Frequency of ABO & Kell Blood Group Antigens & Phenotypes Among ALmanaseer Sudanese Ethnic Group

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يا سَمِ اللهِ الرَّحَمِنِ الرَّحِيمِ
قال الله تعالى
وَاتَّقُوا اللهَ وَيَعِلْمُكُمُ اللهُ وَاللَّهُ يَكْلِلُ شَئَ عَلَیمُ
صدق الله العظيم
سورة البقرة الآية 282
This work is dedicated to

• The one who suffers a lot in helping me kindly and encouraged me. The king of my heart……my precious husband…. **Mohammed Sideeg.**

• Those who lit my path through the darkness of life and saw through my first steps of learning

• My father and mother

• My brothers and sisters

• My kids.

• My teachers and friends.
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Lastly all love to my family.
ملخص البحث

تم إجراء هذه الدراسة في قبيلة المناصير بشمال السودان لتحديد نسبة الأنتيجينات للأنظمة الدموية ABO, KELL في بعض الأشخاص الصحية. تم جمع 100 عينة من الدم الوريدي في وعاء دم سعة 2.5 مل يحتوي مانع تجلط (EDTA) من الجنسين (59 ذكور/41 أنثى) ليرتبطون بصلة قرابة من قبيلة المناصير تم فحصها باستخدام مضادات الامصال لنظام (KEL) وتقنية الانتشار الهلامي (جل) لنظام (ABO). تم ادخال المعلومات والنتائج في الكمبيوتر ومن ثم تحليلها باستخدام نظام التحليل الإحصائي SPSS. أظهرت النتائج المتحصلة في الدراسة أن نسبة توزيع زمر الدم التابعة لنظام ABO كالآتي: نسبة زمرة A 23% ونسبة زمرة B 18% ونسبة Zمرة O 56% ونسبة زمرة AB 3% ونسبة Zمرة K1 73% ونسبة Zمرة K2 96%. وقد أثبتت الدراسة أن THERE IS NO SIGNIFICANT INCREASE IN THE FREQUENCY OF THE ANTIGENS BETWEEN THE GENDER (MALES AND FEMALES). تم مقارنة النتائج المتحصل عليها مع نتائج بعض القبائل السودانية الأخرى وأظهرت المقارنة التوافق مع بعض القبائل (مثل الشلوك) وعدم التوافق مع البعض الآخر.
Abstract

This community-based prospective and analytical study was carried out among Almnaseer tribe in northern Sudan during 6-8/2007 and aimed to determine the frequencies of ABO and Kell phenotypes. Hundred samples were collected into EDTA blood containers (2.5ml) from unrelated donors of both sexes (59 males & 41 females) of Almnaseer individuals; all samples were investigated by direct agglutination ABO and Gell technique to detect Kell system phenotypes (k₁, k₂). Data were analyzed by the computer using SPSS program. The results showed that the frequency of A blood groups was 23%, B 18%, O 56%, and AB 3%. The frequency of Kell (K₁) antigen was (+ve 73%, -ve 27%) and K₂ antigen was (+ve 96%, -ve 4%). The study showed that there is no statistical significant association between the occurrence of Kell phenotypes (K₁, K₂) and gender, as well as phenotype of ABO blood group.

The results obtained were compared with results of other Sudanese tribes which showed agreement with some (such as Alshuluk tribe) and disagreement with others.