

Dedication

**To our parents who always loved us and
who are**

**Supporting and fill us with wishes, who
are feeding our**

**Souls by kindness and
encouragement.**

To our brothers and sisters

To our friends and colleagues

To the people who are help us, to

Perform this work.

**To the people, we are always loved and
to those who**

Are forever loved us..

Acknowledgement

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Abstract

This is a cross-sectional prospective study which was done during the period of January to April 2010. It was conducted to establish the frequency of ABO, Rh and Kell (k1, K2) blood group system antigens among apparently healthy Alrufaen tribe individuals.

Hundred individuals (64 male and 36 female) were selected according to certain criteria and interviewed using questionnaire form.

Venous blood samples were collected from them and analyzed using conventional antisera and statistical package for social science (SPSS) computer program was used for data entry and analysis.

The results obtained showed that the frequency of ABO blood group antigens the most common is O (53%), A (26%), B (15%) and AB is (6%).

The frequency of Rhesus antigen was D (96%), E (18%), C (72%), e (94%) and Rhesus c was (77%).

The Kell-2 frequency was found to be (100%), while Kell-1 was (1%).

ملخص الدراسة

اجري هذا البحث التوقيعي العرضي خلال الفترة من شهر يناير وحتى شهر ابريل 2010 وهو لتحديد نسبه المستضدات الخاصة بلا نظمه في الأشخاص الأصحاء ظاهرياً (K1, K2), Rh , ABO الدموية . السودانين من قبيلة الرفاعيين .

تم اختيار 100 شخص (64 ذكور و 36 إناث) علي حسب مواصفات معينة بعد أن تم إخضاعهم لاستبيان خاص ومن ثم تم اخذ عينات من الدم الوريدي للفحص المعملّي، ثم حللت هذه العينات باستخدام مضادات الأمصال الروتينية وتم إدخال وتحليل كل المعلومات المضمنة في الاستبيان ونتائج تحليل الدم بنظام ألحزمه الاحصائية للعلوم الاجتماعية بواسطة جهاز الحاسوب (spss)

: أظهرت النتائج المتحصلة في الدراسة أن

A كالتالي: نسبة توزيع زمر ABO نسبة توزيع زمر الدم التابعة لنظام A (%). كان 6 AB وتوزيع زمرة O (53%)، زمرة B (15%)، زمرة (26%)

كالتالي: Rhesus ومنها أظهرت أن نسبة توزيع زمر الدم التابعة لنظام وكانت زمرة e (94%)، C (72%)، E (18%)، D (96%) توزيع زمرة c (77%).

كالتالي: نسبة توزيع زمرة Kell وكان نسبة توزيع زمر الدم التابعة لنظام (%). كانت (100 K2 ونسبة توزيع K1 (1%)

List of abbreviation

Abbreviation	Name
Deoxy ribonucleic acid	DNA
Ethylene diamine tetra acidic acid	EDTA
Endothelin	ET
Fucose	Fuc
Fibroblast growth factor	FGF
Galactose	Gal
Hemolytic transfusion reaction	HTR
Hemolytic disease of new born	HDN
Immunoglobulin G	IgG
Immunoglobulin M	IgM
Indirect immuogloblin test	IAT
International society of blood transfusion	ISBT
KEL6	JS ^a
KEL7	JS ^b
Kell-1	K-1
Kell-2	K-2
Kell-3	Kp ^a
Kell-4	Kp ^b
Kilo Dalton	KD
KEL21	Kp ^c
Low ionic strength saline	LISS
Mes anger Ribonucleic acid	mRNA
Polymerase chain reaction	PCR
KEL 27	RAZ
Red blood cells	RBCS
Rhesus	Rh
Statistic package for social science	SPSS
United kingdom	UK

United state of America	USA
KEL25	VLAN

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