Dedication

To my mother

To the soul of my father

To my wife and son

Acknowledgement

So many thanks to Allah Almighty who helped me to write this thesis. My sincere thanks to Dr. Syed Amir Gilani who provided me with the most precious advice and appropriate guidance not only for preparing this thesis but also through his interesting lectures and the practical guidance. He encouraged us to pay attention to the importance of research. His lectures were full of knowledge as I believe he tries honestly to transfer his expertise to all of his students. And I'm grateful to consultant radiologist Dr Shawkat Ali Khan , The head of radiology department in Quayeya general hospital , my local supervisor for his continuous supporting, helping and guidance , he encouraged me, and I Would like to acknowledge and thank Mr. Mubarak Ali Alkahtany the director of Alkhasra general Hospital for his great support and encouragement and giving a good chance for training .

Finally special thanks to my family and friends who always support and encourage me.

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November 2007 Alkhasra

Abstract

The objective of this study is the detection of the relationship between thyroid volume and age, sex and body weight in normal patient in Quayeyya region (Kingdom of Saudi Arabia 2006 to 2007). This study depends on practical scanning through which the data was collected. The data was collected from August 2006 to November 2007. Patients from different areas of Quayeyya region were scanned in government hospitals which include: Quayeyya general hospital, Ruayda general hospital and Alkhasra general hospital. Using a precise and accurate ultrasonic scanning technique we have measured the volume of the thyroid gland in 241 healthy peoples the general average was (18.4 ml.) difference between males thyroid volumes average is (19.4 ml) and females thyroid volumes average is (17.5) was found (1.9 ml). And from the values above we can detects that the thyroid volume was significantly correlated with both body weight and age, the influence of body weight on the thyroid volume was greeter than that of age. The difference in thyroid gland volume between males and females was explained by difference in the body weight. Ultrasound of thyroid gland must be done early to discover the abnormality if present, and look for suitable solutions, also it is accurate modality for detecting the thyroid gland abnormality because it is non –invasive, cheep, and available method.

بسم الله الرحمن الرحيم

ملخص البحث

الهدف من هذه الدراسه هو قياس حجم الغدة الدرقية عن طريق الموجات الصوتية وعلاقته بالعمر والجنس ووزن الجسم اعتمد هذا البحث على الجانب العملى المختص بعمل تصوير بالموجات فوق الصوتيه لتصوير االغدة الدرقية وقياس الحجم فى الفتره من اعسطس 2006 حتى نوفمبر 2007 تم عمل فحص بالموجات فوق الصوتيه لعدد 241 شخصا من مناطق مختلفه من محافظة القويعية بالمملكة العربيه السعودية والمستشفيات الحكومية التى تم فيها الفحص هى مستشفى القويعية العام ومستشفى الخاصرة العام ومستشفى الرويضة العام .

باستخدام الموجات فوق الصوتية بطريقة دقيقة تم قياس حجم الغدة الدرقية لعدد 241 من الشخاص الاصحاء اتضح ان متوسط حجم العدة الدرقيه عند الجنسين يساوى 18.4 مل ومتوسط الحجم عند الرجال 19.4 مل ومتوسط الحجم عند النساء يساوى 17.5 مل والفرق بينهما يساوى 1.9 مل كذلك نجد ان حجم الغدة الدرقية يرتبط ارتباطا وثيقا بوزن الجسم وعمر السخص ووزن الجسم له التاثير الاكبر فى زيادة حجم الغدة الدرقية .

على جميع المرضى اجراء فحص الموجات فوق الصوتيه مبكرا لاهمية اكتشاف حالات أمراض الغدة الدرقية علما بان الموجات فوق الصوتيه هى اجدى انواع الفحوصات التى

تجرى للغدة الدرقية دقة فى التشخيص اضافه الى انها متوفره , رخيصه و غير ضاره بالمرضى .

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