DIAGNOSITIC RELIABILITY OF THYROID IMAGING REPORTING AND DATA SYSTEM (TIRADS), A NON INVASIVE CLASSIFICATION IN DIFFERENTIATION BETWEEN BENIGN AND MALIGNANT THYROID LESIONS.

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ABSTRACT

AIMS AND OBJECTIVE: -

As the Prevalence of thyroid nodules is increasing all over the world. Ultrasound being most reliable and economical imaging technique for diagnosing thyroid nodules , a ultrasound based thyroid imaging reporting and data system classification has been developed . Fine needle aspiration cytology (FNAC) a mandatory in the preoperative diagnosis of thyroid nodules to distinguish benign from malignant nodules but It is still unclear how thyroid nodules should be chosen for FNAC. To classify thyroid nodules and address the issue of nodule selection for FNAC, a useful thyroid imaging reporting and data system (TIRADS) has been developed. This study aims at evaluating the reliability of the daily use of ACR-TIRADS classification in differentiating between benign and malignant thyroid lesions and hence avoiding invasive FNAC procedure in benign lesions.

TYPE OF STUDY: -Hospital based prospective study

MATERIALS AND METHODS: - as per inclusion and exclusion criteria the present study was based on 60 patients , patients with clinically suspected or ultrasound diagnosed thyroid nodules were subjected to undergo conventional high resolution sonography of the thyroid gland, and depending on the presence or absence of various sonographic features The thyroid nodules were categorized according to ACR-TIRADS Classification. Ultrasound guided fine needle aspiration cytology (FNAC) of suspicious or dominant nodule were evaluated according to BETHESDA system of Classification for reporting thyroid cytopathology.

The relation between TIRADS and BETHESDA was evaluated using

Statistical package of social sciences (spss) version 20. The Histopathological report was used as the standard final diagnosis for Comparison

RESULTS: -In this study on comparing the TIRADS scoring system on initial assessment to predict the efficacy in differentiating benign and malignant lesions versus the final biopsy report it is found that TIRADS is effective in predicting malignancy in a suspicious thyroid nodule with significant p value of 0.05 and with sensitivity of 77.36 % specificity of 57.14% positive predictive value (PPV) of 93.18% and negative predictive value of (NPV) 25% at 95% confident interval .

CONCLUSION: -.
The TIRADS scoring system is a statistically significant scoring system in differentiating benign and malignant lesions of the thyroid gland on initial assessment and hence help preclude FNAC in benign lesions.