Evaluation Of Urinary tract obstruction in Ca. Cervix patients in Sudan detected by ultrasonography and radioisotope renal scan

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Under the supervision of
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Dedication

To

My Husband

Nasreddin
Acknowledgment

I am greatly indebted to my supervisors, Dr. Bushra Hussein Ahmed, Faculty of Radiological Sciences and Nuclear Medicine, Ribat University, Dr. Siddig Mohamed Mustafa, Radiation and Isotope Centre of Khartoum and Mr. Salah Ali Fadlalla, Sudan University of Science and Technology.

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Sincere thanks to my family.

Abbreviations

< :Less than
>
:More than

\( 99^\text{m} \text{Tc} \) : Technetium (99m) Metastable

C/MD : Corticomedullary differentiation

\( \text{cm} \) : Centimeter

\( \text{df} \) : Degree of freedom

DMSA : Dimercaptosuccinic acid

DTPA : Diethylenetriamine Pentacetic acid

ERPF : Effective renal plasma flow

\( \text{GFR} \) : Glomerulus Filtration Rate

IVU : Intravenous Urography

\( \text{KeV} \) : Kilo electron volt

MAG-3 : Mercaptoacetyltriglycine

\( \text{MBq} \) : Mega Becquerel

\( \text{mm} \) : Millimeter

MRI : Magnetic Resonance Imaging

RICK : Radiation and Isotope Centre Khartoum

SPSS : Statistical Professional for Social Sciences

\( \text{U/S} \) : Ultrasound

WHO : World Health Organization

\( \chi^2 \) : Chi-square
الخلاصة

ينتشر وص بوطان عنق الرحم بصورة كبيرة بين نساء اليومن و هذا
الوص وثر في واحله الأخوة علي الجهاز الولي و بعض الأعضاء الإخوي
المهمة في الجسم بأضواء كبيرة.
تمت هذه الواسة في المركز القومي للعلاج بالأشعة و الطب النووي- الخط م
وط 120 وystery بوطان عمق الرحم تأكدت إصابتهن بالرض من خلال فحص
الهدف من الواسة مؤننة القيمة التشخيصية للوجات فوق الصوتية مع الفحص
بالنظائر المشعة تشخيص الانسداد الكلي عند ويات بوطان عنق الرحم في
اليومن .
بعض الويات كن يشتكين من آلام في الوجس-آلام في الظهر-وصف
أو حضون للمتاحة ، و تقفيح الحالة تم إلواء فحص بالوجات فوق الصوتية
للوجس و الطفل لكل وystery طلب لها فحص الكلي بالنظائر المشعة.
أظهرت النواتع ملاحظة التغيرات التي تصبك الكليتين باستخدام فحص
الكلي بالنظائر المشعة و كانت (45% ) بينما كانت في الفحص بالوجات فوق
الصوتية لكلي (50% ) و تمت مؤننة النواتع مع رتفاع مسوي الولينا في الدم
الذي ظهر في( 23.3% ) من الوضي .
نسبة لإتفاق الإصابة بوطان عنق الرحم في اليومن حيث يمثل نسبة
( 5.6% ) من كل الأرام في اليومن فإن فحوصات الوجات فوق الصوتية هي
لإسراع التشخيصية السهلة الامح الذي يجب استخدامها من قبل اختصاصي
النساء و الإثيد و اختصاصي الأرام دائماً في تشخيص و متابعة ويات بوطان
Abstract

Carcinoma of the cervix is a common disease in Sudanese women. It is the cancer of lower part of the uterus. The kidneys and other organs are affected in the late stage of the disease.

In this study a group of 120 patients with carcinoma of the cervix confirmed by biopsy, were evaluated by ultrasound scan and renal isotope scan (both Tc$^{99m}$ DMSA and Tc$^{99m}$ DTPA ) in the Radiation and Isotope Centre of Khartoum during the year 2001-2003.

The aim of the study was to compare the diagnostic value of the ultrasound scan compared with renal isotope scan for the diagnosis of renal obstruction and parenchymal changes in women with carcinoma of the cervix.

All the patients had renal isotope scan and whole abdomen and pelvic ultrasound examination was performed for each patient.

Renal isotope scan detected changes in about (45 %) of patient compared with ultrasound scan which detected (50 %) of patients, while in blood urea level there was (23.3 %) of patients with high blood urea.

Because of the high prevalence of carcinoma of the cervix in Sudan (5.6 %) of all cancers, ultrasound scan is the most cheap and available tool for obstetrician and oncologists as a guide to detect renal obstruction and changes, paraortic lymph nodes enlargement, liver metastasis and other masses in carcinoma cervix patients.
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