#### A STUDY OF PLACENTAL HISTOPATHOLOGY AND NEONATAL HEALTH ASSESSMENT IN HIGH RISK PREGNANCIES

#### Thesis

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# بِشُم ِ اللَّهِ الرَّحُمٰنِ الرَّحِيمِ

وَلَقَدُ خَلَقُنَا الْانسَلَ مِنْ سُلَلَةٍ مِّنْ طِينِ (١٢) ثُمَّ جَعَلْنَهُ نُطُفَةً فِي قَرَارٍ مَّكِينٍ (١٣) ثُمَّ خَلَقُنَا النُّطُفَّةُ عَلَقَةً فَخَلَقُنَا النُّطُفَةُ عَلَقَةً فَخَلَقُنَا الْعَظَمَ لَمُعًا الْعَلَقَةَ مُثَغَةً فَخَلَقُنَا الْمُضْفَةَ عِظَماً فَكَسَوْنَا الْعِظَمَ لَمُعًا ثُمَّ أَنْ النَّانُ أَنْ خَلُقاً ءَاخَرُ فَتَبَارَكَ اللَّهُ أُمْسَنُ الْخُلِقِينَ (١٤)

مدق الله العظيم سورة المؤمنون الآية (١٢–١٤)



To my colleagues in N.I.C.U. in Gynaecology and Obstetric hospital. Ain Shams University

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#### List of Abbreviations

B.P : Blood pressure.

C.B.C : Complete blood count.

C.R.P. : C-reactive protein.

C.S : Caesarean section.

Cot : Cotyledon.

D : Diastole .

del : Delivery.

E.A.O : End arteritis obliterans.

E.coli. : Escherichia coli.

F.T : Full term.

Fig : Figure.

G.A : Gestational age.

G.B.S : Group B streptococci.

Gynaecol: Gynaecology.

H & E : Hematoxylin and Eosin.

H.S : Highly significant.

H.S.S : Hematologic Scoring system.

hr : hour.

I.D.M. : Infant of diabetic mother.

I.S or insig: Insignificant

I.U.G.R : Intra uterine growth retardation.

I.U.I : Intra uterine infection.

I.V : Intra venous.

Kg : Kilogram.

M.T : Masson trichrome.

min : minute.

N.I.C.U : Neonatal intensive care unit.

N.V.D : Normal vaginal delivery.

N° : Number.

Obstet : Obstetric.

P.M.N : Poly morphonuclear leucocyte.

P.R.O.M : Premature rupture of membranes.

R.D : Respiratory distress.

S : Systole.

S.D : Standard deviation.

Sig or S : Significant.

U.C : Umbilical cord.

V.H.S : Very highly significant.

+ ve : Positive

- ve : Negative.

WK : Week.

Wt : Weight.

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## INTRODUCTION

#### Introduction

High risk pregnancy is a complication of the maternal illness, obstetric disorder or drug therapy and from which one may anticipate an ill or immature infant. Some maternal illnesses that can seriously affect the newborn include hypertension and pre- eclampsia, diabetes mellitus, post maturity, infection and others (Halliday et al., 1989).

Although the placenta has both foetal and maternal components, it essentially serves as a foetal organ, a vascular organ of exchange, located outside the foetal body cavities. It performs similar functions as the lungs and kidneys do in extra unterine life, namely, respiration and excretion. In addition it assists the transfer of nutrients from maternal to foetal blood and secretes hormones that serve to maintain the pregnancy and foetal growth (Sander, 1991).

Careful examination of the placenta can prove to be a valuable aid in the diagnosis and treatment of the newborn infant. Gross examination of the placenta is of dual interest first, the examination gives an opportunity for verifying the placenta's integrity, thus avoiding maternal complications. Second, it is an important supplement of the newborn's physical examination. The placenta may either be