

# الآية

قال تعالى :

اللَّهُ لَا إِلَهَ إِلَّا هُوَ الْحَيُّ الْقَيُّومُ لَا تَأْخُذُهُ سِنَّةٌ وَلَا نَوْمٌ لَهُ مَا فِي السَّمَاوَاتِ  
وَمَا فِي الْأَرْضِ مَنْ ذَا الَّذِي يَشْفَعُ عِنْدَهُ إِلَّا بِإِذْنِهِ يَعْلَمُ مَا بَيْنَ أَيْدِيهِمْ وَمَا  
خَلْفَهُمْ وَلَا يُحِيطُونَ بِشَيْءٍ مِّنْ عِلْمِهِ إِلَّا بِمَا شَاءَ وَسِعَ كُرْسِيُّهُ  
السَّمَاوَاتِ وَالْأَرْضَ وَلَا يَئُودُهُ حِفْظُهُمَا وَهُوَ الْعَلِيُّ الْعَظِيمُ

سورة البقرة الآية (255)

صدق الله العظيم

# ***Dedication***

*To my beloved and blessed parents*

*who did everything for me god's mercy on them*

*To my family*

*who spend more time encourage me*

*To all patients,*

*wishing for them soon healing*

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# Abstract

The aim of this study was to assess the relationship between Anticardiolipin antibodies and recurrent miscarriage in serum of Sudanese women who suffered from recurrent miscarriage.

This cross sectional study was conducted in the Maternity Hospital and the Saudi Hospital in Omdurman and Ashmige Centre for having a fertility and IVF in Khartoum in the period from November 2015 until February 2016.

Eighty three blood samples were collected from women having frequent abortion (test group) and 5 samples from pregnant women with history of no abortion (control group) Anticardiolipin antibodies were measured using ELISA. The study revealed increase in mean of serum anticardiolipin antibodies (ACL) in patient group ( $2 \pm 0.239$ ) when compared to control group ( $1.49 \pm 0.00$ ), statistically there was significant relationship p value = (0.00) between serum anticardiolipin and recurrent miscarriage compared to the control group. The study showed that 5(6%) of the test groups were positive Anticardiolipin compared to 0.00% of the control group. This study indicated that the high proportion of anticardiolipin antibodies can cause recurrent miscarriage.

## خلاصة البحث

الهدف من هذه الدراسة هو تقييم العلاقة بين الاجسام المضادة للكارديوليبيين والإجهاض المتكرر في مصل الدم لدى النساء السودانيات اللاتي يعانين من إجهاض متكرر مقارنة بالنساء الأصحاء ظاهريا.. أجريت هذه الدراسة المقطعية في مستشفى الولادة والمستشفى السعودي بامدرمان ومركز الإنجاب والخصوبة وأطفال الأنابيب بالخرطوم في الفترة من نوفمبر 2015 حتى فبراير 2016.

أخذت 83 عينة دم من النساء اللاتي يعانين من إجهاض متكرر ( ثلاث مرات فأكثر) ( مجموعة اختبار ) و 5 عينات من نساء حوامل لم يحدث لديهن أجهاض (مجموعة ضابطة) وتم قياس مستويات الاجسام المضادة للكارديوليبيين في مصل الدم باستخدام اختبار الاليزا. في هذه الدراسة أظهرت مستويات مضادات الكارديوليبيين ارتباط ذو علاقة احصائية معنوي (0.00) لدى النساء اللاتي يعانين اجهاض متكرر مقارنة بالمجموعة الضابطة. اظهرت الدراسة ان ( 65% ) من مجموعة الاختبار كانت موجبة الكارديوليبيين مقارنة ب 0.00% من المجموعة الضابطة. هذه الدراسة تشير الي ان ارتفاع نسبة الكارديوليبيين قد يسبب الإجهاض المتكرر.

## Abbreviation

ACL	anticardiolipin antibody
APA	Antiphospholipid antibody
APS	Antiphospholipid syndrome
B2GP1	Beta2 Glico Protein
ELISA	Enzyme Linked Immunosorbent Assay
HLA	Human Leucocyte Antigen
IUGR	Intra Uterine Growth Restriction
IVF	Invitro Fertilization
LA	Lupus anticoagulant
LMP	Last menstrual Period
LPD	Luteal phase Defect
MRI	Magnetic Resonance Imaging
PAPS	Primary Antiphospholipid Syndrome
PCOS	Poly cystic ovarian syndrome
PGD	Pre Implantation Diagnosis
PGT	Pre Implantation Genetic Test
RM	Recurrent miscarriage
RPL	Re Pregnant Loos
SCR	Short Consensus Repeat
SLE	Systemic Lupus Erythematosus
TSH	Thyroid Stimulation Hormone
WHO	World Health Organization

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