شبكة المعلومات الجامعية

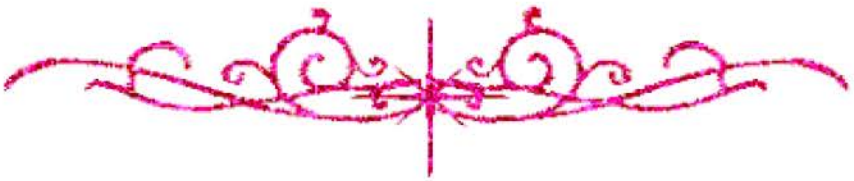
بسم الله الرحمن الرحيم

HOSSAM MAGHRABY

شبكة المعلومات الجامعية

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم



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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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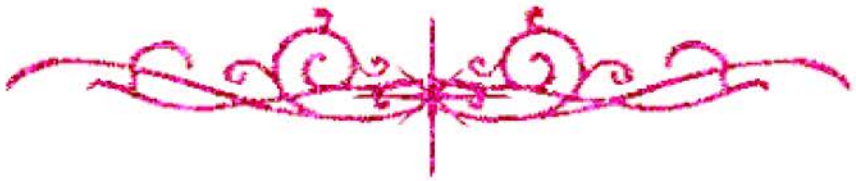
بعض الوثائق الأصلية تالفة



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بالرسالة صفحات

لم ترد بالأصل

HOSSAM MAGHRABY

ENDOUROLOGICAL TREATMENT OF UPPER URETERIC CALCULI

Thesis
Submitted for Partial Fulfillment for
M.D. Urology

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1999

بسم اللـــــه الرحـمن الرحيـم

"سبحانــك لاعلم لنا إلا مـا علمتنا
إنـــك أنت العـليم الحكـيم"

سورة البقرة آية "٣٢"

"TO

MY FAMILY"

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CONTENTS

INTRODUCTION AND AIM OF THE WORK

During the last decade, we have witnessed a revolution in treatment of upper ureteral stones. Open stone surgery with ureterolithotomy has been replaced by less invasive techniques, initially with the development of percutaneous nephrostomy and related procedures *(Dretler, 1990a).*

Significant technological advances have been made in the management of symptomatic ureteral calculi. Antegrade percutaneous techniques, retrograde ureteroscopy and extracorporeal shock wave lithotripsy (ESWL) have all greatly facilitated removal of ureteral calculi. Moreover, various modes of intracorporeal lithotripsy have provided improved methods of stone fragmentation. However, significant debate still exists as to the most appropriate method of ureteral stone management *(Preminger, 1992).*

Endourological treatment of ureteral calculi can be highly successful and results in low morbidity rates. Several techniques are described that have a primary role and success depends on several anatomical factors including size, shape and position of the stone as well as chronicity of impaction of ureteral stone. A series of antegrade and retrograde manipulation techniques has been adevised to

improve stone retrieval rate while simultaneously minimizing any complications *(Kahn, 1986).*

Appropriate management of the variety of patients with stone disease demands access to all methods of stone removal. Percutaneous procedures are an integral aspect of the surgical management of stone patients, and the urologist must recognize when a patient's situation is best served by percutaneous surgery. Although ESWL is rapidly growing in popularity among both patients and physicians, percutaneous procedures still play a role in management of calculous disease. Also several contraindication to ESWL such as large stone burden, pregnancy, bleeding diathesis, inappropriate patient size, associated renal and ureteral stones, sepsis and obstruction distal to calculus increase the need for PCNL *(Motola and Smith, 1990).*

The cry of "ESWL for all" was heard at the 84th annual meeting of the American Urological Association *(Clayman et al., 1989).* Actually, this is not far from the truth. Those physicians who are not familiar with percutaneous techniques, or who do not have necessary equipment available, may actually attempt ESWL for all calculi regardless of stone burden or location. Patients who are interested in avoiding manipulation may request ESWL, even if results may not be as good as those obtained with concomitant manipulation or with percutaneous procedures. Nevertheless, indications still exist for percutaneous techniques, and these

procedures will not become obsolete even as ESWL technology advances ***(Motola and Smith, 1990).***

The aim of this study is to evaluate the endourological procedures as satisfactory method for treating stones in proximal two third of the ureter.

HISTORICAL REVIEW

The clinical significance of ureteral stones has long been known, and surgical approaches to the disease also have received much attention. In 1652 TuLP reported a patient who died 18 days after the onset of anuria, and on autopsy examination, bilateral ureteral stones were found.

Paralleling with development of radiographic techniques, was the development of endoscopic techniques. Nietze is generally credited with inventing the forerunner of modern cystoscope in 1877, but it should be emphasized that other investigator preceded him and also deserve much credit *(Murphy, 1972).*

Refinements continued not only in the system of illumination and optics but also in the ability to perform ureteral catheterization. With the ground work in place, consisting of reliable endoscopy and radiography, advances in diagnosis and management of ureteral stones progressed rapidly *(Scardino, 1974).*

In 1902 young successfully manipulated a stone that was visible cystoscopically at the ureteral orifice. Many reports followed over the next 10 to 15 years, and much work continued in the development of improved ureteral catheters, stone baskets and ureteral dilators. Eisel developed a stone crusher in 1926, and extracting forceps were developed by Lewis in 1929. The Johnson

wire stone basket was introduced in 1937 and in 1958 Dormia introduced a popular retractable wire basket ***(Murphy, 1972).***

In ***1948, Trattner,*** developed a pyeloscope for intraoperative nephroscopy.***Leadbetter, 1950,*** improved this instrument by angling the distal portion of the scope 90°, thereby making it easier to maneuver. A general anesthesia utility forceps and a panendoscope were used. ***Goodwin et al., 1955,*** demonstrated the technique of percutaneous needle puncture and nephrostomy. In ***1974, Brantley & Shirley*** extracted residual stones by using a U loop nephrostomy tube, a panendoscope and stone basket. ***Bissada et al., 1974,*** used a panendoscope and grasping forceps to remove a residual stone under general anaesthesia. ***Fernstrom and Johansson 1976,*** extracted renal stones percutaneously by using basket and stone grasping forceps under fluoroscopic control. ***Weiss et al., 1976,*** employed a percutaneous tract to apply a hydraulic jet onto the renal stones with the prospect of flushing them down the ureter. ***Kurth et al., 1977*** described the disruption of staghorn calculus using the ultrasonic lithotriptor. ***Karamacheti and O'Donnell, 1977,*** reported the use of Randalls forceps under x-ray screen to extract stones via percutaneous nephrostomy. ***Smith et al., 1978*** used combined retrograde and antegrade approach to extract ureteric stones from patient with ileal conduit. ***Thuroff and Hutschenreiter, 1980,*** described ultrasonically guided percutaneous puncture and subsequent endoscopy with stone extraction using Zeiss loop and cystoscope.