DEDICATION

This Research is dedicated to my respective parents who have been my constant source of inspiration. They have given me the drive and discipline to tackle any task with enthusiasm and determination. Without their love and support this project would not have been made possible…!!!

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My deep thanks to my supervisor Dr. Hussain Ahmed Hassan for his contact supervision, inexhaustible patience & unlimited help.

My thanks extend to my colleague Badwy Mustafa who helps me in collect all measurements in this study.

I would like to thanks also all whose help me to complete this work.

Abstract {English}

This study was execute to demonstrate variation in kidneys measurements or renal dimensions (length, width and depth); the study was conducted at CT departments in Nileain private center_ Khartoum and Elsoni private center_ medani. This was expanded from Augusts 2011 up to October 2011.

Random samples of fifty patients whom referred to CT department with KUB CT request, 25 male and 25 females with different ages were collected; axial and sagittal cuts in addition to reconstructed coronal section were done to calculate the kidney size clearly.

From the study Male has large renal dimensions than female and that respecting to gender. But regarding to side the Lt Kidney had greater size than Rt one, As well as the renal pelvis.

Results that correlate with age, does not show any obvious change with increasing age, we attribute the differences in the dimensions of the kidneys to the other reason, which perhaps related to physical condition (length & weight) which differ from person to other.

Multidetector computed tomography is the modality of choice to demonstrate kidney measurements and to visualize some pathological condition that affect the renal kidney size.

ملخص البحث

أجريت هذه الدراسة لمعرفة الإختلافات التشريحية لقياسات الكلى او ابعادها (الطول والعرض والإرتفاع) وذلك في اقسام الأشعة المقطعية بمركز النيلين _ الخرطوم, ومركز السني _ مدني.وذلك في الفترة ما بين اغسطس 2011 إلى اكتوبر 2011

أخذت عينة عشوائية من خمسين مريض تم تحويلهم إلى قسم الأشعة المقطعية بطلب فحص أشعة مقطعية للجهاز البولي (25 من الرجال و 25 من النساء) من مختلف الاعمار, وقد خضع جميع المرضى لإجراء الوضعين (المحوري والسهمي) بالإضافة للوضع التاجي المركب وذلك لقياس حجم الكلية بوضوح.

أوضحت الدراسة أن الأشعة المقطعية متعددة المجسات هي الخيار الأمثل لتحديد قياسات الكلية ورؤية بعض الحالات المرضية التي تؤثر في حجم الكلية.

النَتائِج التي تَرتْبطُ بالعُمرِ، لا تُظهر أيّ تغيير واضح مع تزايد العمر، وبذلك يمكننا أن نَنْسبُ الإختلافاتَ في أبعادِ الكِلى إلى سببِ آخرِ، ألا وهو الإختلاف في البنية الجسمانية والتي تختلفُ من شخصِ إلى آخر..

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