الآية بسم الله الرحمن الرحيم

{ يَا أَيُّهَا النَّاسُ اتَّقُواْ رَبَّكُمُ الَّذِي خَلَقَكُم مِّن نَّفْسٍ وَاحِدَةٍ وَخَلَقَ مِنْهَا وَاحَدَةٍ وَخَلَقَ مِنْهَا زُوْجَهَا وَبَثَّ مِنْهُمَا رِجَالاً كَثِيرًا وَنِسَاء وَاتَّقُواْ اللّهَ اللّهَ اللّهَ اللّهَ اللّهَ اللّهَ اللّهَ عَلَيْكُمْ رَقِيبًا } بِهِ وَالأَرْحَامَ إِنَّ اللّهَ كَانَ عَلَيْكُمْ رَقِيبًا }

،،، صدق الله العظيم ،،،

سورة النساء – الآية رقم (1)

Dedication

This thesis is dedicated to my wonderful parents, who have raised me to be the person I am today. They have been with me every step of the way, through good times and bad. They have been a source of encouragement and inspiration to me throughout my life, a very special thank you for providing a 'writing space' and for nurturing me through the months of writing. And also for the myriad of ways in which, throughout my life, they have actively supported me in my determination to find and realize my potential, and to make this contribution to our world. To my **family(My wife and** my kids **ALI, OMER & EMI)** who represented to me 'living proof' of one's ability to redefine and recreate his life despite, and maybe even because of, the tremendously constraining, oppressive and repressive situations in which we often exist.

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It would not have been possible to write this doctoral thesis without the help and support of the kind people around me, to only some of whom it is possible to give particular mention here. My family has given me their unequivocal support throughout, as always, for which my mere expression of thanks likewise does not suffice. This thesis would not have been possible without the help, support and patience of my supervisor,. **Dr. Hussein Ahmed Hassan,** not to mention his advice and unsurpassed knowledge of comparative Celtic linguistics. The good advice, support and friendship of my Friends and Colleagues for their support and encouragement throughout, some of whom have already been named. For any errors or inadequacies that may remain in this work, of course, the responsibility is entirely my own.

ABSTRACT

HRCT and CXR are the important radiographic procedures during the management of lungs disorders. This study aimed to evaluate diagnostic accuracy of HRCT and chest radiography in diagnosis of lungs disease .A total of 50 patients were examined in Sudan University of Science and Technology (SUST)-College of Medical Radiologic Sciences (CMRS) and Khartoum Modern Diagnostic Center. In the period (October 2010-june 2011). the majority of samples were males (60%) and females (40%). In this study peak incidence was among the age between (41-60 years) of age presenting (34%). The cough is the most clinical indication with (100%) incidence. Chest X-ray examination showed normal appearance in (18%). The most common finding in HRCT is Bronchiectasis (40%). Some of normal CXR appears abnormal in HRCT. normal chest patients showed in HRCT (sensitivity 67%, Specificity 93%, Accuracy 88%). chest x-ray alone especially in first stage diseases is mostly unsuitable in order to differentiate between normal and early pathological development. HRCT is superior investigation tool in detecting lung abnormalities.

الملخص

تعتبر الأِشعة المقطعية ذات الإِظهار العالي وأشعة الصدر العادية أهم الفحوصات لدراسة أمراض الرئة .

هدفت هذه الدراسة لتقييم الدقة التشخيصية للأشعة المقطعية ذات الإظهار العالى وأشعة الصدر في تشخيص أمراض الرئة.

تم فحص عدد 50 مريض في كل من كلية علوم الأشِعة الطبية بجامعة السودان للعلوم والتكنولوجيا ومركز الخرطوم التشخيصي المتطور في الفترة من أكتوبر 2010 - يونيو 2011م.

كان عدد الرجال أكثر من النساء ، الرجال (60%) بينما النساء (40%) من العينة .

وكان أكثر أفراد العينة في الفئة العمرية (41 - 60) سنة (34%). بينما كانت الكحة هي أكثر الأعراض السريرية (100%) كانت نسبة أشعة الصدر الطبيعية (18%). أظهرت نتائج الأشعة المقطعية ذات الإظهار العالي أن التهاب الشعب الهوائية أكثر شيوعاً (40%).

بعض صور أشعة الصدر العادية ظهرت في الأِشعة المقطعية ذات الإظهار العالي غير طبيعية وكانت الحساسية (67%)، الخصوصية (93%). الدقة (88%).

أظهرت هذه الدراسة أن صورة الأشعة للصدر لوحدها خصوصاً في المراحل الأولية للمرض غير- مناسبة للتفريق بين- الأنسجة الطبيعية والتكون المبكر للخلايا المرضية .

الأشعة المقطعية ذات الإظهار العالي هي أفضل وسيلة تشخيصية للكشف عن أمراض الرئة .

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