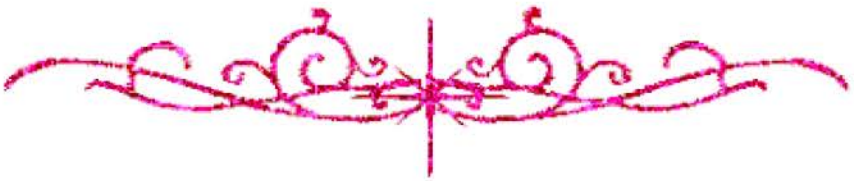
بسم الله الرحمن الرحيم

HOSSAM MAGHRABY

شبكة المعلومات الجامعية

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم



HOSSAM MAGHRABY

شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها

علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات

يجب أن

تحفظ هذه الأقراص المدمجة بعيدا عن الغبار

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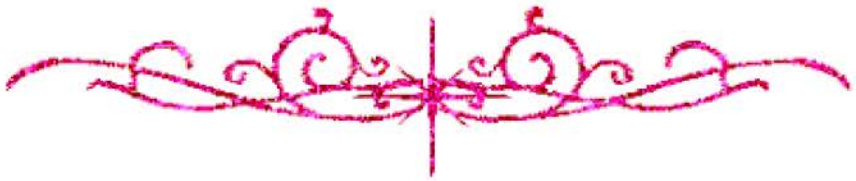
شبكة المعلومات الجامعية

بعض الوثائق الأصلية تالفة



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بالرسالة صفحات

لم ترد بالأصل

HOSSAM MAGHRABY

BIO EFFECTS OF EXTRACORPOREAL SHOCK WAVE LITHOTRIPSY(ESWL) FOR TREATMENT OF RENAL STONES

THESIS

Submitted for Partial Fulfillment of M. D. in Urology

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Assiut University

1997

بسم الله الرحمن الرحيم

" وعلمك ما لم تكن تعلم

وكان فضل الله عليك عظيما "

صدق الله العظيم

(آيه ١١٢ : سورة النساء)

To My Fatehr and Mother

To My Sincere Wife Maram

and Lovely Daugher Tasnim

To My Fatehr and Mother

To My Sincere Wife Maram

and Lovely Daugher Tasenim

ACKNOWLEDGEMENTS

ACKNOWLEDGEMENT

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Hazem M.AbdElaty

1997

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INTRODUCTION

Renal calculi are the most commonly encountered disease in urology. Extracorporeal shock wave lithotripsy (ESWL) is a noninvasive method for the treatment of renal stones. Since its first use by Chaussy in 1980, many questions from physicians, physicists and patients about if a wave of this power passes through the body without affecting human tissue or organ, if shock waves do affect the patient's body as his stone and are the effects detectable and the chnages are temporary or permanent. Also, how we can use shock wave lithotripsy both effectively and safely and how to minimizes these changes. Extracorporeal shock wave lithotripsy has become a major treatment modality for symptomatic upper tract renal stone disease (Lingeman et al., 1992).

The key to prevent injury in ESWL lies in developing a thorough understanding of the extent of acute injury, the type and severity of long term effects and precisely what conditions or factors influence the severity of injury. The basis for solving this problem lies in determining the precise mechanism by which cells are damaged by ESWL. If we are to establish treatment protocols that will minimize or eliminate the risk of injury without compromising the effectiveness of lithotrispy, we must first characterize ESWL bioeffects and define mechanism of cellular injury (Lingman, 1988).

The aim of this study is to recognize the bioeffects of ESWL on both renal and extrarenal tissues and factors that are responsible for these effects. Also to study if these effects are reversible with short period follow up or not and factors affect these adverse effects.

REVIEW OF LITERATURE