

**Comparison between the Effect of Oral
Paracetamol versus Oral Ibuprofen in the
treatment of Patent Ductus Arteriosus in
Preterm and Low Birth Weight Infants**

Thesis

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By

Dina Gamal Abd El-Moez

M.B., B.Ch.2010
Ain Shams University

Under Supervision of

Prof. Dr. Mohamed Sami El Shimi

Professor of Pediatrics and Head of Neonatal Intensive Care Units
Faculty of Medicine - Ain Shams University

Dr. Abeer Salah El Din El Sakka

Assistant Professor of Pediatrics
Faculty of Medicine - Ain Shams University

Dr. Rania Ali El-Farrash

Assistant Professor of Pediatrics
Faculty of Medicine - Ain Shams University

*Faculty of Medicine
Ain Shams University*

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

﴿رَبِّ أَوْزَعْنِي أَنْ أَشْكُرَ نِعْمَتَكَ الَّتِي أَنْعَمْتَ
عَلَيَّ وَعَلَىٰ وَالِدَيَّ وَأَنْ أَعْمَلَ صَالِحًا تَرْضَاهُ
وَأُوْخَلِّنِي بِرَحْمَتِكَ فِي عِبَادِكَ الصَّالِحِينَ﴾

صِرَاقُ اللَّهِ الْعَظِيمِ

سورة النمل آية (١٩)

Dedication

To my *Father* and *Mother*
who supported me in my
whole life



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*First and foremost, thanks to
Allah, the Gracious and the Merciful.*

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List of Abbreviations

ALT	: Alanine aminotransferase
ANOVA	: Analysis of Variance
AST	: Aspartate aminotransferase
BNP	: Brain natriuretic peptide
Bp	: Blood pressure
BPM	: Beat per minute
BUN	: Blood urea nitrogen
CHF	: Congestive heart failure
CLD	: Chronic lung disease
COX	: Cyclooxygenase
CWD	: Continuous wave Doppler
DA	: Ductus arteriosus
DAO	: Descending aorta
DASMCs	: Ductus arteriosus smooth muscle cells
dL	: Deciliter
ECG	: Electrocardiogram
EDV	: End-diastolic volume
ESV	: End-systolic volume
FDA	: Food and drugs administration
fECHO	: Functional echocardiography
g	: Gram
GA	: Gestational age
GFR	: Glomerular filtration rate
GIT	: Gastrointestinal tract
Hb	: Hemoglobin
HCT	: Hematocrit
HFV	: High frequency ventilation
HR	: Heart rate
Hr	: Hour
hsPDA	: Hemodynamically significant patent ductus arteriosus

List of Abbreviations (Cont.)

IMV	: Intermittent mandatory ventilation
IU	: International unit
IVH	: Intra ventricular hemorrhage
K⁺	: Potassium
Kg	: Kilogram
L	: Litre
LA/Ao	: Left atrial to transaortic diameter
LBW	: Low birth weight
LV/Ao	: Left ventricular to transaortic diameter
LVO	: Left ventricular output
LVO/SVC	: Left ventricular output/superior vena cava flow ratio
mg	: Milligram
mmHg	: Millimeter mercury
M-mode	: Motion mode
mOsmol/L	: Milliosmole/Liter
MV	: Mechanical ventilation
N	: Number
NA	: Non applicable
NCPAP	: Nasal continuous positive airway pressure
NEC	: Necrotizing enterocolitis
NICE	: National Institute for Health and Clinical Excellence superior
NSAIDs	: Nonsteroidal anti-inflammatory drugs
PA	: Pulmonary artery
PDA	: Patent of the ductus arteriosus
PGE2	: Prostaglandin E2
PGHS	: Prostaglandin-H2 synthetase
PGs	: Prostaglandins
PLT	: Platelets
PO	: Per os
POX	: Peroxidase

List of Abbreviations *(Cont.)*

PPT	: Partial prothrombin time
PT	: Prothrombin time
PWD	: Pulse wave Doppler
RCTs	: Randomized controlled trials
RDS	: Respiratory distress syndrome
ROS	: Reactive oxygen species
S.creat	: Serum creatinine
SD	: Standard deviation
SIMV	: Synchronized intermittent mandatory ventilation
SMA	: Superior mesenteric artery
SPSS	: Statistical Package for Social Science
TFAP2β	: Tumor necrosis factor receptor-associated factor beta
TLC	: Total leucocytic count
TXA	: Thromboxane
UOP	: Urine output
VEGF	: Vascular endothelial growth factor
χ^2	: Chi-square

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