

بسم الله الرحمن الرحيم

قال تعالى:-

(وما أوتيتم من العلم إلا قليلا)

صدق الله العظيم

الاية (85) الاسراء

## **Dedication**

**.... To my parents  
.... To my wife  
To my teachers  
....  
....To my brothers  
.... To my sister  
To my  
.... friends**

Siddig

## **ACKNOWLEDGEMENTS**

*I consider myself very fortunate to have Dr. Mona Ahmed as my guide and mentor. I express my heartfelt appreciation for her valuable guidance, constant inspiration, optimistic attitude,*

*meticulous support and encouraging words*

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Siddig

### **Abstract**

The main objective of this study is to determine the sonographic appearance of the ovaries in the abnormal

thyroid patients. Hence the specific objectives is To correlate between the size of the ovaries and hormone profile, to find the frequency distribution of echogenicity and to investigate the impact of age on the thyroid function test and sonographic appearance of the ovaries. The study done in the department of Nuclear medicine in Radiations isotope center of Khartoum in period between 1.12.2011 to 1.5.2012 in 60 patients with clinical thyroid gland abnormalities, the mean age of the patients under study was 30.8 yrs with standard deviation 8.4. The result concluded that, 39(65%) was normal , poly cystic ovarian disease (PCOD) is 15(25%) Simple cyst of ovary formed 5 (8%)of and 1(2%) has ectopic pregnancy

Women with hypothyroidism have polycystic ovaries, as determined by ultrasound. And women with hyperthyroidism may have irregular menstrual cycles

### **ملخص الدراسة**

الهدف الأساسي من هذه الدراسة هو دراسة المبايض في حالة الإصابة بأمراض الغدة

الدرقية بينما الاهداف المحددة هي المقارنة بين حجم المبايض وملامح هرمونات الغدة

الدرقية ودراسة تغير الصدى في المبايض باستخدام الموجات فوق الصوتية.

تمت هذه الدراسة في مستشفى الخرطوم للعلاج بالأشعة والطب النووي على 60 مريض مصاب بخلل في الغدة الدرقية في الفترة من 1.12.2011 إلى 1.5.2012 بمتوسط أعمار 30.8 سنة ومقدار إنحراف معياري 8.4 وسجلت الدراسة أن 39 حالة (65%) حالات طبيعية و 15 حالة (25%) مصابة بتكيس في المبايض و 5 حالات (8%) عبارة عن أكياس دهنية وحالة واحدة (2%) تمثل حمل خارج الرحم .

أوضحت الدراسة أن النساء المصابات بخمول في الغدة الدرقية لديهن تكيس في المبايض بينما اللاتي يعانين من زيادة في نشاط الغدة الدرقية مصابات بعدم انتظام في الدورة الشهرية.

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Of T3 scatter plot show the relationship level with Lt ovary size and Rt ovary with a trend line depict a direct linear relationship

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#### LIST OF Abbreviation

<b>FNAC/FNAB</b>	<b>Fine Needle Aspiration Cytology/Biopsy</b>
<b>MEN</b>	<b>Multiple Endocrine Neoplasia</b>
<b>MRI</b>	<b>Magnetic Resonance Image</b>
<b>MTC</b>	<b>Medullary Thyroid Carcinoma</b>
<b>PC</b>	<b>Papillary Carcinoma</b>
<b>PCOD</b>	<b>Poly Cystic Ovary Disease</b>
<b>STN</b>	<b>Solitary Thyroid Nodule</b>
<b>TN</b>	<b>Thyroid Nodule</b>
<b>TSH</b>	<b>Thyroid Stimulating Hormone</b>
<b>T3</b>	<b>Trilodothyronine</b>
<b>T4</b>	<b>Thyroxine</b>
<b>TAS</b>	<b>Trans abdominal sonography</b>
<b>EVS</b>	<b>EndoVaginal Sonography</b>
<b>CL</b>	<b>Corpus Luteum</b>
<b>HCG</b>	<b>Human Chorionic Gonadotrophin</b>
<b>WHO</b>	<b>World Health Organization</b>
<b>FT4</b>	<b>Free thyroxine</b>

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