

Dedication

To my parents

The sun and moon which give light to my life
so I can see the way.

To my sisters, brothers and Yasir

The stars which make the world a beautiful
place for living in the future and today.

Acknowledgment

My thanks and gratitude to my supervisor:

Ust. Malik Hassan Ibrahim Mustafa

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هذه الدراسه اجريت فى قبيلة البقاره في الفترة ما بين 15\5\2005 الي 19\5\2005 لتحديد نسبة النمط الظاهري لمستضدات الزمر الدمويه الريصيه و (ABO) فى هذه الـقبيله. و قد تم تجميع 100 عينه فى 100 وعاء يحتوى كل منهم على ماده مانعه لتجलط الدم. وتم فحص العينات باستخدام طريقة الشريجه الزجاجيه؛الأنبوب؛الكروت مانعـتـ النـفـاذـيـهـ. حـلـلتـ الـبـيـانـاتـ باـسـتـخـدـامـ الـحـاسـوبـ عنـ طـرـيقـ بـرـنـامـجـ الرـزـمـهـ الإـحـصـائـيـهـ لـلـعـلـومـ الـإـجـتمـاعـيـهـ.

تبين أن الفصيله الشائعه فى نظام الزمره الدمويه (ABO) هـى (O) والتى تمثل (50٪) ثم تليها (A) بنسبة (26٪)، (B) بنسبة (20٪)، واخيرا (AB) بنسبة (4٪). أما فى نظام الزمره الدمويه الـريـصـيـهـ فقد وـجـدـ انـ نـسـبـةـ العـاـمـلـ الـرـيـصـىـ السـالـبـ هوـ (10٪)، وـالـعـاـمـلـ الـرـيـصـيـ الـمـوـجـبـ (90٪)، المستضـدـ (c) وـ (e) بـنـسـبـةـ (100٪)، (C) يـمـثـلـ (31٪) وـ (E) يـمـثـلـ (15٪).

أعلى نمط ظاهري لنظام الزمره الدمويه الـريـصـيـهـ هوـ (cDe) والـذـىـ يـمـثـلـ (48٪)، يـلـيـهاـ (CcDe) والـذـىـ يـمـثـلـ (27٪)، ثمـ (cDDe) بنسبةـ (12٪)، (cde) والـذـىـ يـمـثـلـ (9٪)، (CcDEe) بنسبةـ (3٪) وـ اـخـيـراـ (Ccde) والـذـىـ يـمـثـلـ (1٪).

كتوصيه يمكن اجراء دراسات مـسـتـ قـبـيلـهـ فىـ عـدـدـأـثـرـ منـ الـعـيـنـاتـ وـفـىـ قـبـائلـ اـخـرىـ لمـعـرـفـتـ أـكـثـرـ نـمـطـ ظـاهـرـىـ لـنـظـامـ الزـمـرـهـ الدـمـوـيـهـ الـرـيـصـيـهـ فـىـ السـوـدـانـ.

Abstract

This study was performed in Elbagara ethnic group in the period between 15/5/2005-15/9/2005. One hundred samples were collected in EDTA containers to determine the frequencies of ABO and Rhesus phenotypes and Rhesus gene complexes. Blood samples were tested by the slide method, tube method, and ID-card method. The results were analyzed using the SPSS software program.

In the ABO blood group system the highest frequency was group O (50%), then group A (26%), followed by group B (20%), and group AB (4%).

The most frequently occurring antigens of the Rhesus blood group system were found to be c and e (100%), followed by D (90%), C (31%), and finally E (15%).

The most frequently phenotype in the Rhesus system was found to be cDe (48%), followed by CcDe (27%), cDEe (12%), cde (9%), CcDEe (3%), and Ccde (1%) respectively.

Thirty samples were tested by both the slide and ID-card technique to make a comparison between the two methods and the same results were obtained.

The conclusion: Rh-E negative antigen was detected in 85% of Bagara individuals, Rh-C negative antigen in 69%, Rh-D negative in 10%.

The recommendation: Future studies should be done using a larger number of samples on other tribes in Sudan to determine the most common Sudanese genotypes.

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