

# HISTOPATHOLOGICAL AND CYTOLOGICAL CHARACTERISTICS OF THYROID NODULES IN SOUTH VIETNAM

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## Abstract

**Background:** It is well known that fine needle aspiration (FNA) plays an essential role in diagnosis of thyroid nodules. Recently, the development of ultrasound makes FNA of deep and untouchable nodules possible. FNA can be used to distinguish thyroid cancer in early stage from benign lesions. It is recommended that thyroid lesions should be classified into 6 groups based on FNA interpretation: unsatisfactory, benign, cellular follicular lesion, suspicious for malignancy, follicular neoplasm, and positive for malignancy. **Design:** In Ho Chi Minh City University Hospital, we do FNA for diagnosis of thyroid diseases as a routine procedure. Our study aims to assess pathological and cytological characteristics of thyroid nodules operated at Ho Chi Minh City University Hospital and to determine the value of FNA in diagnosis of thyroid cancer. We performed a cross-sectional and retrospective study of all thyroid nodules operated at Ho Chi Minh City University Hospital from 2006 to 2007. **Results and Conclusions:** According to our study, thyroid nodules were involved in a wide range of age (mostly from 30-60), whereas thyroid cancer was diagnosed

mostly in the age of 50-59. Thyroid nodules had strong predilection for women (male - female ratio is 6.7/1). The overwhelming majority of thyroid nodules are goiters (68%), followed by follicular adenoma (12.3%), and papillary carcinoma (13.2%). Multiple thyroid nodules were seen in 76.8% of the patients and solitary thyroid nodule in 20.9%. In thyroid cancer, multiple nodules were observed in 36.6% and solitary nodule in 63.4%. We conclude that FNA is a reliable tool for diagnosis of thyroid cancer with a sensitivity of 89.4%, a specificity of 100%, a positive predictive value of 100%, and a negative predictive value of 87.2%.