

الآية

قال تعالى:

﴿وَرَفَعَ أَبَوَيْهِ عَلَى الْعَرْشِ وَخَرُّوا لَهُ سُجَّدًا وَقَالَ يَا أَبْتِ هَذَا تَأْوِيلُ رُؤْيَايَ مِنْ قَبْلُ قَدْ جَعَلَهَا رَبِّي حَقًّا وَقَدْ أَحْسَنَ بِي إِذْ أَخْرَجَنِي مِنَ السِّجْنِ وَجَاءَ بِكُمْ مِنَ الْبَدْوِ مِنْ بَعْدِ أَنْ نَزَغَ الشَّيْطَانُ بَيْنِي وَبَيْنَ إِخْوَتِي إِنَّ رَبِّي لَطِيفٌ لِمَا يَشَاءُ إِنَّهُ هُوَ الْعَلِيمُ الْحَكِيمُ﴾

سورة يوسف: الآية ﴿١٠٠﴾

DEDICATION

**To my mother, father,
brothers, sister
and
my friends**

ACKNOWLEDGEMENT

Thanx to Almighty Allahforgiving me the strength and grace to successfully complete this work. I would like to express my gratitude to everyone who has made it possible to reach the final point of this work. I would like to express my gratitude to my supervisor **Prof. Humodi Ahmed Saeed**,for his useful suggestion, dedication and generous support in all stages of this work. I am grateful for his valuable scientific advice, constructive criticism, encouragement, deep commitment and guidance throughout the study.

I would also like to express my sincere and deepest gratitude to **Dr. Thiga Eljuzouly**for her support in talking to the respondents and assisting me in obtaining the informed consent from the participants and collecting the specimens.

I would like also to offer my gratitude to **Eltaib Alhaj** who supported and helped me to extract the results practically.

Last but not least, thanks foranyone who contributedto the success of this work by any means of assistance from the starts to the final touch.

ABSTRACT

Herpes simplex-2 virus (HSV-2) infection in pregnant women can result in undesirable neonatal outcomes. This is a cross-sectional study conducted to determine the prevalence of HSV-II among pregnant women in different Sudanese hospitals in Khartoum State. The study was carried out during the period from February to May 2016.

A total of 92 pregnant women attending some hospitals were enrolled in this study. Sociodemographic data were collected by questionnaire. Three ml of blood was collected from each pregnant woman. The blood was dispensed into an EDTA container. Plasma was obtained by centrifugation and gently transferred to a plane container and stored at – 20°C until the serological analysis. The plasma were examined for the presence of Herpes simplex virus type-2 (HSV-2) using enzyme linked immunosorbent assay (ELISA).

Of the enrolled pregnant women 41(44.6%) were with a history of abortion, 51(55.4%) without any history of abortion. The result showed that out of 92 blood specimens investigated, 7 (7.6%) were positive for HSV-2 IgG antibodies. Of the positive blood specimens 2 (4.8%) were obtained from pregnant women with a history of abortion and 5 (9.8%) from pregnant women without history of abortion. Of the positive cases (7), 5 (71.4%), in the third trimester, 1(14.3%) in each of the first and second trimesters.

The study concluded that the seroprevalence of HSV-2 among pregnant women in Khartoum State was low. Further studies with a large number of specimens and more advanced technique are required to validate the results of the present study.

المستخلص

فيروس الهربس أوالحلأ البسيط "2" يصيب النساء الحوامل يمكن أن يؤدي إلى نتائج غير مرغوب فيها في الأطفال حديثي الولادة. هذه دراسة مقطعية أجريت لتحديد مدى إنتشار فيروس الحلأ البسيط بين النساء الحوامل المترددات على بعض المستشفيات السودانية المختلفة ، ولاية الخرطوم . وقد أجريت هذه الدراسة خلال الفترة من فبراير إلى مايو 2016.

اشتركت في هذه 92 من النساء الحوامل المترددات على بعض المستشفيات لهذه الدراسة. تم جمع البيانات الاجتماعية والديموغرافية بواسطة الإستبيان. تم جمع ثلاثة مليمترات من عينة دم من كل امرأة حامل ومن ثم تفريغ الدم في وعاء . ثم الحصول على البلازما بواسطة جهاز الطرد المركزي و نقلها بلطف في وعاء خال من أي المضادات للتجلط ومن ثم تخزينها في - 20 درجة مئوية حتى التحليل المصلي.

تم فحص البلازما لوجود الهربس البسيط نوع الفيروس الثاني باستخدام تقنية إنزيم المناعي المرتبط (إلزا).

من النساء الممرجات 41 (44.6%) حاملًا ولها تاريخ من الإجهاض، 51 (5.4%) من دون أي تاريخ من الإجهاض.

