# Interleukin -8 level in maternal serum in relation to C. reactive protein In intraamniotic infection at term

Thesis

Submitted in partial fulfillment of master

Degree in Obstetrics & Gynaecology

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### Acknowledgements

All thanks are due to the might God.

I am greatly obliged to the eminent **Prof.Dr. Mohamed Abd El-Halim Ali Mohanna**. It was a great honour and a chance of life time to be supervised by him, the knowledgeable scientist.

I am also offering my warmest thanks to **Prof.Dr. Ihab Hassan Abd El-Fattah**, for his positive attitude and generosity which are the corner stones in the completion of this work.

I am greatly indebted to **Dr. Gamal Farag Moustafa** to him I wish to express my profound graduatte and deep thanks for his constructive guidance and general help which were the paramount axes in the inition and completion of this work.

No word can fullfill the feeling of gratitude and respect I carry to **Prof. Dr. Ahmed El Henawi**, the great patholgist for his cooperation in this work.

Last but Not least, I thank the staff of Early caneer Detection unit, at Ain Shams University, for their assistance and help in this work, under the supervision of **Prof. Dr. Ali Khalifa**.

Finally great thanks to my parents and my wife for their patience and support.

#### Contents

Introduction	1
Aim of the Study	
Review of Literature	3
I Premature rupture of membranes	3
II Diagnosis of PROM	22
III Adverse Effects of premature rupture of membranes	37
IV Chorioamnionitis	46
V Diagnosis of Chorioamnionitis	66
VI Adverse effect of chorioamnionitis	96
VII Treatment of premature rupture of membranes	102
VIII Cytokines	114
- Subjects and Methods	119
- Results	133
- Discussion	151
- Summary & Conclusion	160
- Recomendations	161
- References	162
- Arabic Summary	

## List of Abbreviation

αFP : Alpha Feto protein.

A PP : Acute phase proteins.

A.F. : Amniotic Fluid.

AF WBC : Amniotic fluid white blood cells.

AIS : Amniotic infection syndrome.

CAD : Chorioamnonitic dissociation.

CAM : Chorioamnionitis:

CFU : Colony forming unit.

CRP: C- reactive protein.

E Alpha 1PI: Elastase alpha 1 proteinase inhibitor.

ELISA : Enzyme linked immune sorbet assay.

ESR : Erythrocyte Sedimentation rate.

FBM : Fetal breathing movment.

FBP : Fetal biphysical profile .

FHR: Fetal heart rate.

G-CSF : Granulocyte colony stimulating factor.

GBS : Group B Streptococci.

GLC : Gas liquid chromotography.

HPL: Human placental lactogen.

IAI : Intra amniotic infection.

IL: Interleukin.

M. homonis: Mycoplasma homonis.

NST : Non stress test.

PG: Phosphatidyl glycerol.

PGE<sub>2</sub>: Prostaglandin E<sub>2</sub>.

PMNL : Polymorph nuclear leukocyte.

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PPROM : Preterm premature rupture of membranes.

PPV : Positive predicitve value .

PRL: Prolactin.

PROM : Premature rupture of membranes .

RDS : Respiratary distress syndrome.

ROM : Rupture of membranes.

S. aureus : Streptcoccus aureus .

SROM : Spontenuos rupture of membranes.

T. Vaginalis: Trichomans Vaginalis.

TNF : Tumor necrosis factor.

Vs : Versus .

W.B.C : White blood cells.

#### Introduction

Intraamniotic infection is a serious complication of premature rupture of the membranes and so early detection of intra-amniotic infection is essential. Cinical and laboratory signs of infection such as fever, leucocytosis and elevated C-reactive protein (CRP) are not very accurate and may be delayed by 24 hours to 36 hours after the onset of the infection. We need a test which is capable of identifying intra-amniotic infection soon after it occurs. (Romero et al 1991).

Histological chorioamnionitis has been identified in 10-18 % of women with term deliveries. Definitive diagnosis of histological chorioamnionitis is only possible at present by histological analysis of the placenta after delivery (Miller et al 1990).

Adequate diagnostic methods to premit the precise diagnosis of histological chorioamnionitis as early and efficiently as possible should be developed to ensure favorable outcome of pregnancy. (Shimoya et al 1997).

Some cytokines such as interleukin -1 (IL-1), tumor necrosis factor-α (TNF-α), interleukin - 6 (IL-6) and interleukin-8 (IL-8), have been shown to be useful for the detection and monitoring of various human inflammatory diseases. Similar analyses have been applied to diagnose intraamniotic infection by titering cytokine levels amniotic fluid (Romero et al 1991).

Interleukin-8 (IL-8), a 72-amino acid peptide, is produced by many cells, including macrophages and neutrophils, and cells of the decidua, amnion and chorion. IL-8 has been shown to be increased in amniotic fluid in cases of intra-amniotic infection (**Trautman et al 1992**).

## Aim of the Study

#### This study will be conducted to evaluate:

The inter-relationship between the presence of histological chorioamnonitis and its markers which include maternal serum inter leukin 8 level, and level of c-reactive protein, in relation to the clinical picture of the patients who have premature rupture of membranes at term with Comparable control group.