Dedication

This work is dedicated to our parents, brothers and sisters for their endless support, our friends who stood side by side with us through the past Academic years. And everyone who offered their assistance to complete this humble work.

Acknowledgement

Most gratefulness to Allah, our Lord and Cherisher, for guiding us to complete this work. Indeed, without His help and will, nothing was accomplished.

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Abstract

This study aims to analyze the utility of ultrasound in the estimation of the size of the prostate gland. And to show the relationship between the size of the prostate gland with age. This study was conducted in Sudan University of Science and Technology, Ultrasound Department. And a sample of 30 adult male patientwith an age between 30-43 years old (35.3±4.1), and transabdominal ultrasound was used to measure the length, depth and width of the prostate gland, from which the size of prostate for all patients was obtaind through the formula:

L*W*D*0.052 mm

Where L is the length of the prostate, W is the width of prostate, and D is the depth of Prostate.

Our results shows that length, width, depth and size of the prostate has linear relationship with the age.

الملخص

هذه الدراسة تهدف لتوضيح فائدة استخدام الموجات فوق الصوتية في تقدير حجم غدة البروستاتا وتوضيح العلاقة بين حجم غدة البروستاتا والعمر. هذه الدراسة أجريت في جامعة الخرطوم للطب والتكنولوجيا، قسم الموجات فوق الصوتية. تم استخدام عينة تتكون من 30 مريضا، تتراوح أعمارهم بين 30 عاما إلى 43 عاما (35.3±4.1) وتم استخدام جهاز الموجات فوق الصوتية عن طريق البطن لقياس طول وعرض وعمق غدة البروستاتا لكل المرضى ومنها تم تقدير حجم البروستاتا لكل المرضى باستخدام المعادلة : L*W*D*0.52 حيث

.

L تمثل طول غدة البروستاتا ، W تمثل عرض غدة البروستاتا، D تمثل عمق غدة البروستاتا.

وأوضحت هذه الدراسة أن الطول والعرض والعمق والحجم لهم علاقة خطية طردية مع العمر.

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