شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأفلام قد أعدت دون أية تغيرات

يجب أن

تحفظ هذه الأفلام بعيدا عن الغبار

في درجة حرارة من ١٥-٢٥ مئوية ورطوبة نسبية من ٢٠-٤٠%

To be Kept away from Dust in Dry Cool place of 15-25- c and relative humidity 20-40%

بعض الوثائق الاصلية تالفة

بالرسالة صفحات لم ترد بالاصل

COMPARISON BETWEEN COMPUTED TOMOGRAPHY AND ULTRASONOGRAPHY IN THE DIAGNOSIS OF APPENDICITIS

Thesis Submitted to The Faculty of Medicine
in partial fulfillment for
Master Degree in Radiodiagnosis

By

Hazem Ahmed El-Shawadfy

M.B.B.Ch. (Alex. University, 1993)

Supervised By

Prof. Dr. Laila M. El-Kady
Professor and head of Radiology Department
Faculty of Medicine
Suez Canal University

Prof. Dr. Ahmed M. El-laban
Professor of Surgery
Faculty of Medicine
Suez Canal University

Dr. Tarek H. Khalil
Assistant Professor of Radiology
Faculty of Medicine
Suez Canal University

Faculty of Medicine
Suez Canal University
2001

بسم الله الرحمن الرحيم

قالوا سبحانك لا علم لنا إلا ما علمتنا
إنك أنت العليم الحكيم

صدق الله العظيم

سورة البقرة الآية ٣٢

Acknowledgment

First of all, thanks GOD, the merciful, the beneficent for helping me during this work.

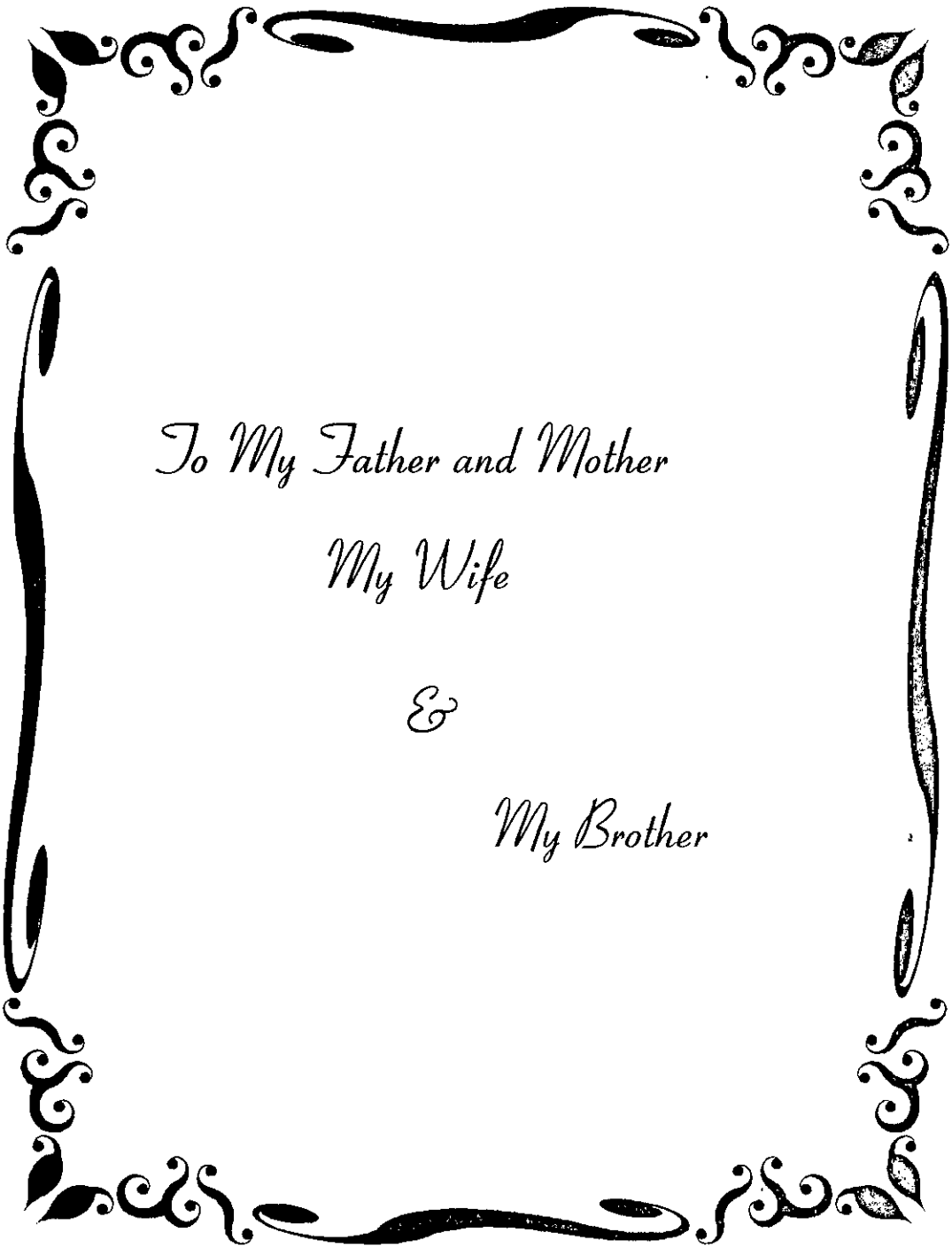
I would like to express my indebtedness and deepest gratitude to ***Prof. Dr. Laila M. El-Kady,*** Professor and Head of Radiology Department, Faculty of Medicine, Suez Canal University for her valuable advice, guidance and constructive criticism, also for the invaluable assistance and efforts she devoted in the supervision of this study.

