Dedication

To the soul of my mother
To my dear father, brothers and
sisters
To my beloved wife
To my kind colleagues and friends
• • • • • • • • • • • • • • • • • • • •
I dedicated this work.

Acknowledgement

I would like to express my sincere thanks to my supervisor D.Munsoor Mohammed Munsoor for his efforts supervision and guidance during the course of this project. He is unlimited help and valuable comments and suggestions are highly appreciated. My grateful thanks also extend to D.Amar Obubaker for his constant care, valuable advice and assistant.

Abstract

This is descriptive study, aimed at determining the frequency of Rh antigens (C, D, c, E, and e) and kell1among sickle cell patients. The study was conducted during approximately four months (from February 2010 to july2010), an informed consent was obtained from all patients a total of forty venous blood samples were collected from sickle cell patients in a 2.5 ml EDTA containers .All samples were tested for Rh D antigen using the slide agglutination techniques, and the same samples tested for Rh C, c, E, e, and kell1 antigens by immunodifusion gel technique. The antigens were determined.

The results obtained showed that, the **c** antigen was most common frequency (100%), followed by **D** antigen occurred (90%), **e** antigen was(82.5%), and the least common in Rhesus system were antigen **C** (67.5%), and **E** (80%).

The **kell1** antigen was the least frequent and constitute (10%).

هذه دراسة وصد فية أجريت فى مرضى الأنيميا المنجلية هدفت لتحديد نسب تردد فى مرضى الأنيميا المنجلية . أيضا الدراسة هدفت لتحديد (D, C, c, E,e) الأنتجينات فى مرضى الأنيميا المنجلية التى لها أهمية فى عمليات kell1 نسبة تردد الأنتجين

. نـ قل الدم

ل قد أستغر قت الدراسة أربعة شهور , أخذت الموافقة من الأشخاص الذين سحب منه م الدم و قد تم احاطتهم بأهداف البحث . تم تجميع العينات من أربعين مريض فى وعاء تم فحص جميع العينات . (EDTA) سعة 2.5 مل يحتوى على مادة مانعة لتجلط الدم بأستخدام طرد قة الشريحة . ونفس العينات فحصت بطرد قة (D) لمعرفة الأنتجين kell ، والأنتجين (C, c, E,e) تسمى جل (مانعة النفاذية) لتحديد الأنتجينات

هى اللَّك ثر شيوعا (%100). ويليها c وأظهرت نتائج الدراسة أن نسبة تردد الأنتجين c (82.5%) و قد كانت الأنتجينات c ثم (82.5%) و قد كانت الأنتجينات c ثم (82.5%) و قد كانت الأنتجينات c (82.5%) و قد كانت الأنتجينات c (82.5%) و قد كانت الأنتجين (67.5%) هو الأقل ترددا بنسبة c (82.5%) هي أقل ترددا في النظام الريصي الأنتجين (67.5%) (80.5%).

LIST OF ABBREVIATION

Item	Abbreviation
Rhesus.	Rh
Sickle cell disease.	SCD
Hemoglobin.	Hb
Kell.	K
Delayed hemolytic transfusion reaction.	DHTR
Hemolytic disease of the new born	HDN
Hemolytic transfusion reaction	HTR
Red blood cells	RBCs
Antibodies	Abs

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