

# الآية

بسم الله الرحمن الرحيم

قال تعالى:

وَالْعَصْرِ ﴿١﴾ إِنَّ الْإِنْسَانَ لَفِي خُسْرٍ ﴿٢﴾ إِلَّا الَّذِينَ آمَنُوا  
وَعَمِلُوا الصَّالِحَاتِ وَتَوَاصَوْا بِالْحَقِّ وَتَوَاصَوْا بِالصَّابَرِ ﴿٣﴾

سورة العصر

## Dedication

To my father and my mother for support and encourages me to complete my study.

To my wife for helping me in everything in my life .

To my brothers and sisters who they didn't lift my side.

## **Acknowledgement**

My greatest and all thanks to Allah as he helped me to finish this research . He also gave me strength and good health while doing this work.

Thanks also Dr. Asma Ibrahim Ahmed, my supervisor for his kind advice, true guidance and great help.

## **Abstract**

This was a cross-sectional study carried out in Gadarif state from January 2017 to April 2017 to estimate the normal measurement of normal main portal vein diameter. For 100 normal populations. The study excluded any patient with hepatic and biliary system disease.

The data was analyzed using Standard Package of Social Science and EXCEL programmers.

and the result of study show that normal measurement of portal vein less than 13 mm, and there is no significant correlation between portal vein diameter and age and sex and other anthropometry measurement.

The study recommended more research should be done with increase duration and sample for more accurate results.

## الملخص

هذه الدراسة مقطعة وصفية لتحديد المقاس الطبيعي للوريد البابي لجسم الانسان ، اجريت هذه الدراسة في ولاية القضارف ، لعدد 100 شخص ، في الفتره بين يناير 2017 الى ابريل 2017 ، استثنينا في هذه الدراسة الاشخاص الذين لديهم اي مرض في الكبد ومجاري الهويسقة الصفراوية .

تم جمع البيانات وتصنيفها ثم تحليلها بواسطة برنامج التحليل الإحصائي.

ووجدت الدراسة أن المقاس الطبيعي للوريد السباتي اقل من 13 ملم . وان العمر و نوع الانسان والحجم والطول لا يؤثران في حجم الوريد الثباتي.

اوصلت الدراسة بعمل المزيد من البحث في هذا المجال بفترة زمنية اطول وبيانات اكثراً لنتائج افضل و ادق .

## List of Tables

<b>Table No</b>	<b>Title</b>	<b>Page No</b>
4-1	frequency distribution of population according to gender	16
4-2	show frequency distribution of population according to age	17
4-3	show frequency distribution of population according to portal vein diameter	18
4-4	statistical parameter for all population	16
4-5	statistical parameter for female population	25
4-6	statistical parameter for male population	25

## List of Figures

<b>Figure No</b>	<b>Title</b>	<b>Page No</b>
2.1	Showed Variant anatomy of portal vain	7
2.2	Diagram showing the scanning areas used to obtain the portal vain	11
2.3	Image show the normal appearance of the portal vain	12
4.1	show frequency distribution of population according to gender	16
4.2	show frequency distribution of population according to age	17
4.3	show frequency distribution of population according to portal vain diameter	18
4.4	Show correlation between Body Mass Index and Chest Circumference (C1)	20
4.5	Show correlation between Body Mass Index and portal vain	20
4.6	Show correlation between Body Mass Index and Abdominal Circumference (C1)	21
4.7	Show correlation between Age and portal vain	21
4.8	Show correlation between Age and Abdominal circumference (C1)	22
4.9	Show correlation between Age and Chest circumference (C1)	22
4.10	Show correlation between portal vain and Chest circumference (C1)	23
4.11	Show correlation between portal vain and abdominal circumference (C1)	23

## **List of Abbreviations**

Ad cir	Abdominal Circumference
BMI	Body Mass Index
CBD	Common bile duct
chest cir	Chest Circumference
CT	Computerize tomography
HCC	hepatocellular carcinoma
Min	Minimum
Max	Maximum
MRI	Magnetic resonance image
P.V	Portal vain
STD	Standard deviation

## List of Contents

No	Topic	Page
	الآية	I
	Dedication.	II
	Acknowledgement.	III
	Abstract.	IV
	Abstract Arabic	V
	List of tables.	VI
	List of figures.	VII
	List of abbreviations.	VIII
	Contents.	IX
<b>Chapter one</b>		
1-1	Introduction.	1
1-2	Problem of the Study.	2
1-3	General Objective.	2
1-4	Specific Objectives.	2
1-5	Overview of the study.	3
<b>Chapter two</b>		
2-1	Anatomy.	4
2-2	Physiology.	9
2-3	Investigation don	11
2-4	Previous studies.	13
<b>Chapter three</b>		
3-1	Materials.	14
3-1-1	Subjects.	14
3-1-2	Study area and.	14
3-1-3	Duration of study	14
3-2	Method.	15
3-2-1	Image interpretation.	15
3-2-2	Data collection and analysis.	15

<b>Chapter four</b>		
4-1	Results.	16
<b>Chapter five</b>		
5-1	Discussion.	24
5-2	Conclusion.	26
5-3	Recommendations.	27
	References.	
	Appendices A	
	Appendices B	