

الاية



صدق الله العظيم

طه (114) سورة

DEDICATION

I would like to dedicate my thesis to:

The tender man ...

My Father

The Kindest woman ...

My Mother

To my dearest friends

To everyone who participated and

Helped me in the dissertation

ACKNOWLEDGMENT

I would like to express my greatest gratitude to Prof. Duha Abdu Mohammed Abdu my supervisor,(Sudan university, faculty of radiology)for supervising this work to layout .

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Last but not least , I will never forget the unlimited assistance , support and care I got from all my family and also my deepest thanks go to them .

Abstract

The aim of this study to measure the normal range of the volume of spleen and correlate volume of spleen with body height, body weight and age. In male and female.

The volume of the spleen was measured by using CT in 55 male and 55 female, the data used in this study was collected from two hospitals in Khartoum state:

Al zaytouna Specialist Hospital, Royal Scan Diagnostic Center. In period from October 2015 to January 2016.

The result of this study shows that in female there is no relation between spleen volumes with the age, Spleen volume have direct relation with body weight, Spleen volume increase with increase the body height.

In male there is no relation between spleen volume with age and body height.

There is a relation between body weight and the splenic volume.

The result of this study showed the mean of splenic volume for Sudanese population are $165 \pm 23 \text{ cm}^3$.

Further studies in measuring spleen with larger sample of population are recommend.

الخلاصة

هدفت هذه الدراسة لقياس المدي الطبيعي لحجم الطحال ومقارنة حجم الطحال مع طول ,وزن الجسم و العمر الرجال و النساء. تم قياس حجم الطحال بأستخدام التصوير المقطعي المحوسب لعدد 55 رجل و 55 امرأة ,تم جمع البيانات المستخدمة في هذه الدراسة من مستشفين في ولاية الخرطوم :مستشفى الزيتونة التخصصي و مركز رويال اسكان التشخيصي في الفترة من اكتوبر 2015 حتي يناير 2016.

وقد اظهرت النتائج في هذه الدراسة بالنسبة للنساء لا توجد علاقة بين حجم الطحال مع العمر . وتوجد علاقة مباشرة بين

حجم الطحال مع وزن الجسم .حجم الطحال يزيد مع زيادة طول الجسم.

بالنسبة للرجال لا توجد علاقة بين- حجم الطحال مع العمر و لا توجد علاقة بين- حجم الطحال مع طول الجسم وايضا توجد علاقة بين وزن الجسم و حجم الطحال ,يزيد حجم الطحال مع زيادة وزن الجسم .

وجدت هذه الدراسة بان متوسط الطحال للسودانيون هو 23 ± 165 سم³ .

يوصي باجراء مزيد من الدراسات في الطحال قياس مع اخذ عينة أكبر من السكان.

List of Contents

Topic	Page
الاية	I
Dedication	II
Acknowledgment	III
Abstract English	IV
Abstract Arabic	V
Contents	VI
List of Tables	VIII
List of Figures	IX
List of Abbreviation	XI
Chapter One: Introduction	
1.1 Introduction	1
1.2 Research problems	1
1.3 objectives of the study	1
1.4 Research Overview	2
Chapter Two: Literate review	
2.1: Theoretical Background:	3
2.1.1 Anatomy of the Spleen	3
2.1.2 Physiology of Spleen:	11
2.1.3 Pathology of the spleen:	12
2.1.4 Principles of Computed tomography(CT)	14
2.1.5 Technique of abdomen and spleen	17
2.1.7 Measurement of spleen	18
2.1.8 Calculation of spleen volume method	18
2.2 previous studies:	19
Chapter Three :Materials and Methods	
3.1 Materials	20
3.2 Methods	21
Chapter Four :Results	

4.1 Results	23
Chapter Five :Discussion, Conclusion and Recommendations	
5.1 Discussion	31
5.2 Conclusion	33
5.3 Recommendations	34
References	
Appendix	

