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شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم



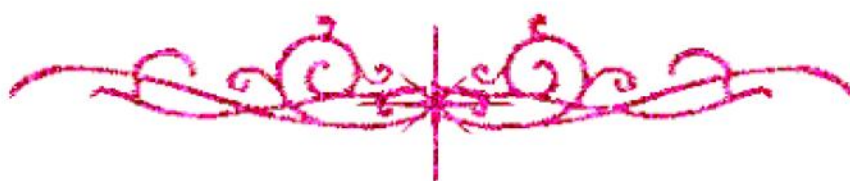
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شبكة المعلومات الجامعية



شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم



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شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

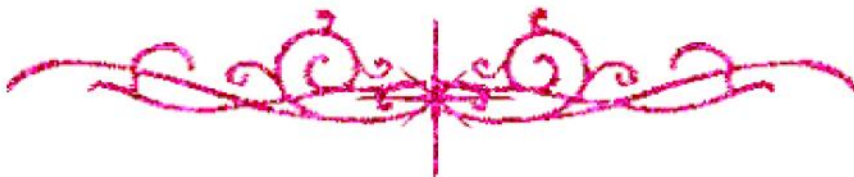
قسم

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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بعض الوثائق الأصلية تالفة



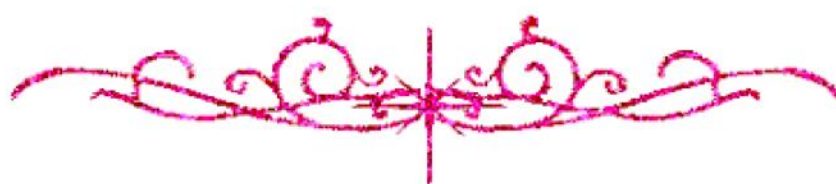
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**بالرسالة صفحات
لم ترد بالأصل**



***Evaluation of the diagnostic and prognostic
values of percutaneous nephrostomy tubes
(PCN) in cases of obstructive uropathy in
uraemic patients***

Thesis

B17771

Submitted in partial fulfillment for master degree in urology

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1999

To my parents and the spirit of my grandmother,

To my whole family,

To my friends and colleges.

Acknowledgment

First of all, Prayerful thanks to our Merciful Allah, who gives me every thing I have.

The words I write are not enough to express my actual feelings for my professors.

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Abbreviations :

ARF ; Acute renal failure.
BUN ; Blood urea nitrogen.
BUO ; Bilateral ureteral obstruction.
C.T. ; Cortical thickness.
CRF ; Chronic renal failure.
CT ; Computerized tomography.
ESRD ; End stage renal disease.
GFR ; Glomerular filtration rate.
IVU ; Intravenous urography.
MR ; Magnetic resonance.
PCN ; Percutaneous nephrostomy.
PCS ; Pelvicalyceal system.
PUJ ; Pelviureteral junction.
PUT ; Plain urinary tract.
RBF ; Renal blood flow.
RI ; Resistive index.
S.Cr. ; Serum creatinine.
S.G. ; Specific gravity.
SLE ; Systemic lupus erythrematosus.
UUO ; Unilateral ureteral obstruction.

Introduction and aim of work

Introduction and aim of work

We believed that the percutaneous nephrostomy tube (PCN) is a widely used modality for treatment of patients who have raised blood chemistry (azotaemic and/or uraemic patients) due to obstructive uropathy. Also we noticed that some of those patients obtained great benefit from the use of those tubes while others gained little or no benefit after their use (concerning the improvement of their clinical symptoms and signs, also their blood chemistry).

This study aims to assess the outcome of using PCN tube in patients with obstructed kidneys with impaired kidney functions (elevated blood chemistry). This is actually a trial to identify in a prospective manner the criteria of patients who would gain benefit from the use of these tubes.

Review of the literature

Review

Pathophysiology of ureteral obstruction:

1) Pathophysiology of unilateral ureteral obstruction (UUO):

The physiologic changes that occur in unilateral ureteral obstruction concern:

A) Renal blood flow [RBF] (Moody et al, 1975)

In unilateral ureteral obstruction, there are three characteristic phases or RBF changes as follow:

- (a) The first phase: lasting 1 – 1.5 hours, characterized by rise in RBF.
- (b) The second phase: lasting until the fifth hour of ureteral obstruction, characterized by a decline in the RBF.
- (c) The third and final phase: characterized by progressive decline in the RBF.

Haemodynamically, in phase I, there is an afferent arteriolar vasodilatation, in phase II, there is an efferent arteriolar vasoconstriction, in phase III (constrictive phase), there is pre and post glomerular vasoconstriction.

After 24 hours of UUO, the effective renal plasma flow (ERPF) is demonstrated to be 55% of control values in the obstructed kidney

(Yarger and Griffith, 1974). At this time, there is marked decrease in the perfusion of superficial cortical tissue, and an increase in the perfusion of the juxtamedullary glomeruli (Harris and Yarger, 1974).

This redistribution of intrarenal blood flow between the superficial and juxtamedullary nephrons is believed to be due to an increase in renin in the outer cortex in relation to the inner medulla (yarger and Griffith, 1974).

B) Glomerular filtration rate (GFR):

Direct measurements of the GFR show 75% decrease of the GRF after the onset of UUO (Hvistendahl et al, 1998).

C) The ureteral pressure (Moody et al, 1975)

Three phases corresponding to those of the RBF can be demonstrated.

- a) The first phase, in which there is rise in the ureteral pressure
- b) The second phase, in which there is continuous rise in ureteral pressure.
- c) The third and final phase, in which there is progressive decrease in the ureteral pressure.

2) Pathophysiology of bilateral ureteral obstruction (BUO):

The physiologic changes that occur in BUO are the following:

I) Effect on renal blood flow (RBF):

The RBF increases after the first 90 minutes of BUO or unilateral obstruction of a solitary kidney (Moody et al, 1977).