

Although most of thyroid nodules are benign, 5-10% are malignant. It is important to predict the risk factors and malignant potential of STN to avoid unnecessary surgery with its complications. A prospective study was conducted to assess the rate and malignant potential of STN in 146 patients. They submitted to thorough investigations including a detailed history and clinical examination, thyroid function test, ultrasound examination and FNAC.

There were 126 females and 20 males with female to male ratio about 6:1. The rate of malignancy in STNs was 8.9% with males affected more than female (15% Vs 7.9%), and more with age above 40 in both sexes. History and clinical exam suspect malignancy in 6% of cases. All patients were euthyroid. Ultrasonic features such as ill-defined margin, microcalcifications, marked hypoechogenicity, and cervical lymphadenopathy are helpful features for prediction of malignancy, but none of these features are specific or pathognomonic. The results of FNAC in this study were: 76 benign colloid goiter, 24 follicular tumor, 18 suspicious aspirate, 6 papillary carcinoma and 22 indeterminate cytology. The sensitivity, specificity and accuracy rate of FNAC in this study were 86.4%, 96.3 and 92.3% respectively.

History and examination are poor predictors of malignancy in STN. Male and increasing age are proved to be risk factors for malignancy in STN. Certain ultrasonic features are helpful in predicting malignancy but neither specific nor characteristics. These include ill-defined and irregular margin, microcalcification, marked hypoechogenicity, hyper-vascularity and cervical LAP. FNAC is highly sensitive in predicting malignant nodule. FNAC must be the first and could be the only test required to evaluate STN.