List of Table

33	Demonstrate the distribution of the gender.	Table (4.1)
34	demonstrate relation between age groups and spleen volume in males	Table (4.2)
35	demonstrate relation between age groups and spleen volume in females	Table (4.3)
36	demonstrate relation between body height and spleen volume in males	Table (4.4)
37	demonstrate relation between body height and spleen volume in females	Table (4.5)

38	demonstrate relation between body weight and spleen volume in males	Table (4.6)
39	demonstrate relation between body weight and spleen volume in females	Table (4.7)
40	demonstrate the mean of the spleen volume for males and females adult Sudanese population	Table (4.8)

List of Figures		
Figure	Title	Page
Fig (2.1)	shows spleen is location in the abdominal cavity	5
Fig (2.2)	shows the relation of the spleen with the ribs	5
Fig (2.3)	A, External features of the spleen: A, as seen in the transverse section; B, as seen from the visceral surface.	7
Fig (2.4)	peritoneal relations of the spleen	9
Fig (2.5)	Visceral surface of the Spleen showing different impressions.	9
Fig (2.6)	Diaphragmatic surface of the Spleen showing relation to 9 th ,10 th , and 11 th ribs.	10
Fig (2.7)	Longitudinal section through the mid axillary line to show the relation of diaphragmatic surface of the spleen.	10

Fig (2.8)	A. Shows the Arterial supply of the spleen, B. venous drainage of the spleen.	13
Fig (2.9)	shows the vascular segment of the spleen	13
Fig (2.10)	shows the step and shot technology	19
Fig (2.11)	Shows the Spiral CT Continuous patient motion through the gantry combined with uninterrupted beam rotation leads to the spiral pattern of data acquisition.	20
Fig (2.12)	Shows the first generation.	22
Fig (2.13)	Shows the second generation.	22
Fig (2.14)	Shows the fourth generation.	23
Fig (2.15)	Shows the five generation.	23
Fig (2.16)	Shows the spiral CT technology.	24
Fig(2:17)	Shows Measurement of splenic length (cephalo-caudal length Along 10th rib).	27
Fig(2:18)	Shows Measurement of splenic width	27
Fig(2:19)	Shows Measurement of splenic thickness	28
Fig (4.1)	Shows the distribution of the gender.	33
Fig (4.2A)	Shows relation between age groups and spleen volume in males.	34
Fig (4.2B)	Shows correlation between age groups and spleen volume in males.	34
Fig (4.3A)	Shows relation between age groups and spleen volume in females.	35
Fig (4.3 B)	Shows correlation between age groups and spleen volume in females.	35
Fig (4.4A)	Shows relation between body height and spleen volume in males.	36
Fig (4.4B)	Shows correlation between body height and spleen volume in males.	36

Fig (4.5A)	Shows relation between body height and spleen volume in females.	37
Fig (4.5B)	Shows correlation between body height and spleen volume in females.	37
Fig (4.6A)	Shows relation between body weight and spleen volume in males.	38
Fig (4.5B)	Shows correlation between body weight and spleen volume in males.	38
Fig (4.7A)	Shows relation between body weight and spleen volume in females.	39
Fig (4.5B)	Shows correlation between body weight and spleen volume in females.	39
Fig (4.8)	Shows the mean of the spleen volume for males and females adult Sudanese population.	40

List of abbreviations

MRI	Magnetic Resonance Imaging
CT	Computed Tomography
SCT	Single Computed Tomography
MDCT	Multi Detector Computed Tomography
FOV	Field of View
KVP	Kilo Volt Penetration
MAS	Mile Ampere Second
AP	Anterio posterior

BMI	Body mass index
S LE	Spleen length
S TH	Spleen thickness
S WI	Spleen width
GIT	Gastro intestinal tract
IV	Intra venous
IGM	Immunoglobulin M
IGG	Immunoglobulin G