RENAL SIZE AND FUNCTION IN FOLLOW UP OF WILMS' TUMOUR IN EGYPTIAN CHILDREN

THESIS

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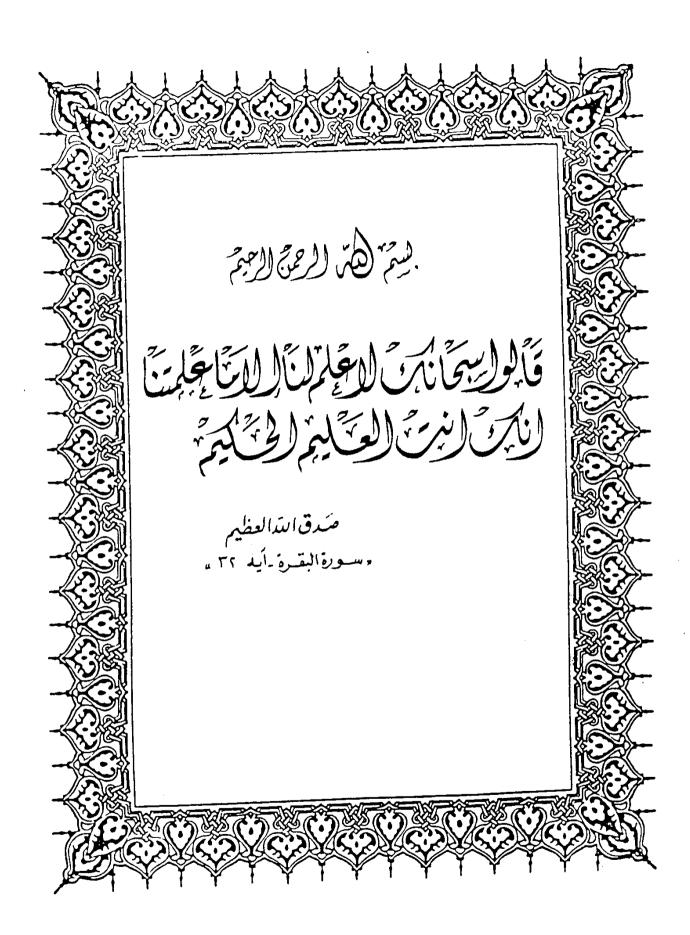
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To ... My parents With love and affection.

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LIST OF ABBREVIATIONS

ADR

Adriamycin

AMD

Actinomycin-D

BMRTC

Bone metastasizing renal tumor of childhood

CCSK

Clear cell sarcoma of the kidney

CT

Computerized tomography

DBP

Diastolic blood pressure

ECF

Extracellular fluid

FH

Favorable histology

MRI

Magnetic resonance imaging

NWTS

National Wilms' Tumor Study

RTK

Rhabdoid tumor of the kidney

SBP

Systolic blood pressure

SIOP

International Society of Pediatric Oncology

UH

Unfavorable histology

US

Ultrasound

VCR

Vincristine

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Introduction

INTRODUCTION

Wilms' tumor is the most common malignant renal tumor in children and adolescents. The incidence of Wilms' tumor remains remarkably constant at approximately 500 new cases reported each year in the U.S.A. (*Mesrobian*, 1988).

Wilms' tumor is the paradigm for multimodal treatment of pediatric malignant solid tumor. Developments in surgical techniques and postoperative care, the recognition of the sensitivity of Wilms' tumor to chemotherapeutic agents and irradiation led to a dramatic change in the prognosis for most patients (*Green et al.*, 1991).

Although a high rate of cure has been achieved in Wilms' tumor, there is little information on the growth and function of the remaining kidney. The functional compensation of increased perfusion of residual nephrons after nephrectomy may present deleterious, maladaptive stresses to those surviving nephrons and lead to their ultimate destruction due to hyperfiltration injury.

Focal segmental glomerulosclerosis with renal failure was reported in patients treated for Wilms' tumor (*Hostetter*, 1984). These findings, if substantial, would have implication for the design of new treatment protocols and long-term follow up strategies.

Aim of the Work

AIM OF THE WORK

The aim of the current study is to investigate late sequelae of the intensive treatment of unilateral Wilms' tumor on the size and function of a single kidney and the effect on the blood picture and bodily growth of these individuals and to compare these results with a group of individuals of comparable age.

Review of Literature