

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قال الله تعالى

وَمَا لِأَحَدٍ عِنْدَهُ مِنْ نِعْمَةٍ تُجْزَى (19)
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صدق الله العظيم

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Dedication

...To Amna,

***My mothermy first
teacher.***

...To Gaffer,

My fathermy hero.

To my brother, sisters and friends,

***To all those unbelievable
persons***

***I' am trying
to say thank you.***

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ملخص البحث

هذه دراسة وصفية تحليلية أجريت فى قبيلة المناصير السودانية بالولاية الشمالية بقرى المهجرين فى أمرى الجديدة بمحافظة مروى ,القرى (2و3و4). هدفت الدراسة لتحديد نسب تردد الأليل والشكل الظاهرى لزمر الدم ABO والعامل الريسى (Rh factor) ولتكوين قاعدة بيانات لهذه القبيلة مع بقية القبائل السودانية المختلفة. أخذت الموافقة من الأشخاص الذين سحب منهم الدم وقد تمت احاطتهم بأهداف البحث. تم تجميع مائة عينة من افراد القبيلة بحيث لا توجد بينهم صلة قرابة فى وعاء سعة 2.5 مل يحتوى على مادة (EDTA) مانعة لتجلط الدم. تم فحص جميع العينات لمعرفة الزمر الوظيفية لانتيجينات ال((ABO بطريقة الشريحة و للعامل الريسى باستخدام طريقة حديثة تسمى جل (مانعة النفاذية) وكذلك بطريقة الشريحة ومن ثم تم تحديد الزمر الوظيفيه والشكل الظاهرى لكل عينة . لقد تم تحليل البيانات بواسطة برنامج تحليل الحزم الاحصائية وتم تحديد التشابة بين القبائل باستخدام قانون جاكرد للتشابة . المعلومات الظاهرية التى تحصلت هى نسبه كل اليل. اظهرت الدراسة ان الزمرة الوظيفية O هي الاكثر تردداً(50%) تليها A(18%) , B (28%) واخيراً AB(4%). كذلك وجد ان الانتجينات D , c , e . هي الانتجينات صاحبه التردد الاعلى حيث كان ترددها هو 91% , 91% , 98% على التوالي اما الانتجينات E , C . فقد كانت الاقل ترددا حيث كان ترددها هو 52% , 27% .

اوضحت الدراسة وجود تشابة بين هذه القبيلة بعض القبائل ووجود اختلاف مع قبائل اخرى.

Abstract

This is descriptive and cross-sectional study which took place in northern state of Sudan in amree algadida villages (Villages 2, 3, 4). The study aimed to determine the frequencies of ABO & Rhesus blood group antigens and phenotypes among Almanaseer tribe. ABO& Rhesus blood group baseline data for this tribe could be established and compare with other Sudanese tribes.

This study was conducted during the period of three months; between April and July, 2007. Following informed consent, a total of one hundred venous blood samples were collected from unrelated individuals into 2.5 mls EDTA containers. The red blood cells were tested for ABO by the slide agglutination techniques & common Rhesus antigens by the Particle gel immune diffusion and 30% of specimens were tested by the slide agglutination techniques. The alleles and frequencies were determined. Results were analyzed by SPSS program and the similarities were determined by using jaccard Rule.

The antigen O was the most common antigen among the study group (50%), followed by B (28%), A (18%), and the least common antigen was AB (4%).

The e, c and the D genes were the commonest alleles detected with frequencies of 98%, 91% and 91% respectively. The C antigen and the E antigen were the least frequent with 52% and 27% frequencies respectively. Similarities between Almanaseer and some Sudanese populations and differences with others were noticed.

LIST OF ABBREVIATIONS

➤CPD-A	Citrate phosphate dextrose – adenine
➤cDNA	Cytoplasmic Deoxyribonucleic acid
➤C	Cytosine
➤DNA	Deoxyribonucleic acid
➤EDTA	Ethyle diamine tetra acetic acid
➤Fue	Fucose
➤Gal	Galactose
➤HDN	Hemolytic disease of the newborn
➤HBsAg	Hepatitis B surface Antigen
➤HCV	Hepatitis C Virus
➤HIV	Human immunodeficiency virus
➤ID	Immuno-diffusion
➤IgG	Immunoglobulin G
➤IgM	Immunoglobulin M
➤IAT	Indirect antiglobulin test
➤ISBT	International society of blood transfusion
➤LISS	Low ionic strength solution
➤mRNA	messenger Ribonucleic Acid
➤PCR	Polymerase chain reaction
➤RBCs	Red blood cells
➤Rh	Rhesus blood group system
➤SPSS	Statistical Package for Social Science
➤T	Thymine
➤UK	United Kingdom
➤USA	United States of America

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