بسم الله الرحمن الرحيم

MONA MAGHRABY

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

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جامعة عين شمس

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قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات

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تحفظ هذه الأقراص المدمجة بعيدا عن الغبار

MONA MAGHRABY

Predictive Value of Serum β-hCG for Early Pregnancy Outcomes among Women with Recurrent First Trimesteric Spontaneous Abortion

Thesis

Submitted for Partial Fulfillment of Master Degree in Obstetric and Gynecology

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Souad Mohammed Abd Elsalam

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List of Abbreviations

Abb.	Full term
-	*Negative*
+	*Positive*
AAS	*Anabolic androgenic steroid*
aCL	*Anticardiolipin*
AFP	*Alfa feto protein*
Anti-B2GPI	*Anti-β2 glycoprotein I antibodies*
APL	*Anti phospholipid*
APS	*Anti phospholipid syndrome*
AU	*Arbitrary, nonstandardized units*
AUC	*Area under the ROC curve*
BHCG or β-hCG	*Beta subunit of human chorionic gonadotrophins*
CA125	*Cancer Antigen 125 (tumour marker)*
cal	*Calorie*
CD25	*Cluster of Differentiation 25 (type of white blood cells play an important role in immune system)*
CD4	*Cluster of Differentiation 4 (type of white blood cells play an important role in immune system)*
cMPs	*Circulating microparticles*
DNA	*Deoxy Ribonucleic Acid*
E	*Estrogen*
EGF	*Epidermal growth factors*
ESHRE	*European Society of Human Reproduction and Endocrinology*
FDA	*The Food and Drug Administration*
Foxp3	*Protein involved in the immune system response (scurfin)*
FSH	*Follicle-stimulating hormone*
FTC	*Federal Trade Commission*

List of Abbreviations (Cont...)

Abb.	Full term
GA	*Gestational age*
Gal-1	*Galectin-1*
G-CSF	*Granulocyte colony-stimulating factor*
Gd	*Glycodelin*
gm / dl	*Grams per deciliter*
GnRH	*Gonadotropin-releasing hormone*
GPL	*IgG Phospholipids unit*
GTD	*Gestational trophoblastic disease*
HB	*Hemoglobin*
HCG	*Human chorionic gonadotrophin*
HIV-1	*Human Immunodeficiency Virus 1*
HO-1	*Heme oxygenase isoform*
HPGA	*Hypothalamic-pituitary-gonadal axis*
HS	*Highly significant*
ICSI	*Intracytoplasmic sperm injection*
IDO	*Indolamine 2-3 deoxy-genase*
IgA	*Immunoglobulin A*
IL-10	*Interleukin10*
IL-4	*Interleukin4*
IMA	*Ischemia Modified Albumin*
INR	*International normalized ratio of the prothrombin time*
IQR	*Interquartile range(the measure of statistical dispersion being equal to the difference between the 75th and 25th percentile)*
IU	*International unit*
IU/l	*International units per liter*
IVF	*Invitro fertilization*
IVIg	*Intravenous immunoglobulin*

List of Abbreviations (Cont...)

Abb.	Full term
KDa	*Kilo Dalton (a unit of molecular mass consisting of 1000 daltons)*
LDA	*Law dose aspirin*
LH	*Luteinizing hormone*
LHCG	*Luteinizing hormone chorionic gonadotrophin*
LMP	*The first day of the last menstrual period*
LMWH	*Law molecular weight heparin*
LPD	*Luteal Phase Defect*
mg	*Mili gram*
mIU/ml	*Thousandth international units per milliliter*
mL	*Milliliter*
MLB	*Major League Baseball (which is a professional baseball organization)*
mm	*Millimeter*
MPL	*IgM Phospholipids Unit*
N terminus	*The Amino terminus (the start of a protein or polypeptide referring to the free amine group located at the end of a polypeptide)*
NFL	*The National Football League (a professional American football League)*
ng/ml	*Nanograms per milliliter*
NK	*Natural killer*
No.	*The number*
NPV	*Negative predictive value*
NS	*Non significant*
P value	*Probability value*
PCOS	*Polycystic ovary syndrome*
PAPP-A	*Pregnancy-associated plasma protein A*
PPAR	*Peroxisome proliferator-activated receptors*

List of Abbreviations (Cont...)

Abb.	Full term
PPAR-F	*Peroxisome proliferator-activated receptor F*
PPV	*Positive predictive value*
PRL	*Prolactin*
PT	*Prothrombin time*
PTT	*Partial thromboplastin time*
r value	*Correlation coefficient (measures the strength and direction of alinear relationship between two variables on a scatter plot*
RCOG	*Royal College of Obstetricians and Gynecologists*
RH	*Rhesus factor of the blood groub*
RIF	*Recurrent implantation failure*
ROC curve	*Receiver operating characteristic curve*
RSA	*Recurrent spontaneous abortion*
S	*Significant*
SD	*Standard deviation (the spread of the data about the mean value)*
Sig	*Significance*
TH1	*T Helper cells 1 (mediate cellular immune response)*
TH2	*T Helper cells 1 (potentiate the humoral response)*
TH3V	*Regulatory Tcells (help in immune suppression)*
TNF-α	*Tumour necrosis factor alpha*
TORCH	*Toxoplasmosis, rubella, cytomegalovirus and herpes*
T-regs	*The Regulatory T cells (help in immune suppression)*
TSH	*Thyroid stimulating hormone*

List of Abbreviations (Cont...)

Abb.	Full term
TVU/S	*Transvaginal ultrasound*
UFC	*Ultimate Fighting Championship (an American mixed material arts promotion company)*
VCD4	*Type of t cells help in the immune system*
VEGF	*Vascular endothelial growth factor*
VTH1	*Type of t cells help in the immune system*
WKS	*Weeks*
Yrs	*Years*
α	*Alpha*
β	*Beta*

INTRODUCTION

Recurrent spontaneous abortion (RSA) is defined according to the American society for reproductive medicine as two or more spontaneous failed clinical pregnancies as documented by ultrasonography or histopathological examination ***(Practice Committee of American Society for Reproductive Medicine, 2013)***. While the old classical definition of RSA is the occurrence of three or more consecutive losses of clinically recognized pregnancy prior to the 24th weeks of gestation (ectopic, molar, and biochemical pregnancies are not included) ***(Van Niekerk et al., 2013).***

Recurrent pregnancy loss is one of the most difficult problems in reproductive medicine as the etiology is usually unknown (40% - 50%), endocrine factors account for 17% - 20% of the cases, 20% due to auto immune factors, anatomical factors about 10% -15%,while 0.5% - 5%due to infections and 2% -5% genetic factors ***(Tanwar et al., 2014).***

Epidemiologic studies have revealed that actually 0.5% to 1% of women experience recurrent pregnancy loss. The best available data suggest that the risk of pregnancy loss in subsequent pregnancies is 30% after 2 losses, compared with 33% after 3 losses among patients without a history of a live birth. This strongly suggests a role for evaluation after just 2 losses in patients with no prior live births ***(Tanwar et al., 2014).***