

# الآية

لِلَّهِ مُلْكُ السَّمَاوَاتِ وَالْأَرْضِ يَخْلُقُ مَا يَشَاءُ يَهَبُ لِمَنْ  
( يَشَاءُ إِنَاثًا وَيَهَبُ لِمَنْ يَشَاءُ الذُّكُورَ

سورة

الشورى الآية 50

صدق الله العظيم

# **Dedication**

To my little family

To My father and mother

# **Knowledgegment**

First I would like to express my deep gratitude and sincere thanks to my supervisor Dr.Elsafi Ahmed for his useful advice and wise guidance through this thesis and sharing his knowledge through all the lectures and practical sections he conduct during the course.

My thanks extend to all who were not mentioned here and provide my by any kind , learn and knowledge to fulfill this work.

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## **Abstract**

Varicocele, whose association with male infertility has been clearly documented in the literature, is a common finding in adolescents and adult men, being diagnosed in 20-40% of infertile patients. A correct and early diagnosis of this affliction is of great importance because, in most cases, a timely correction, usually performed using percutaneous sclerotherapy, leads to an improvement in semen quality. this study is to describe the criteria for diagnosis, particularly emphasizing the present ultrasound guidelines. Methods and manoeuvres to aid visualization , as well as variations in appearance. study will carry out to evaluate the sonographic appearance of the varicocele.

Data collected from Asia Hospital, Military Hospital and Ultrasound Clinic of Dr. Mohammed Hassan (Omdurman) , 50 patients with highly suggestive varicocele or have been scanned using Doppler machine **LOGIQ3** with 10 MHz linear probe, The summaries about the sample and the measures by the main features of a collection of data have been analyzed .

The diagnosis of varicocele made in cases of the diameter of vein larger than 2 mm and grading was been made according to the location of the dilatation related to the testis either with or without

manoeuvres. The clinical remarks for this study was 30 patient (60%) from the total were symptomatic, 4 patient (8%) of the total were A symptomatic , 16 patient (32%) of the total were Infertility.

## مستخلص البحث

لقد ثبت علمياً أن دوالي الخصيتين سبب رئيسي في العقم عند الرجال , حيث ثبت في إحدى الدراسات أن 20% الى 40% من العقم سببه دوالي الخصيه و لذا تبرز أهمية التشخيص المبكر لهذا المرض حيث يتم تحديد نوع العلاج الصحيح. أجريت هذه الدراسة لتقييم دور الموجات الصوتيه في تشخيص هذا المرض وتحدد درجته .

تم جمع هذه البيانات من مستشفى اسيا (د.الرشيد مصطفى) و السلاح الطبي وعيادة د.محمد الحسن (أمدرمان), حيث تم فحص خمسون مريضاً تم تشخيصهم إكلينيكيًا بدوالي الخصيه , وباستعمال جهاز دوبلر لوجك 5 مع ماسح خطي بطاقة 10 ميجاهرتز .

تم تحليل خلاصت العينات و القياسات, أعتمد التشخيص لدوالي الخصيتين علي إتساع الأورده لأكثر من 2 مم , وتم التصنيف علي حسب موقع الإتساع من الخصيتين والتأثر بضغط التنفس علي الأورده .

تم توزيع جملة المرضى على حسب الشكوى وكانت النتائج بعد الفحص ان 30 مريض (60% ) من جملة المرضى يشتكون الام حول الخصيتين و 4 مريض (8%) لا يشتكون من اي اعراض و 16 مريض (12%) يعانون من عقم اولي.

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## **List of abbreviation**

Mm\_ meli miter

Cm\_ centimeter

LH\_ lethal hormone

Fsh\_ Follicular Stimulation Hormone

Lat\_ Lateral

Rt\_ Right

Lt\_ Left

Trans\_ Transverse

Long\_ Longitudinal

Mid\_ Middle

CDU\_ Color Doppler Ultrasound

PWD\_ Pulsed wave Doppler

Epid\_ Epididymas

TM\_ Testicular microlithiasis

NY\_ New York

NSGCT\_ nonseminomatous germ cell tumors

HCG\_ human chorionic gonadotropin.

AFP\_ Alpha Fetal Protein

U\S\_ Ultrasound

PT\_ patient