

ENCAPSULATED FOLLICULAR VARIANT OF PAPILLARY THYROID CARCINOMA: EVOLUTION OF THE DIAGNOSTIC CRITERIA AND CLINICAL BEHAVIOR

Armstrong, Michael¹; Jung, Chan²; Seethala, Raja³; Chiosea, Simion³; Hodak, Steven⁴; Yip, Linwah¹; Carty, Sally¹; Nikiforov, Yuri³

¹University of Pittsburgh, Division of Endocrine Surgery, Pittsburgh, PA, USA; ²The Catholic University of Korea, Department of Hospital Pathology, Seocho-gu, Seoul, Korea, Republic of; ³University of Pittsburgh, Department of Pathology, Pittsburgh, PA, USA; ⁴University of Pittsburgh, Division of Endocrinology, Pittsburgh, PA, USA

Background/Purpose: Over the past 20 years the histopathologic criteria for the diagnosis of PTC have progressively changed. As a result some tumors previously considered benign are now categorized as encapsulated follicular variant of papillary thyroid carcinoma (EFVPTC). This study aimed to evaluate the proportion of patients affected by reclassification as well as EFVPTC clinical behavior.

Methods: Under institutional approval, we examined a consecutive series of patients who from 1995-1998 had histopathology reported as a benign follicular adenoma or discrete hyperplastic nodule. Three thyroid pathologists reviewed slides. The clinical data of all patients whose lesions were reclassified with unanimity as EFVPTC by current criteria were then reviewed.

Results: Of 347 thyroid nodules diagnosed as benign in 1995-1998, 42 (12%) were reclassified as EFVPTC. In this group the female:male ratio was 3.7:1, mean age was 49 years (range 19-85), 10% had a history of radiation, 69% received initial lobectomy, 24% had total thyroidectomy, and 7% had completion thyroidectomy. Among the 76% of reclassified patients who had follow-up >6 mo (mean 141, range 8-213) none had evidence of recurrence or tumor-related death; moreover 38% had clinical thyroid follow-up within the past 3 years. The 24% of reclassified EFVPTC patients with follow-up ≤ 6 mo have no evidence of recurrence or death from disease.

Discussion & Conclusion: Approximately 12% of patients with discrete thyroid nodules diagnosed as benign in 1995-1998 would now be classified as EFVPTC. EFVPTC is a low-risk cancer with disease-free long-term outcomes even when treated with lobectomy and without radioiodine therapy.