### بسم الله الرحمن الرحيم



## جامعة السودان للعلوم والتكنولوجيا

#### SUDAN UNIVERSITY OF SCIENCE AND TECHNOLGY

**College of Graduate Studies and Scientific Research** 

# Evaluation of the Right abdominal pain causes by using CT

تقويم اسباب الالم في الجانب الايمن للبطن بالأشعة

### المقطعية

Thesis submitted in partial fulfillment of requirements of M.Sc degree in Diagnostic Radiologic Technology

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### **Dedication**

To my parent
To my sisters
My brothers
My friends
To everyone whom
Gave me a bit of
Wise advice

#### **ACKNOWLEDGEMENT**

I wish to thank all those who helped me. Without them, I could not have completed this project.

This research could not have been written without

**Dr. Mohammed Mohamed Omer** who not only served as my supervisor but also encouraged and challenged me throughout my academic program.

I would like to thank all people who have helped me and contributed to this research.

To my colleague in ALNILEIN DIAGNOSTIC CENTER (doctors, radiologist, technologists and staff of receptionists).

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#### **Abstract**

This study aimed to Classify the causes of Rt abdominal pain by CT It was conducted at radiology departments in Al-Nilin diagnostic center \_ Khartoum .

This study was expanded from August 2011 up to January 2012.

Random samples of 50 patients, males (66%%)and females (34%)their ages range from 15 to 72 years old with symptoms of Rt abdominal pain were chosen, spiral CT was done to explain the demonstrate causes of Rt abdominal pain clearly.

The most affected age group from 20-60 years old represent 66 %, most patients with no history in their families, Upper quadrant is the most affected area (40%), and Most patients suffer from Right abdominal pain (50%) ,then Back pain, 30%, Shoulder pain 10%, Chest pain 4% and Others 6%).

CT images have a role in the diagnosis of causes of Rt abdominal pain so in this study Renal stone (33%), Gall bladder stone(10%), Ovarian cyst (6%), RCC (20%), HCC (15%) and others (16%)

It can be said that the CT image modality was performed and used as essential technique of evaluation causes of Rt abdominal pain, which help to obtain early diagnosis

#### ملخص البحث

تهدف هذه الدراسة إلى تصنيف أسباب الألم البطني في الجهة اليمنى بواسطة استخدام جهاز الاشعة المقطعية فى مركز النيلين التشخيصي في الفترة من أغسطس 2011 وحتى يناير 2012 ، حيث شملت هذه الدراسة عينات عشوائية من خمسين مريضا يعانون من آلام البطن في الجانب الأيمن من الجسم وكانت أعمارهم تتراوح بين 15-72 سنة. 34% إناث و 66% ذكور.

وتم التصوير المقطعي الحلزوني لتوضيح أسباب آلام في البطن واوضحت النتائج ان الفئة العمرية الأكثر اصابة من العمر 20-60 سنة يمثلون % 66، ومعظم المرضى ليس لهم تاريخ وراثي يثبت اصابة احد افراد العائلة بالمرض و الربع الأعلى هي المنطقة الأكثر تضررا بنسبة %40، ومعظم المرضى يعانون من آلام في البطن الأيمن بنسبة %50، ثم آلام الظهربنسبة % 30 وآلام الكتف بنسبة %10 وألم في الصدر 4% وآخرون بنسبة % 6.

وبينت الدراسة ان الصور المقطعية لها دور كبير في تشخيص أسباب آلام البطن المتمثلة في حصاوي الكلى بنسبة 38% وحصاوي المثانة بنسبة 10% اكياس المبيض بنسبة 6% سرطان الكلى بنسبة 20% وسرطان الكبد بنسبة 15% وامراض اخرى بنسبة 16%.

ويمكن القول إن استخدام الاشعة المقطعية تقنية ضرورية لتقويم اسباب الم الجهة

اليمنى من البطن ، مما يساعد على الحصول على التشخيص المبكر والمساعدة على العلاج.