

بسم الله الرحمن الرحيم

اقْرَأْ بِاسْمِ رَبِّكَ الَّذِي خَلَقَ {1} خَلَقَ الْإِنْسَانَ مِنْ عَلَقٍ {2} اقْرَأْ وَرَبُّكَ الْأَكْرَمُ {3}
الَّذِي عَلَّمَ بِالْقَلَمِ {4} عَلَّمَ الْإِنْسَانَ مَا لَمْ يَعْلَمْ {5}.

سورة العلق - الآية { 1 - 5 }

Dedication

To my family for their encouragement specially my mother, my father, my son and my brothers & sisters. I appreciate their patients and their supporting my efforts throughout the research writing and rewriting.

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List of Abbreviations

AP	Anteroposterior
CT	Computed Tomography
CZ	Central zone
PSA	Prostate Specific Antigen
PZ	Peripheral zone
TAUS	Trans Abdominal Ultrasound
TRUS	Trans Rectal Ultrasound
TZ	Transitional zone
US	Ultrasound

Abstract

This a descriptive cross sectional study carried out in Medical Modern Center -Khartoum - Sudan from october-2016 to February 2017which discussed Estimation of Normal Prostate Volume in Adults using Ultrasonography.

A total of “60” men were selected randomly; all those men had age below forty years, have normal prostate. Any person had age above forty or had prostate disorders was excluded from this study.

All patients were subjected to be examined by U/S scanning using ‘Honda’ Aloka and General Electric scanners with 3,5MHz probe.

Trans abdominal scanning was performed for all persons to measure AP, transverse, thickness and volume of prostate, then evaluated the shape and texture of the prostate.

Study resulted that the mean prostate volume (22.3ml), the mean of length, width and thickness were (2.6) (3.5) (3.2) cm respectively.

Study concluded that the prostate volume was increased with increasing of age, weight and height.

This study recommended that further studies should be carried out in this field on many aspects such as increasing the number of patients, to compare between the role of U/S scanning and other diagnostic tools, using a trans rectal ultra sonographic approach and color Doppler ultrasonography.

مستخلص الدراسة

هذه الدراسة وصفية مقطعية طبقت بجمهورية السودان ولايتي الخرطوم (المركز الطبي الحديث)، من أكتوبر 2016م إلي فبراير 2017م ناقشت الدراسة تحديد حجم البروستاتا الطبيعي لدى البالغين باستخدام التصوير بالموجات فوق الصوتية .

هنالك (60) شخص اختيروا عشوائيا وجميعهم لديهم أعمار اصغر من 40 سنة , لقياس حجم البروستات الطبيعي . كل شخص لديه عمر اكثر من أربعين سنة أو لديه مرض في البروستاتا استبعد من هذه الدراسة.

كل هؤلاء الاشخاص فحصوا بالموجات فوق الصوتية باستخدام ماسحات هوندا الوكا وجنرال اليكترىك بطاقة مقدارها 3.5 ميغا هرتز وجهاز ميندراي 7.5 ميغا هيرتز.

اجري المسح عن طريق البطن لكل الاشخاص وتم قياس البعد الأمامي الخلفي , العرضي , السمك , حجم البروستاتا , تقييم شكل ومظهر البروستاتا الطبيعي .

الدراسة انتجت أن متوسط حجم البروستاتا هو (22.3 سم)، متوسط الطول، العرض والسمك هم (2.6 سم)، (3.5 سم)، (3.2 سم) على التوالي.

الدراسة خلصت الى ان حجم البروستاتا يزيد بزيادة عمر، وزن وطول الشخص.

هذه الدراسة أوصت بان يتم تطبيق دراسات أخرى في نفس المجال بعدة أوجه مثل زيادة عدد الشخاص، المقارنة بين المسح بالموجات فوق الصوتية والأدوات التشخيصية الأخرى، باستخدام طريقة التصوير بالموجات فوق الصوتية عن طريق فتحة الشرج والتصوير بالموجات فوق الصوتية الملونة.