

# **The Role Of Ultrasound In The Thyroid Swellings**

*Thesis*

*Submitted in partial fulfilment of the Master  
Degree in radiodiagnosis*



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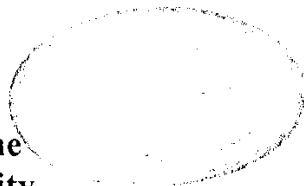
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## **Introduction & Aim of the Work**



## *Introduction & Aim of the Work*

*In the past few years, sophisticated ultrasound system specially designed for the evaluation of superficial organs & structure have been developed. These high resolution scanners are particularly well suited to diagnostic imaging of Thyroid Gland. The various methods used for the investigation of Thyroid Gland are mainly directed towards the determination and evaluation of its functional activity. The resulting information obtained by such functional tests is in many cases insufficient to establish a confident diagnosis of the underlying diseased condition.*

*\* The aim of this work is to evaluate the use of high resolution "high frequency" scanners, in the interpretation of various thyroid swellings as well as, the important role of ultrasonographic as a recent imaging modality in diagnosis follow up & guidance to precise management of thyroid swellings.*



# Anatomy



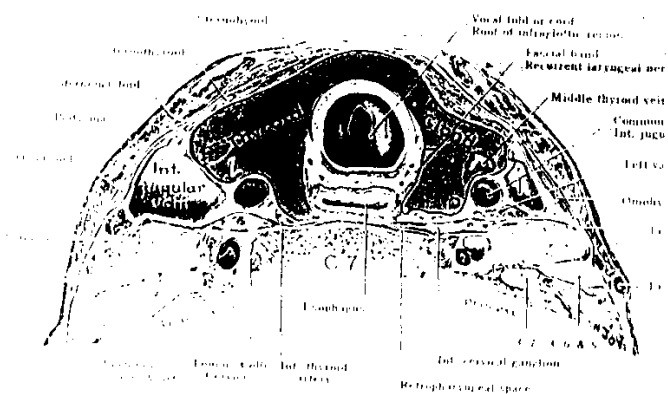


Fig (3)

(Quoted from warwick R. and williams P.L)



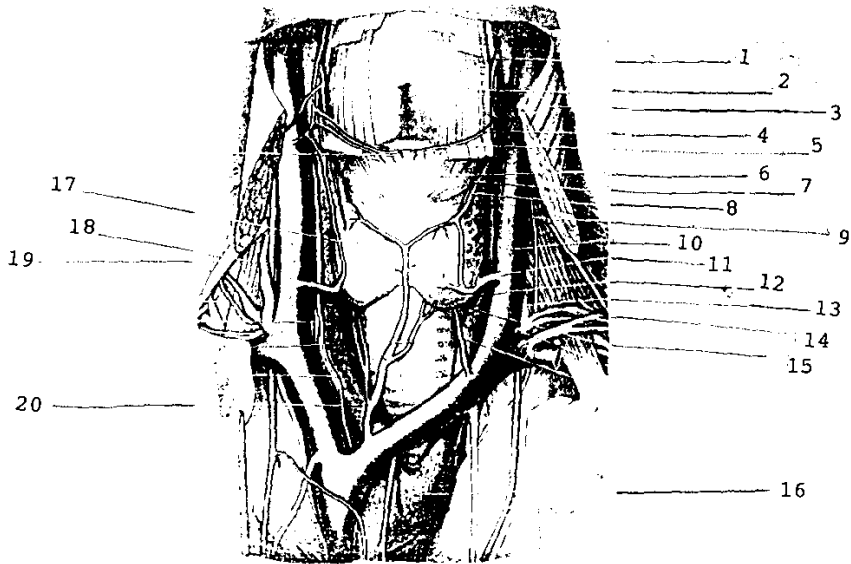


Fig (2)

(Quoted from warwick R. and williams P.L.)

- |                                |                         |
|--------------------------------|-------------------------|
| 1- Superior thyroid A.         | 2- Thyroid - hyoid      |
| 3- Sternomastoid               | 4- Crico thyroid A.     |
| 5- Sterno thyroid              | 6- Crico thyroid        |
| 7- Sup, thyroid A.             | 8- Sup, thyroid V.      |
| 9- Phrenic nerve               | 10- Int.J.vein          |
| 11- Middle thyroid vein        | 12- Thyroid gland       |
| 13-14 Jugular & Subclavion L.N |                         |
| 15- Common carotid artery      | 16- Arch of aorta       |
| 17- Isthmus of thyroid         | 18- Scalenus ant.       |
| 19- Omohyoid inf. belly        | 20- Brachio-cephalic A. |

