Supplementary data

To define which Italian Reporting System for Thyroid Cytology category had to be considered in our population as “cytologically high risk” we analysed data from a subset of 142 nodules with available histological diagnosis and of 109 nodules with two consecutive cytological diagnosis of benign nodule (TIR2). Malignancy rates of only 1%–2% have been reported in large retrospective series that analyzed the utility of systematic repeat FNA in nodules with prior benign cytological results (1-3). Indeed, according to these evidences, a repeated TIR2 should be considered as benign nodule with >99% certainty.

Therefore, a definitive diagnosis of benignity or malignancy was available for 251 nodules. Of these 144 were TIR2 (rate of malignancy: 1.4%), 11 were TIR3A (rate of malignancy: 36.4%), 22 were TIR3B (rate of malignancy: 68.2%), 17 were TIR4 (rate of malignancy: 82.4%) and 57 were TIR5 (rate of malignancy: 98.3%).

A logistic regression analysis was performed to evaluate the risk of malignancy associated to each cytological category (supplementary figure). The categories TIR3B, TIR4 and TIR5 were significantly associated to a definitive diagnosis of malignancy. Therefore, in the subsequent analysis only TIR3B, TIR4 and TIR5 nodules have been considered cytologically high risk.

References for supplementary material