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التوثيق الالكتروني والميكروفيلم

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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

بالرسالة صفحات لم ترد بالأصل

بعض الوثائق الأصلية تالفة

EVALUATION OF OBSTRUCTIVE UROPATHY

USING DOPPLER PARAMETERS

Thesis submitted for partial fulfillment of MD degree in urology

By

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DEDICATED TO

THE SOUL OF MY FATHER

بسم الله الرحمن الرحيم

فأما الزبد فيذهب جفاء و أما ما ينفع الناس فيمكث في الأرض

كذلك يضرب الله الأمثال.

سورة الرعد آية ١٧

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INTRODUCTION AND AIM OF THE WORK

INTRODUCTION

Urinary tract obstruction is an old problem in urological practice.

Many modalities have been used in the diagnosis of this condition,and for long time ,intravenous urography has been the technique of choice. However, many techniques have appeared such as, computerised tomography,ultrasonography , radioisotopes and others.Undoubtedly , the future will bring further changes in our assessment of urinary obstruction. **{Koelliker et al 1997}**

It should be pointed out, that sometimes,dilated renal pelves and calyces are not due to the presence of obstruction. Rarely ,the renal cavities are congenitally capacious and thus simulate hydronephrosis. More commonly ,hydronephrosis may occur in childhood owing to the back pressure associated with vesicoureteric reflux .If the valvular incompetence resolves {and this is common} ,some degrees of hydronephrotic changes may persist. These persisting changes may cause the physician to suspect presence of obstruction which may lead to unnecessary surgery.

One might examine a patient within the first few hours of obstruction or a patient whose collecting system is encased by a tumour ,in which case the collecting system may not exhibit

significant distension .Conversely ,a collecting system may be dilated without true obstruction as seen in patients with Vesico-ureteral reflux. **{Curry et al 1982}**

Other investigations may be necessary here to determine whether organic obstruction is present.**{ Whitaker et al 1984 }**

The developpment of a reliable non invasive ,unexpensive methodof distinguishing significant renal obstruction from dilatation without obstruction would have important clinical implication . Doppler ultrasound is one of the non invasive techniques which can be used in the diagnosis of urinary tract obstruction.It can give informations regarding the presence and direction of flow in renal vessels.

As it is known that renal blood flow decreases overtime in the presence of obstruction, assessment of vascular resistance is possible from Doppler waveform analysis using parameters such as the resistive index.This index is higher whenever the blood flow is diminished and this indicates obstruction.

{ Lee et al 1996}

In this work we will try to evaluate urinary tract obstruction by using Doppler ultrasonography and try to investigate the usefulness and limitations of some Doppler parameters as resistive index and delta.resistive index in the diagnosis of obstructive uropathy.

AIM OF THE WORK

Urinary tract obstruction is of great importance in urological practice.The diagnosis may be sometimes difficult , because one of the important criteria , the pelvicalyceal dilatation ,may occur without obstruction.

For long time ,intravenous urography has been the investigation of choice , then, other diagnostic tools came to appear in clinical practice , namely ultrasonography , computerised tomography, radioisotopes, and others.

Since some of these tools may be invasive ,expensive or inconclusive, the development of a reliable ,non invasive and inexpensive method ,would have important clinical implication An example of such method is Doppler ultrasonography.

In this work we will try to evaluate urinary tract obstruction by using Doppler ultrasonography and try to investigate the usefulness and limitations of some parameters as resistivity index and delta resistivity index in the diagnosis of obstructive uropathy.

REVIEW OF LITTERATURE