, hydrosalpinx formation and intramural fibrosis is the underlying pathological abnormality in tubal infertility following acute salpingitis (Westrom, 1975).

The risk of infertility after chlamydial salpingitis is unknown, although a striking correlation between tubal infertility and the prevalence of antibodies to Chalmydia trachomatis has been reported (Conway et al., 1984). Between 64% and 91% of infertile women with tubal occlusion have antibodies to Chlamydia trachomatis, a prevalence two to eight times greater than that found in women with other causes of infertility (Brunham et al., 1985).

Chlamydial pelvic infections may be so mild that they escape attention and medical treatment, and in such cases there is a high risk of continuing tubal disease with subsequent tubal obstruction leading to infertility. These findings suggest that gynecologists should be aware of the importance of Chlamydia trachomatis in mild acute pelvic inflammatory disease. Prompt

diagnosis and treatment of such mild disease are needed to prevent the long-term sequalae (Kane et al., 1984).

### Aim of the Work

The aim of this work is to study the association between the prevalence of Chlamydia trachomatis infection and tubal infertility in women who underwent diagnostic laparoscopy and who were assessed for tubal microsurgery. This will be carried out by:

- 1. Direct antigen detection
- 2. Specific Chlamydia antibodies detection.

# Review of Literature