

# **THE ROLE OF ULTRASONOGRAPHY IN THE EVALUATION OF SUBMANDIBULAR PATHOLOGY**

**A thesis**

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**By**

**Dr. Shefa'a Hussein Khaleel  
B.D.S.**

**Supervised by**

**Professor  
Dr. Widad Al-Sahhar**

**Specialist Radiologist  
Dr. Abdul-Kareem Ghaleb Flayeh  
D.M.R.D, F.I.C.M.S  
Baghdad teaching hospital**

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# Summary

This prospective study was conducted in the Radiological department; at ultrasound unite of Baghdad teaching Hospital at medical city from October 2002 to June 2003.

Fifty nine Iraqi subject their age 2.5-65 years were examined by ultrasound with evaluation the role of ultrasound in the assessment of submandibular region pathology as a new investigation in relation to the clinical and histopathological results.

Data were collected from patients history, clinical examination and histopathology if available to the patients, ultrasound investigation was performed for both sides to all patients using probe (7.5-10) MHz. Data analyzed and presented in forms of graph and tables. The results show . Thirty five patients with tumor masses (Benign and malignant masses ). Fifteen patient with infection, nine patients with miscellaneous group (Muscle hyper atrophy ,Foreign body,Haematoma, cyst).

The results of this study indicated that:

Ultrasound has ability to differentiate between cystic and solid masses, benign and malignant masses with its anatomical origin .in short period of time with low cost.

Ultrasound is quick and easy method for detection and follow-up of vascular anomalies, muscle disease, sialolithiasis and foreign body in submandibular region.

Ultrasound found to be superior to clinical palpation in diagnosis sub mandibular lymph node metastasis,infection, depend on, short axis/long axis,echo texture, out line and color Doppler imaging.

Ultrasound guided biopsy and aspiration used as alternative to surgical procedure in case of abscess drainage and biopsy of solid tumor.