

## ***Acknowledgements***

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## ***ABSTRACT***

The aim of this study was to measure thyroid hormones level (TSH, total  $T_3$ , and total  $T_4$ ) among males and females patients with goiter in west Darfur (Algeneina City) their ages arranges between (10-65) years.

One hundred thirty (120) samples (30males (10-65years) and 90females (10-65years)) were collected in the plain containers;90 samples were collected from patients with goiter and 40 samples from apparently healthy individuals as control .the samples was transported In ice bag by air plane from Algeneina to Khartoum and the Hormones wear measured using ELISA technique in the management of Laboratories.

In this study 64samples(82.5%) were found to have normal thyroid hormones levels (Euthyroid), while six samples(7.5%) were found to have hyperthyroidism, and four samples(5.0%) were found to have hypothyroidism, and four samples (5.0%) are high in TSH.

Also we found mean of  $T_4$  in patients with goiter (7.5) was significantly lower than mean in non goiter individuals (9.4), mean of TSH in patients with goiter (1.8) was

significantly lower than mean in non goiter individuals (2.3) and no significant difference between mean of  $T_3$  in patients with goiter (1.1) and mean in non goiter individuals (1.2).

## مستخلص الدراسة

تهدف هذه الدراسه الى قياس هرمونات الغده الدرقيه (مجموع الشيروكسين ثلاثي اليود,الشيروكسين رباعي اليود وايضا الهرمون المحفز للغده الدرقيه) لدى المصابين بتضخم الغده الدرقيه من الرجال والنساء بولاية غرب دارفور تتراوح اعمارهم ما بين 01-65 سنة.

تم جمع 120 عينة (30 عينة من الرجال اعمارهم ما بين 10-65 سنة) و 90 عينة من النساء اعمارهم ما بين (10-65 سنة) من مصل الدم فى حاويات خاليه من مضادات التجلط 80 عينه منهم مصابين و 40 عينه منهم غير مصابين للمقارنه, وقد تم نقلها فى حافظة ثلج من الجنينه الى اداره المعامل ELISA الخرطوم وحللت باستخدام طريقة . فى ادارة المعامل

وفي هذه الدراسه تحصلنا على (66)عينة (82.5%) بها هرمونات الغده الدرقيه فى المستوى الطبيعي بينما (6)عينات (7.5%) بها ارتفاع فى مستوى هرمونات الغده الدرقيه , (4)عينات (5.0%) بها انخفاض فى مستوى هرمونات الغده الدرقيه , (4)عينات (5.0%) بها ارتفاع فى الهرمون المحفز للغده الدرقيه.

وجدنا ان متوسط هرمون الشيروكسين رباعي اليود لدى المصابين بتضخم الغده الدرقيه (7.5) اقل من المتوسط لدى غير المصابين (9.4), متوسط الهرمون المحفز للغده الدرقيه لدى المصابين بتضخم الغده الدرقيه (1.8) اقل من المتوسط لدى غير المصابين بتضخم الغده الدرقيه

وايضاً وجد ان ليس هناك فرق بين متوسط مجموع التيروكسين ثلاثي اليود لدى المصابين وغير المصابين بتضخم الغدة الدرقية (1.1) و(1.2) على التوالي .

## ***List of Content***

Subject	Page No
دیلی	
Dedication	
Acknowledgements	I.
Abstract	II.
Abstract	III.
List of Abbreviations	IV.
List of Tables	V.
List of Figures	VI.
<b><i>Chapter One : Introduction &amp; Literature Review</i></b>	
1.1 Thyroid gland	1
1.1.1 Anatomy of thyroid gland	1
1.1.2 Thyroid Physiology	1
1.2. Thyroid Physiology	2
1.2.1 Regulation of thyroid hormones	2
1.2.1.1. The thyroid gland is under the control of the pituitary gland	2
1.2.1.2. the pituitary gland itself is regulated by another gland know as hypthalmus .	2
1.2.2. Type of thyroid hormones	3
1.2.3. Biosynthesis of thyroid hormones	3
1.2.4. Transport of thyroid hormones	4
1.2.5. Metabolism of thyroid hormones	4
1.2.6. Mechanism of action	5
1.2.7. Action of thyroid hormones	5
1.3. Disorders of the thyroid gland	5
1.3.1. Hyperthyroidism	5
1.3.1.1. Causes of hyoerthyroidism	5
1.3.1.1.1. Primary thyroid abnormalities	5

