

بسم الله الرحمن الرحيم

: 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)

صدق الله العظيم

سورة البقرة الاية 255

DEDICATION

To the nonstop love river the source of graciousness and the continuous giving ...

my affectionate MOM

To the grate force that showed me this way, this way which leads to my success and happiness ...

my compassionate Dad

To my best friend who has been a constant source and encouragement during the challenges of the life...

my husband

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My greatfull thanks to Almighty ALLAH who gave me health and power to finish this work.

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ABSTRACT

The main aim of this study was to serodetect of west Nile Virus (WNV) among febrile patients at Wad Madeni Teaching Hospital . The present study was carried out during the period from July 2013 to September 2014.

Ninety one febrile patients attended to Wad Madeni Teaching Hospital were enrolled in this study. 23(25.3%) were males while 68(74.7%) were females. The ages of the patients ranged from 11-78 years.

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

Thirty two (35.2%) were positive for anti-WNV IgG while 12(13.2%) were positive for anti-WNV IgM. Based on gender 23(25.3%) were males while 68(74.7%) were females. 2 males (2.2%) and 10 female (11%) were anti-WNV IgM positive. Out of 32 IgG positive it was found that 5 males (5.5%) and 27 female (29.7%) were anti-WNV IgM positive . As for patients residence, 55(60.4%) were localized in rural area while 36(39.6%) were localized in urban area.

The age, residence and distribution among males and females were not significant($p > 0.05$) risk factor to induce WNV IgG and IgM seropositivity. While the contact with birds were found significantly ($p < 0.05$).

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ملخص الدراسة

الهدف الرئيسي من هذه الدراسة هو الكشف المصلي للأجسام المضادة لفيروس حمى غرب النيل عند المرضى المصابين بالحمى باستخدام جهاز يعتمد على نظرية التقارب اللوني لتحديد الأجسام المضادة من النمط . تم جمع 91 عينة دم من مرضى يعانون من الحمى حضروا إلى مستشفى ومعدني التعليمي. في الفترة ما بين يوليو 2013 الى سبتمبر 2014. أعمار الأشخص الذين اختبرت لصالهم كانت تتراوح ما بين 11الى 78 سنة.

تم جمع المعلومات الشخصية والطبية عن طريق الاستبيان بعد موافقتهم الشفوية ومن ثم أخفت العينات وفحصت . لفيروس غرب النيل **IgM** و النمط **IgG** المعرفة احتوائها على أجسام مضادة من النمط

بينما وجد . **IgG** من بين 91 مريض وجد ان 32مريض (35.2%) كانت لديهم أجسام مضادة من النمط **IgM**. ان 12 مريض (13.2%) لديهم أجسام مضادة من النمط

كانت هناك علاقة ذات دلالة إحصائية (القيمة الاحتمالية اقل من 0.05) بين الاتصال بالطيور من جهة ومعدل .ايجابية الأجسام المضادة من النمطين لفيروس غرب النيل

كما انه لا توجد فروقت ذات دلالة إحصائية بين وجود الأجسام المضادة من النمطين وممكن العيش،النوع و،العمر (القيمة الاحتمالية اكبر من 0.05).

أوصت الدراسة بأهمية الكشف عن فيروس غرب النيل في المرضى الذين لديهم حمى غير معروفة السبب أو أعرض في الجهاز العصبي خصوصا في موسم البعوض

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ABBREVIATIONS

Alferon	Alpha-interferon
CAL	Calibrator
CDC	Centers for Disease Control and Prevention
CNS	Central nervous system
COV	Cut-off value

DENV	Dengue virus
EIA	Enzyme Immunoassay
ELISA	Enzyme-linked immunosorbent assays
HI	Haemagglutination inhibition
HRP	Horseradish peroxidase
JEV	Japanese encephalitis
MAb	Monoclonal antibody
MAC-ELISA	Captureenzyme-linked immunosorbent assay
N	Negative control
NAT	Nucleic acid testing
NIAID	National Institute of Allergy and Infectious Diseases
P	Positive control
PRNT	Plaque reduction neutralisation test
RT-PCR	Real-time polymerase chain reaction
SPSS	Statistical package for social science
TBEV	Tick-borne encephalitis viruses
TMB/H₂O₂	Tetramethylbenzidine/hydrogen peroxide
VN	Virus neutralization
WNF	West Nile fever
WNME	West Nile meningoencephalitis
WNV	West Nile Virus

YFV

Yellow fever