I am greatly indebted to ***Prof. Dr. Ahmed M. El-Laban,*** Professor of Surgery, Faculty of Medicine, Suez Canal University for his continuous support to achieve an elaborate output.

I'll never forget, how cooperative was ***Dr. Tarek H. Khalil,*** Assistant Professor of Radiology, Faculty of Medicine, Suez Canal University, also he was encouraging all the time. It is honorable to be supervised by him.

I am thankful to all the staff and members of Radiology Department, Faculty of Medicine, Suez Canal University for helping me to make this work.

Last, but not least, I want to express my cordial feelings towards my parents and wife who saved no effort in supplying me with the material and spiritual provision, I and my family needed to succeed this work.



To My Father and Mother

My Wife

&

My Brother

List of Tables

List of Figures

INTRODUCTION

INTRODUCTION

Appendicitis is the most common cause of abdominal pain that requires surgical intervention *(Brown et al., 1991)* also appendicitis may cause many complications when the appendiceal lumen becomes occluded, resulting in an accumulation of fluid, appendiceal dilation, inflammation, ischemia and eventually perforation with possible abscess formation.

Patients with the disease may present with a wide variety of clinical manifestations, and the diagnosis may elude even the most experienced clinicians *(Williams et al., 1983).*

Prompt diagnosis is essential to minimise morbidity, which remains substantial if perforation occurs.

The clinical diagnosis is based on the history and the physical examination, which play a major role in the clinical diagnosis. Although many patients present with typical clinical signs and symptoms, allowing for prompt diagnosis and treatment, some patients have typical and frequently confusing presentations, leading to misdiagnosis. This is specially problematic in women of child-bearing age *(Berry et al., 1984).*

Without the use of diagnostic imaging, the accuracy of pre-operative diagnosis of appendicitis ranges between 70 to 78% *(Zoller et al., 1996).*

Laparotomy resulting in the removal of normal, non-inflamed appendices was reported in 16 to 47% of cases, with a mean of 26% ***(Kacanan et al., 1994).*** Current medical practice recognises the necessity of removing some normal appendices to minimise perforation rates.

Until recently, the diagnosis of appendicitis using radiological techniques included plain abdominal X-ray in which the findings are non specific, and abnormalities do not occur with enough frequency to justify the routine use of the examination ***(Campbell et al., 1988)*** also barium enema examination can be performed safly and quickly with the double contrast technique. Complete filling of the normal appendix exculdes the diagnosis of appendicitis. Non filling or incomplete filling does not always indicate appendicitis but the presence of an extrinsic mass effect of the cecum helps to confirm the diagnosis ***(Fedyshin et al., 1984).***

During the past 5 years, several imaging techniques have been advocated for diagnosing appendicitis ***(Brown 1991).***

Direct sonographic visualization of the appendix by applying graded compression to the Rt. lower quadrant of the abdomen, has been described by ***Puylaert (1988).***

Also ***Puylaert (1988)*** described the value of graded compression sonography in the evaluation of patients suspected of having appendicitis. Since then, other investigators have improved the sonographic criteria for diagnosis of appendicitis, firmly establishing the value of sonography in