

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قال تعالى:

(قُلْ لَوْ كَانَ الْبَحْرُ مِدَادًا لِكَلِمَاتِ رَبِّي لَنَفِدَ الْبَحْرُ قَبْلَ أَنْ تَنفَدَ

كَلِمَاتُ رَبِّي وَلَوْ جِئْنَا بِمِثْلِهِ مَدَدًا)

صدق الله العظيم

سورة الكهف: الآية (109)

DEDICATION

To my parents

Brothers

Friends

Colleagues

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Firstly, thanks to ALMIGHTY ALLAHA for helping me to complete this study.

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ABSTRACT

This study was conducted during the period from May to September 2012 to determine the seroprevalence of human cytomegalovirus (HCMV) among pregnant women at Omdurman Maternity Hospital.

A total of 130 subjects were included in this study. One hundred (n=100) subjects were pregnant women attending the antenatal clinics of Omdurman Maternity Hospital for antenatal care, the remaining thirty (n=30) women were apparently healthy, non-pregnant women with no history of blood transfusion or abortion included as control group. The ages of all women tested ranged from 17 to 42 years.

Personal and clinical data were collected by questionnaire after a verbal consent, serum samples were collected, tested for CMV IgG and IgM using enzyme-linked immunosorbent assay (ELISA).

Out of the 100 pregnant women tested, 97(97%) and 7(7.0%) were CMV IgG and CMV IgM positive, respectively. While in the 30 non-pregnant women of the control group, 28(93.3%) and 1(3.33%) were CMV IgG and CMV IgM positive, respectively. The age and history of abortion were significantly associated ($p < 0.05$) with CMV IgM seropositivity. While the parity, gestational age, congenital abnormalities, educational level and occupation were not significantly ($p > 0.05$) associated with CMV infection.

ملخص الاطروحة

اجريت هذه الدراسة لتحديد الانتشار المصلي لفيروس مضخم الخلايا وسط الحوامل بمستشفى التوليد بأم درمان. شملت الدراسة مائة وثلاثون امرأة (130). مائة منهن كن نساء حوامل اتين لعيادات رعاية الحوامل بمستشفى الولادة بامدرمان للرعاية الطبية وباقي العدد ثلاثين (30) كن نساء سليماً ظاهرياً لم تجهضن من قبل ولم تجربن نقل دم سابق ادرجن في الدراسة كمجموعة ضابطة للاختبار. اعمار كل النساء اللاتي اختبرن كانت تتراوح ما بين 17 الى 42 سنة.

تم جمع المعلومات الشخصية والطبية عن طريق الاستبيان بعد موافقتهم الشفوية ومن ثم اخذت العينات وفحصت لمعرفة احتوائها على اجسام مضادة من النمط IgG والنمط IgM لفيروس مضخم الخلايا باستخدام اختبار الإليزا.

من مجموع 100 من النساء الحوامل 97 منهن (97%) كانت لديهن اجسام مضادة من النمط IgG و 7 منهن (7%) كانت لديهن اجسام مضادة من النمط IgM، بينما في مجموعة النساء الضابطات للاختبار غير الحوامل (28) منهن (93.3%) اعطين نتائج ايجابية للنمط IgG وواحدة منهن (3.33%) اعطت نتيجة ايجابية للنمط IgM لفيروس مضخم الخلايا.

كانت هنالك علاقة ذات دلالة احصائية (القيمة الاحتمالية أقل من 0.05) بين كل من تاريخ الاجهاض وعمر النساء الحوامل من جهة ومعدل ايجابية الاجسام المضادة من النمط IgM لفيروس مضخم الخلايا من الجهة الاخرى.

وجد في هذه الدراسة ان كل من عدد مرات الوضع ,عمر الحمل ,المستوى التعليمي ,وجود اطفال ذوى تشوهات خلقية والوظيفه ليست لها علاقة ذات دلالة احصائية (القيمة الاحتمالية أكبر من 0.05) بالاصابه بفيروس مضخم الخلايا.

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ABBREVIATIONS

AIDS	Acquired immunodeficiency syndrome
CMV	Cytomegalovirus
COV	Cut-off value
CPE	Cytopathic effect
EBV	Epstein-Barr virus
EIA	Enzyme Immunoassay
ELISA	Enzyme-Linked Immunosorbent Assay
HAART	Highly active antiretroviral therapy
HCMV	Human cytomegalovirus
HFFF	Human fetal foreskin fibroblast
HHV-5	Human herpesvirus 5
HHV-6	Human herpesvirus 6
HHV-7	Human herpesvirus 7
HIV	Human immunodeficiency virus
HSV	Herpes simplex virus
PCR	Polymerase chain reaction
pp65	Phosphoprotein 65
RF	Rheumatoid factor
SCT	Stem cell transplantation
SOT	Solid-organ transplantation
SPSS	Statistical Package of Social Sciences
TLRs	Toll-like receptors
TMB	Tetramethylbenzidine