

### **Incidental Papillary Thyroid Microcarcinoma: is Completion Surgery Required?**

V. Muntean<sup>1</sup>, I. Domsa<sup>2</sup>, A. Zolog<sup>2</sup>, D. Piciu<sup>3</sup>, O. Fabian<sup>1</sup>, R. Bosu<sup>1</sup>, R. Simescu<sup>1</sup>, G. Petre<sup>1</sup>, M.V. Muntean<sup>1</sup>

<sup>1</sup>Department of Surgery, CF Clinical Hospital, "Iuliu Hațieganu" University of Medicine, Cluj-Napoca, Romania

<sup>2</sup>Department of Pathology, CF Clinical Hospital, Cluj-Napoca, Romania

<sup>3</sup>Department of Nuclear Medicine, "Ioan Chiricuță" Institute, Cluj-Napoca, Romania

#### **Abstract**

*Background:* The indications for completion surgery in patients with thyroid papillary microcarcinoma (PMC), incidentally found in thyroids removed for benign conditions, remains a subject of debate.

*Methods:* In a retrospective, transversal, cohort study of 187 incidental PMCs, found during histological examination of the thyroid gland in 2168 patients operated for benign thyroid conditions, we evaluated the influence of initial and completion surgery on pathological features associated to local recurrence and cancer-related mortality.

*Results:* In the patients with almost total or total thyroidectomy at the first operation, lymphadenectomy of lymph nodes with features suggestive of malignancy on postoperative ultrasound resulted in a statistically significant ( $p < 0.01$ ) increase of node positive patients in pathological examination. Completion surgery in 38 out of 42 patients who underwent less than a total thyroidectomy doesn't result in a significant increase of tumor size, number, multifocality, bilaterality, invasion or nodal metastases. There were no significant differences in postoperative complications between the two groups.

*Conclusions:* In patients with less than total thyroidectomy and incidentally found PMC in resection specimens, 1-5 mm in greatest dimension and without extrathyroidal extension, completion surgery was not followed by a significant increase of pathological features associated to cancer related morbidity and mortality.

**Key words:** papillary thyroid microcarcinoma, completion thyroidectomy, lymphadenectomy

Corresponding author: Valentin Muntean, MD

"Iuliu Hațieganu" University of Medicine  
CF Clinical Hospital, Department of Surgery  
18 Republicii Street, 400015, Cluj-Napoca, Romania  
Fax: +40264450394  
E-mail: valentin.muntean@gmail.com