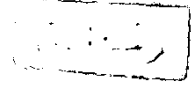


**THE MATERNAL PLATELETS COUNT AND THE
EFFECT OF ANTI PLATELETS IgG ON NEONATAL
PLATELETS**

Thesis



*Submitted for Partial Fulfillment of Master Degree in
Pediatric*

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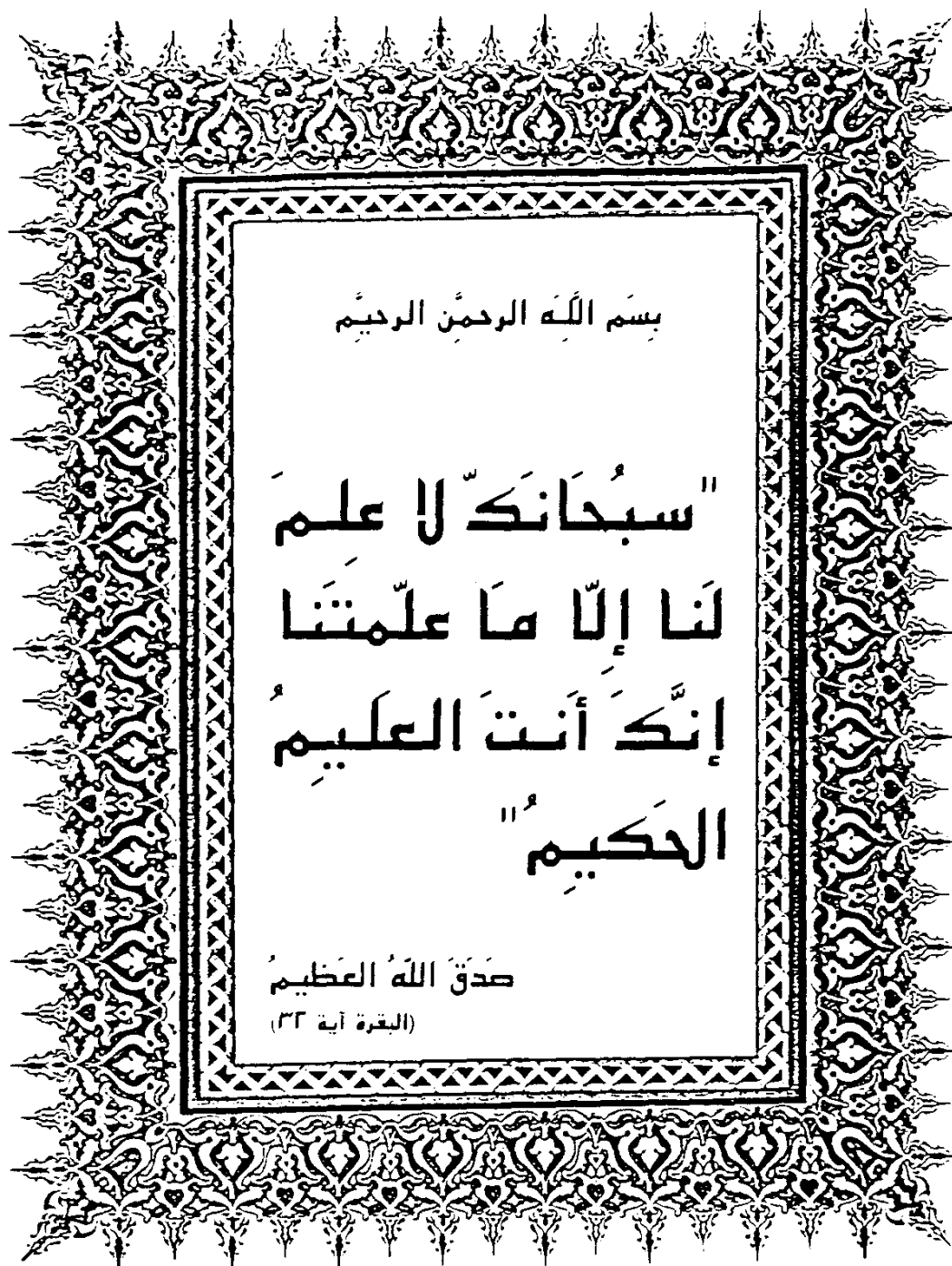
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TO MY FAMILY

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LIST OF ABBREVIATION

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Å	: Angstorm
AIHA	: Autoimmune hemolytic anemia.
AITP	: Autoimmune thrombocytopenic purpura.
C	: Complement
DIC	: Disseminated intravascular coagulopathy
DL	: Decilitre
FBS	: Fetal blood sampling
GP	: Glycoprotein
HLA	: Histocompatibility leucocyte antigen
Ia	: Immune response region-associated antigen
Ig	: Immunoglobulins
ITP	: Idiopathic thrombocytopenic purpura
IUFD	: Intrauterine fetal death
IVIgG	: Intravenous immunoglobulin G
MHC	: Major Histocompatibility complex
ML	: Millilitre
Mmol	: Millimole
Mg	: Milligram
PAIgG	: Platelet associated immunoglobulin G
PBS	: Phosphate buffered saline
PFA	: Paraformaldehyde
PUBS	: Perumbilical blood sampling
RES	: Reticuloendothelial system
SCCS	: Surface connecting canalicular system
SLE	: Systemic lupus erythematosus
Ug	: Microgram
UL	: Microlitre
US	: Ultrasound
\bar{X}	: Mean
SD	: Standard deviation

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LIST OF TABLES

- Table (1)** : Shows some properties of human antibodies classes & subclasses
- Table (2)** : Shows erythrocyte antigens present on platelets.
- Table (3)** : Shows differences in clinical picture between acute and chronic ITP
- Table (4)** : Shows that among 50 mothers, 17 were found to be thrombocytopenic.
- Table (5)** : Shows that among 51 newborn (including a twin), 13 were found to be thrombocytopenic.
- Table (6)** : Shows some predisposing factors that may affect neonatal platelets count.
- Table (7)** : Shows some predisposing factors that may affect neonatal platelet counts of infants born to complicated deliveries is significantly affected, while in mothers there is no difference between the platelet count of the two groups.
- table (8)** : Shows the correlation of each complication with maternal platelet count, in which no statistically significance was found.

Table (9) : Shows the correlation of each complication with neonatal platelet count. Positive correlation was noticed but not statistically significant.

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Fig. (1) : The maternofetal model : only maternal IgG antibodies cross the immunological barrier provided by the placenta and gain access to the fetus.

Fig. (2) : Shows that there is a positive correlation between the mother platelet counts and their neonatal platelet counts, but not statistically significant.

**INTRODUCTION
&
AIM OF THE WORK**

INTRODUCTION

When idiopathic thrombocytopenic purpura (ITP) occurs during pregnancy, the rate of abortion and neonatal hemorrhage is considerably increased.

Thus, careful management during pregnancy and delivery is mandatory. It should be noted that ITP may occur in the neonate, even if it seems to be in remission in the mother.

In the neonate, ITP must be distinguished from isoimmune fetomaternal thrombocytopenia, which often leads to even more disturbing hemorrhages.

Some authors consider that there is correlation between the importance of platelets associated IgG-Titre (PAIgG) and the occurrence of neonatal thrombocytopenia, but these data are controversial. (Bellucci et al ., 1989)

AIM OF THE WORK

We study the correlation of platelets count in the pregnant mothers and the platelet count of their newborns at time of delivery.

We study also, the maternal platelets associated IgG (PAIgG) in the pregnant mother and its effect on the platelet count of their newborns.

REVIEW OF LITERATURE