وأظهرت النتيجة أن أصل 92 عينة تم فحصها، 7 (7.6%) كانت ايجابية للأجسام المضادة لفيروس الحلأ البسيط "2". من عينات الدم الإيجابية التي تم الحصول عليها 2 (4.8%) من النساء الحوامل الذين لديهم تاريخ من الإجهاض و 5 (9.8%) كانت إيجابية من النساء الحوامل دون تاريخ من الإجهاض. من عينات الدم الإيجابية (7)، النساء الحوامل في المرحلة الثالثة من الحمل 9 (71.4%) ، 1 (14.3%) للنساء الحوامل في المرحلة الأولى والثانية.

لخصت الدراسة أن الإنتشار المصلي لفيروس الحلأ البسيط النوع الثاني بين النساء الحوامل في ولاية الخرطوم كان منخفضا. ويلزم إجراء مزيد من الدراسات مع عدد كبير من العينات وتقنية متقدمة للتحقق من صحة نتائج هذه الدراسة.

ABBREVIATIONS

GUD: Genital ulcer disease

HSV-2: Herpes simplex virus type 2

HIV: Human immunodeficiency virus

HSV-1: Herpes simplex virus type 1

IgG: Immunoglobulin G

IgM: Immunoglobulin M

STI: Sexually transmitted infection

VZV: Varicella zoster virus

ORFs: Open reading frame

U_L: Long unique region

U_s : Short unique region

TRL & RIL:Terminal and internal repeats of the long unique sequence

TRS & IRS:Terminal and internal repeats of the small unique sequence

IE: Immediate early gene

LAT: latency-associated transcript gene

DRG: Dorsal root ganglia

HVEM: Herpes virus entry mediator

TNFR: Tumor necrosis factor receptor

CNS: Central nervous system

PCR: Polymerase chain reaction

IF: immunofluorescence

EIA: Enzyme immune assay

IVAG: Intra vaginal vaccine

CDC: Center for Disease Control and Prevention

GP: Glycoprotein

ELISA: Enzyme linked immunosorbent assay

EDTA: Ethylene Diamine Tetra Acetic acid

TMB: Tetra Methylene Benzidine

TABLE OF CONTENTS

..... الآية.....	I
Dedication.....	II
Acknowledgement.....	III
Abstract (English).....	IV
Abstract (Arabic).....	V
Abbreviations.....	VI
Table of contents.....	VIII
List of tables.....	XII

CHAPTER ONE

INTRODUCTION AND OBJECTIVES

1. Introduction.....	1
1.2. Rationale.....	3
1.3. Objectives.....	3

CHAPTER TWO

LITERATURE REVIEW

2.1. Background.....	4
2.2. Taxonomy.....	5
2.3. Structure and composition.....	5
2.4. Replication.....	6
2.5. Transmission and acquisition.....	7
2.6. Pathogenesis.....	7
2.7. Latency and reactivation.....	8
2.8. Epidemiology.....	9
2.9. Clinical significance.....	9
2.10. Laboratory diagnosis.....	11
2.10.1. Specimens.....	11
2.10.2. Viral isolation in cell culture.....	12
2.10.3. Antigen detection.....	12
2.10.4. Nucleic acid detection.....	13
2.10.5. Serological tests.....	13
2.11. Prophylaxis of HSV-2 infection.....	14
2.12. Vaccination.....	15

2.13. Therapy.....	16
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CHAPTER THREE

MATERIALS AND METHODS

3.1. Study design.....	17
3.1.1. Type of study.....	17
3.1.2. Study area.....	17
3.1.3. Study duration.....	17
3.1.4. Study population.....	17
3.1.5. Data collection.....	17
3.2. Sampling size.....	18
3.3. Ethical consideration.....	18
3.4. Laboratory methods.....	18
3.4.1. Collection of blood specimens.....	18
3.4.2. Specimen processing.....	18
3.4.3. Analysis of specimens.....	18
3.3.4. Principle of HSV-2 IgG ELISA.....	19
3.4.5. Procedure.....	19
3.4.6. Quality control and calculation of the results.....	20
3.4.7. Interpretation of results.....	20
3.5. Data analysis.....	20

CHAPTER FOUR

RESULTS

4.1. Results.....	21
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CHAPTER FIVE

DISCUSSION

5.1. Discussion.....	25
5.2. Conclusion.....	26
5.3. Recommendations.....	26
- References.....	27
- Appendix.....	34

LIST OF TABLES

Table 1. Distribution of pregnant women according to the hospitals.....	22
Table 2. Frequency of HSV-2 among all participants.....	22
Table 3. Frequency of HSV-2 according to the gestational stage.....	23
Table 4. Frequency of HSV-2 according to the history of abortion.....	23
Table 5. Frequency of HSV-2 according to the age group.....	24

