

# Evaluating the Consistency of the FNA Test in Pathologically Proven Nodules of Thyroidectomy

Alireza Khazaei, Abdolreza Sotoodeh Jahromi, Masoum khoshfetrat, Nooshi Pormehr Yabandeh, Mohammad Behnampoor

## ABSTRACT

Fine Needle Aspiration (FNA) is a selective diagnostic technique for the evaluation of non-toxic thyroid nodules. Thyroid FNA results are either undiagnosed or suspicious and indeterminate in 20-30% of cases. Therefore, this study seeks to determine the consistency of the FNA test in pathologically proven nodules of thyroidectomy. This is a descriptive cross-sectional study carried out on a total of 73 candidates for thyroidectomy who had been admitted to Imam Ali Hospital. A census sampling method has been used in this study. The FNA samples and pathology samples were evaluated and the consistency of the FNA test in pathologically proven nodules were compared. The SPSS software was used for data analysis. The mean age of the patients was  $40.1 \pm 12.9$  years. 23.3% of the participants were male and 76.7% of them were female. The malignancy rate in the pathology was 65.8% (48 cases) and 53.4% (39 cases) in the FNA. Of the 48 positive cases, the FNA pathology diagnosed 35 cases (72.9%) as positive and 13 cases (27.1%) as negative. Of the 25 negative cases, the FNA pathology diagnosed 21 cases (84%) as negative and 4 cases (16%) as positive. Sensitivity, specificity, positive and negative predictive values of FNA in malignancy diagnosis were 72.92, 84, 89.74, and 61.76%, respectively. The results show that FNA does not have a high sensitivity in the diagnosis of malignancy, but has good specificity and the use of other diagnostic methods before the operation of thyroid nodules seems necessary.

**Key words:** FNA, Pathology, Thyroid Nodule