

Sudan University of Science and Technology

College of Graduate Studies

Department of Haematology

**Measurement of the frequency
of ABO and Rhesus Blood Group
System Phenotypes in Al Fur
Ethnic Group**

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Dedication

To my

Mother

and

Father

Acknowledgement

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List of contents

No.	Subject	Page
1	Dedication	I
2	Acknowledgment	II
3	List of content	III
4	List of tables	V
5	List of figures	VI
6	Abstract(in English)	VII
7	Abstract(in Arabic)	VIII
8	Chapter one	
9	1. Introduction& Literature Review	1
10	2. Literature Review	3
11	2.1 History	3
12	2.2 Rh inheritance	4
13	2.3 Nomenclature& genetic theory	4
14	2.3.1 The fisher-Race nomenclature	4
15	2.3.2 The Wiener nomenclature	5
16	2.4 Rh antigens	5
17	2.4.1Rh super family genes and protiens	7
18	2.5 Discriptionof Rh blood group system in terms of asigle RhD	9
19	2.5.1 Genetic base of RhD	9
20	2.5.2 Structural configuration	9
21	2.5.3 Demonstration of RhD gene in RhD-positive& RhD-negative individuals	9

22	2.5.4 Phenotypes of RhD category	10
23	2.5.5 An unusual Rh phenotypes	11
24	2.5.6 Evans phenotype	11
25	2.5.7 Allelic variants of RhD polymorphism	12
26	2.6 The less common C variants	13
27	2.7 Rh antibodies	13
28	2.7.1 Naturally occurring antibody	14
29	2.7.2 Immune antibodies	15
30	2.8 Disease associated with Rh system	17
31	2.8.1Heamolytic transfusion reaction	17
32	2.8.2Rh Heamolytic disease of new born	18
33	2.9 Previous studies	20
34	2.10 ABo antigens	22
35	2.10.1 Numbers of A, B, and H antigen sites on red cells	23
36	2.10.2 Oh, Ah, Bh red cells	24
37	2.10.3 Development ofTHE A,B,&H antigens	24
38	Chapter two	
39	Objectives	
40	General objectives	30
41	Specific objectives	30
42	Chapter three	
43	Materials &methods	
44	3.1Study design	31
45	3.2 Study population	31
46	3.3 Study area	31
47	3.4 Sampling technique	31
48	3.5 Sample size	31
49	3.6 Ethical consideration	32
50	3.7 Apparatus& procedures	32
51	3.7.1 Equipment	32

52	3.7.2 Reagent	32
53	3.7.3 Principle of Rh - typing	33
53	3.7.4 Principle of indirect coomb's test	33
54	3.7.5 ABO grouping	35
55	3.8 Quality control	35
56	Chapter four	
57	Results	37
58	Chapter five	
59	Discussion	44
60	Conclusion	46
61	Recomondation	46
62	Appendix	47
63	References	48

List of tables

Table No.	Title	Page
1	Number and percentage of Rh phenotypes in relation to gender	41
2	Number and percentage of the occurrence of D antigen in relation to other Rh antigens	42
3	Correlation between the expression of ABO AND Rh antigens	43

List of Figures

Figure No.	Title	Page
1	The percentage of males & females included in the study	37
2	RhD +ve & RhD –ve individuals among the studied population	38
3	Frequency of the occurrence of Rh antigens among EL-fur tribe(2005)	39
4	Frequency of the occurrence of ABO phenotypes	40

Abstract

The intent of this study is to determine the frequency of Rh and ABO blood groups among El-four tribe who live in Khartoum State. One hundred individuals (77males & 23 females) were investigated by the direct agglutination test and indirect antiglobulin test whenever the presence of D^u was suspected.

The results showed that antigens *e* and *c* was fully expressed (100%) while antigens *E* and *C* were poorly expressed. The most common Rh phenotypes were ccDee and *CCdee* while the phenotype *CcDEe* was the rarest.

The study concluded that the expression of all Rh antigens illustrates the resurgence of considering this blood group system in compatibility testing in blood transfusion practice. Therefore, it was recommended to apply Rh compatibility testing in all blood banks in Sudan

ملخص الاطروحة

تهدف هذه الرسالة الى ايجاد نسبة فصائل الدم عند قبيلة الفور الذين يسكنون فى الخرطوم وهذه الفصائل معبرا عنها بالشكل الظاهري وكذلك بعض المستضدات (ABO) وجهاز الـ (Rh) تتبع للجهاز اليربصى ل قد اجريت هذه الدراسة على مئة شخص بينهم 77 ذكور و 23 اناث حيث اخذت منهم . DU النادرة مثل : عينه دم وربدى تم فحصها وكانت النتيجة
CCDEe وتمثل 90% بينما الطراز الظاهري الا قل شيوعا هو CCDee الطراز الظاهري الاكثر شيوعا هو : وتمثل 1% توزيع مستضدات العامل اليربصى كالاتى
D 96% C 100% e 100% C 6% E 5%
ABO وتوزيع مستضدات جهاز الـ