1.3.1.1.2. Secondary hyperthyroidism	5
1.3.1.2. Pathophysiology	5
1.3.2. Hypothyroidism	6
1.3.2.1. Symptoms of hypothyroidism	6
1.3.2.2. Causes of hypothyroidism	6
1.3.2.3. Patho physiology	6
1.4. Thyroid function tests	7
1.4.1. Total thyroxine (T4)	7
1.4.2. Free thyroxine (free T4)	7
1.4.3. Plasma TSH	8
1.4.4. Total and free triiodothyronine (T3)	8
1.4.5. TRH test	8
1.5. Iodine	8
1.5.1. Role of iodine in the body	9
1.5.2. Iodine physiology	9
1.5.3. Deficiency	9
1.5.4. Iodine deficiency in Sudan	10
1.6. Goiter	10
1.7. Euthyroid goiter	11
1.7.1. Edemic goiter	12
1.7.2. Sporadic goiter	12
1.8. Objective	13
1.9. Rationale	14
<b><i>Chapter Two : Material and Method</i></b>	
2.1. study design	15
2.2. Study population	15
2.2.1. Sampling	15
2.2.2. Inclusion criteria	15
2.2.3. Exclusion criteria	15
2.3. Tools of data collections	15
2.4. Data analysis	15
2.5. Ethical consideration	15
2.6. Methodology	16

2.6.1. Measurement of total T3	16
2.6.1.1. Principle of the method	16
2.6.2. Measurement of total serum thyroxin (T4)	17
2.6.2.1. Principle of the method	17
2.7.2.2. Procedure of the method	17
2.6.3. Measurement of TSH	18
2.6.3.1. Principle of the method	18
2.6.3.2. Assay procedure	18
<b><i>Chapter (3) Results &amp; Data Analysis</i></b>	
3.1. Results	19
3.2. Data Analysis	28
<b><i>Chapter (4)Discussion and Conclusion and Recommendation</i></b>	
4.1. Discussion	29
4.2. Conclusion	30
4.3. Recommendation	31
References	32
References	32
Appendices	33

## List of Abbreviation

T4	Thyroxine
FT4	Free thyroxine
T3	Triiodothyronine
rT3	Reverse triiodothyronine
TSH	Thyroxine stimulating hormone
TRH	Thyroxine releasing hormone
TG	Thyroglobulin
TBPA	Thyroxine binding prealbumin
GD	Craves disease
ID	Iodine deficiency

## **List of tables**

NO	Name of Table	Page
(3.1)	Frequency of age among study groups.	21
(3.2)	Frequency of sex among study groups.	22
(3.3)	Frequency material status distribution.	23
(3.4)	Comparison of Thyroid hormones among age of study groups	24
(3.5)	Comparison of Thyroid hormones between male and female among study groups.	25
(3.6)	Comparison of Thyroid hormones between social statuses among study groups.	26
(3.7)	Comparison of Thyroid hormones between case and control among study groups.	27
(3.8)	Frequency distribution of case results among study groups.	28

## **List of Figures**

No	Name of Figures	Page
(3.1)	Frequency of age among study groups.	21
(3.2)	Frequency of sex among study groups.	22
(3.3)	Frequency material status distribution.	23
(3.4)	Comparison of Thyroid hormones among age of study groups	24
(3.5)	Comparison of Thyroid hormones between male and female among study groups.	25
(3.6)	Comparison of Thyroid hormones between social statuses among study groups.	26
(3.7)	Comparison of Thyroid hormones between case and control among study groups.	27
(3.8)	Frequency distribution of case results among study groups.	28