

**Republic of Iraq
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College of Dentistry**



Sonographic Role in the Diagnosis & Evaluation of Early Therapeutic Response of Cervical Tuberculous Lymphadenitis

A thesis

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Abstract:

Background:

Tuberculosis is still a worldwide infectious disease in spite of advancement in health care system. Tuberculous lymphadenitis is the most prevalent form of extra pulmonary tuberculosis with predilection cervical lymph nodes

High index of suspicion is made by clinical examination and confirmation depends on radiological and histopathological examination.

Objectives:

To evaluate the reliability of grey scale ultrasonography together with color Doppler in the diagnosis of cervical tuberculous lymph adenitis and evaluation of early therapeutic response.

Subjects and methods:

This study was carried out in the period from July 2015 to May 2016 in Al-Karama teaching hospital /Kut city- Wasit-Iraq, (63) patients presented with cervical lymphadenopathy, (34) males and (29) females their ages range from (5-54). After following the exclusion criteria 25 patients (14 males and 11 females) with age range from (6-50) years their mean age (31.04) were selected. Ultrasonographic examination was done for all patients and grey scale criteria (distribution, size, shape, echogenicity, echogenic hilum, intranodal necrosis and ancillary features) and vascular distribution were recorded to help in the diagnosis of tuberculous lymphadenitis. Excisional biopsy was done to confirm the diagnosis histopathologically. After chemotherapy the patients were followed up 46days after treatment, grey scale criteria were recorded again and compared with the 1st reading.

Results:

Ultrasonography could identify 88% of the patients (22/25) as having cervical tuberculous lymphadenitis while histopathology proved that only 80% of the patients truly have the disease. This means that ultrasonography had (100%) sensitivity, specificity (60%) and accuracy (92%) with no false negative and 8%

false positive. In following up the patients, grey scale ultrasonography criteria showed a significant difference for the same patients before and after 46 days of treatment.

Conclusions:

Ultrasonography have 100% sensitivity, 60% specificity and 92% accuracy in the diagnosis of cervical tuberculous lymphadenitis and grey scale sonography was found to be significant in the evaluation of early therapeutic response of the patients.