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شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

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بالرسالة صفحات لم ترد بالأصل

Cord Blood Ischemia-Modified Albumin Levels in Preterm Infants with Intrauterine Growth Restriction

Thesis
Submitted for Partial Fulfillment of
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List of Contents

List of Tables

List of Figures

List of Abbreviations

Abb.	Meaning
AC	Abdominal circumference
ACB	Albumin- cobalt binding
ACS	Acute coronary syndrome
AGA	Appropriate for gestational age
AREDF	Absent or reversed end diastolic flow
ASR	Albumin synthesis rate
AT	Anti thrombin
AUC	Area under the curve
AV	Atreio-ventricular
BMI	Body mass index
BPD	Bi- parietal diameter
BUN	Blood urea nitrogen
CAD	Coronary artery disease
CBC	Complete blood count
CMV	Cytomegalovirus
DM	Diabetes mellitus
EFW	Estimated fetal weight
ELISA	Enzyme- linked immune sorbent assay
FDA	Food and Drug administration
FGR	Fetal growth restriction
FL	Femeur length
GH	Growth hormone
GIT	Gastro-intestinal tract
HC	Head circumference

List of Abbreviations

Abb.	Meaning
HIE	Hypoxic ischemic encephalopathy
HIV	Human immune deficiency virus
IMA	Ischemia modified albumin
IQR	Inter-quartile range
IUGR	Intra uterine growth restriction
LBW	Low birth weight
LMP	Last menstrual period
MCA	Middle cerebral artery
NEC	Necrotizing enterocolitis
NPV	Negative predictive value
OD	Optical density
OFC	Occipto-frontal circumference
PE	Preeclampsia
PI	Ponderal index
PLTs	Platelets
PPV	Positive predictive value
RBCs	Red blood cells
RF	Radio- frequency
ROC	Receiver opening characteristic curve
SGA	Small for gestational age
SLE	Systemic lupus erythromatosus
SPSS	Statistical Package for Social Science
WBCs	White blood cells
WHO	World health organization

INTRODUCTION

Intrauterine growth restriction (IUGR) is the term used to describe a fetus that has not reached its growth potential because of genetic or environmental factors. It is defined as an estimated birth weight $<10^{th}$ percentile for gestational age. The origin may be fetal, placental, or maternal, with significant overlap among these entities. These infants are at increased risk for significant morbidity and mortality compared with infants with normal in utero growth ***(Mandy, 2018).***

IUGR is most commonly caused by placental insufficiency and babies affected by IUGR are likely to show signs of placental disease ***(Henriksen & Clausen, 2002),*** and/or poor placental function with the placenta failing to make the adaptive changes required to maximise fetal growth ***(Sandovici et al., 2012).***

Preterm birth may be caused by multiple factors including inflammation and maternal stress, however, placental ischemia and other forms of placental dysfunction commonly contribute. In fact, gestational length itself is known to be at least partially regulated by factors secreted by the placenta ***(Goldenberg et al., 2008).***

Ischemia modified albumin is a novel marker of ischemia generated due to hypooxygenation and increased hydroxyl free radicals in low pH. The molecule has been licenced for clinical

use as an early marker for acute coronary syndrome in cardiology ***(Oran & Oran, 2017)***. Since the presence of ischemia might have serious and sometimes devastating effects in perinatology, various researches have evaluated its value in different clinical perinatal and neonatal conditions ***(Yarci et al., 2017)***.

AIM OF WORK

This study aims to determine the possible association between cord blood ischemia-modified albumin (IMA) levels and intrauterine growth restriction (IUGR) in preterm infants with or without complicated gestations.