Abstract

Background: Thyroid nodules (TN) are a common problem occurring in 4 to 7% of the general population. The final objective of a TN study is to determine whether it is benign or malignant. Fine needle aspiration biopsy (FNAB) is accepted as the most appropriate preoperative procedure, but some authors have described undetermined results in 30% (follicular or suspicious lesion). Our objective is to determine whether transoperative frozen section (TOFS) plays a significant role in diagnosis and treatment of TN. Methods: This was a retrospective study and included patients who underwent thyroid surgery between January 2000 and December 2003 at the ABC Medical Center in Mexico City. Results: We included 142 patients: 14.8% were males and 85% were females. Median age was 43 years. In women, 30% had cancer and in men 76%. Sensitivity and specificity for TOFS were 94% and 93%, respectively. FNAB and the TOFS together detected 89% of the cancers. TOFS detected 39% of the cancers that the FNAB failed to detect and changed the surgical procedure in 13.4% of the patients. Conclusions: Males face a higher risk of thyroid cancer. TOFS should be done as a routine procedure in the ABC Medical Center. In cases where FNAB is inconclusive or in the absence of one, TOFS is useful and can avoid a significant number of reoperations.

Keywords
Thyroid nodule, biopsy.