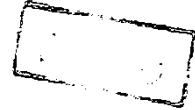


**Role of Transrectal Ultrasonography
In the Diagnosis of Male Pelvic Lesions**

**Thesis
Submitted for Partial Fulfillment
of the M.D. Degree
(RADIO - DIAGNOSIS)**



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TO..

A SPECIAL MOTHER

AND..

THE MEMORY OF MY FATHER

ACKNOWLEDGMENT

My thanks are first given to ALMIGHTY God without whose divine help this work would not have been accomplished.

I wish to express my sincere gratitude to prof. Dr. Heba Khalil El - Deeb, Professor of Radiodiagnosis, for her unfailing help, meticulous supervision, loyal encouragement and valuable advice.

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Last, but not least, I would like to thank the teaching staff and all my colleagues in the Radiodiagnosis department.

ABSTRACT

In this study an attempt was made to assess the role of transrectal ultrasonography in the diagnosis of male pelvic lesions.

One hundred eighty seven patients with different clinical presentations were examined with high resolution transrectal ultrasonography.

18 showed normal ultrasound findings, 144 prostatic lesions, 14 seminal vesicle and ejaculatory duct abnormality 6 urinary bladder lesions and 5 rectal and perirectal disease.

In prostatic and seminal vesicle lesions the TRUS the yeild a high degree of sensitivity and spcificity in the Diagnosis of various benign and malignant diseases.

Also, in rectal lesion despits it's shortcomings we consider endorectal US as a complementary method to clinical assessment in identifying patient with full thickness penetration and extra rectal cnacer.

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INTRODUCTION

AND

AIM OF WORK

INTRODUCTION AND AIM OF WORK

The sonographic evaluation of the male accessory glands has undergone evolutionary changes over the past 20 years and it had matured into an important adjunct to clinical and laboratory examination.

In the early 1970s, physicians were able to diagnose prostatic and seminal vesicles lesions using fairly crude (by today's standards) transabdominal ultrasound equipment with low frequency transducers that have high penetration but low resolution.

The development of endorectal US in the late 1960s initiated a new era in the detection of prostatic diseases.

In 1980s the transrectal approach gained popularity and has been used increasingly to evaluate the prostate and seminal vesicles.

Technological refinements in sonographic equipment designed for endorectal use have progressed to the point where high resolution images are obtainable on routine basis.

The anatomic proximity of the rectal orifice to these pelvic organs allow the use of high frequency transducer, which provide a much greater power of resolution.

Transrectal ultrasonography enables visualization of minute details of the rectum especially when high resolution transducers are used. It is therefore not surprising that in recent years this modality has gained great popularity among physicians in the detection and staging of rectal cancers.

An evolution in biopsy technique has paralleled the improvements in US imaging. Transrectal ultrasound guided biopsy is an important method for diagnosis and staging of male neoplasms.

In our daily clinical practice, we come across many conditions where both the radiologist and the clinician are facing a dilemma to determine the least invasive, most conclusive, less time consuming toward resolving a clinical problem. Under these circumstances, when the male pelvis is the primary area of concern, transrectal ultrasound can be the only diagnostic modality required for diagnosis. This is especially true in many institutions where the more expensive technologies such as CT and MRI are less available.

The aim of this work is to assess the role of transrectal ultrasound in the diagnosis of male pelvic lesions.

ANATOMY
AND
SONO ANATOMY