

## الآية

( وَقُلْ اَعْمَلُوا فَسَيَرَى اللّٰهُ عَمَلَكُمْ وَرَسُولُهُ وَالْمُؤْمِنُونَ وَسَتُرَدُّونَ اِلٰى عَالَمِ  
الْغَيْبِ وَالشَّهَادَةِ فَيُنَبِّئُكُمْ بِمَا كُنْتُمْ تَعْمَلُونَ )

صدق الله العظيم

التوبة : الآية 105

## *Dedication*

*To my mother*

*To my father*

*To my brothers*

*To my sister*

*To my friends*

*And my colleagues*

*I dedicate this work with my best wishes to all*

## **Acknowledgment**

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## list of Abbreviations

Abbreviation	Term
Heamtocrit %	HCT%
Mean cell heamoglobin	MCH
Mean cell heamoglobin concentration	MCHC
Mean cell volume	MCV
Platelets counts	Plts counts
Red blood cell counts	RBCS count
White blood cell counts	WBCS counts



## **Abstract**

Blood transfusion is the process of referring blood or blood - based products from one person into the circulatory system of another.

Blood transfusion may treat medical condition.

This is cross section study carried in Elnehoud Teaching Hospital – Westeran Kordofan and aimed to assess effect of storage duration on some hematological parameters of CPDA-1 whole blood .

50 blood bags were collected from 50 volunteer donor after satisfaction of blood donation requirement.

Results showed statistically significant changes on all parameters (Hbg/dl, RBCs count, HCT%, MCV, MCH, MCHC, WBCs count and platelets count) p.value <0.05 when compared results on day 7, 15, 21 and 28 with day zero (time of collection).

## المستخلص

أجريت هذه الدراسة المقطعية بمستشفى النهود التعليمي – ولاية غرب كردفان في الفترة من فبراير الي يونيو 2015.

هدفت الدراسة لمعرفة تأثير فترة تخزين الدم (CPDA-1 whole blood) علي بعض قياسات الدم , وقد تم جمع عدد 50 وحدة دم من 50 متبرع طوعي بعد اجراء الفحوصات اللازمة للمتبرعين بالدم وذلك من خلال فحص الدم الشامل بواسطة جهاز الفحص الذاتي ( Sysmex KX21) وتم تحليل النتائج المتحصلة باستعمال برنامج تحليل الحزم الاحصائية (SPSS)

اشارت الدراسة الي انه يوجد انخفاض ذو دلالة احصائية في كل القياسات ( Hb,RBCs count,HCT%, MCV,MCH,MCHC,WBCs count and platelets count, والقيمة الاحتمالية 0.05 عند مقارنة قياسات اليوم السابع والخامس عشر والحادي والعشرون والثامن والعشرون من التخزين باليوم الاول من جمع وحدات الدم.