DEDICATION

This Research is dedicated to my respective mother who have been my constant source of inspiration. Without her love and support this project would not have been made possible…!!!

Acknowledgement

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

My thanks extend to Dr.Caroline and my colleagues whose help me to complete this research.

Abstract

This study was execute to demonstrate dimension of renal pelvic (length and width in three levels); the study was conducted at CT departments in Nilain private center and ALripat hospital from march 2013 to may 2013.

Random samples of fifty patients whom referred to CT department with CTU 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 renal pelvic clearly.

From the study the RT. Renal pelvic was greater than the LT.Renal pelvic dimensions because the liver press the right kidney.

Determine the renal pelvic dimension help in accuracy of diagnoses because there was direct impact between width of renal pelvic and hydronephrosis.

Multidetector computed tomography is the modality of choice to determine dimension of renal pelvic and to visualize some pathological condition.

ملخص البحث

أجريت هذه الدراسة لمعرفة الأبعاد التشريحية لحوض الكليه (الطول والعرض في ثلاثه مستويات) وقد أجريت الدراسه في كل من مركز النيلين ومستشفي الرباط الجامعي في الفتره من مارس 2013 الي مايو 2013

أخذت عينة عشوائية من خمسين مريض تم تحويلهم إلى قسم الأشعة المقطعية بطلب فحص أشعة مقطعية ملونه 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 حوض الكلية بوضوح.

أوضحت الدراسة أن حوض الكليه اليمين أكبر من حوض الكلية اليسار وأن تحديد أبعاد حوض الكليه يساعد في سهولة ودقه التشخيص لأن لعرض حوض الكلية علاقة بالتموه الكلوي.

أوضحت الدراسة أيضا أن الأشعة المقطعيه متعددة المجسات هي الخيار الأمثل لتحديد أبعاد حوض الكلية وتحديد الأمراض.

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ABBRVIATION

ADH	Antidiuretic Hormone
CT	Computed Tomography
CTU	Computed tomography urology
IVP	Intravenous Paleography
IVU	Intravenous Urography
MDCT	Multidetector Computed Tomography
MRI	Magnetic Resonance Imaging
PCS	Pelvicalyceal system
PTH	Prathyroid hormone
RAS	Renin Angiotensin System
SST	Single Slice CT
VRT	Volum Rendring Technique