## Persistent hypercalcitoninemia in patients with medullary thyroid cancer

Claudia Misso<sup>1</sup>, Filippo Calzolari<sup>1</sup>, Efisio Puxeddu<sup>2</sup>, Roberta Lucchini<sup>1</sup>, Massimo Monacelli<sup>1</sup>, Camillo Giammartino<sup>2</sup>, Alessandro Sanguinetti<sup>1</sup>, Michele d'Ajello<sup>1</sup>, Mark Ragusa<sup>1</sup>, and Nicola Avenia<sup>1</sup>

<sup>1</sup>Endocrine Surgical Unit, and <sup>2</sup>Internal Medicine Department, University of Perugia, Perugia, Italy

## ABSTRACT

Medullary thyroid carcinoma is a highly malignant and progressive disease. Surgery is the only effective treatment. Calcitonin is a significant marker for medullary thyroid carcinoma, and due to its sensitivity it represents a useful tool for the follow-up. The outcome of patients affected by medullary thyroid carcinoma depends on tumor size, lymph node involvement, and adequacy of primary surgical management. In the present study, the authors reviewed their own experience in the cure of medullary thyroid carcinoma were included. Indications for surgery, inclusive of lymphectomy techniques, timing of redo surgery, and the meaning of calcitonin levels in highlighting disease are extensively discussed. Patients with elevated calcitonin levels and favorable outcome are considered, together with the various diagnostic tools to be employed during patient workup.

**Key words:** calcitonin, medullary thyroid carcinoma, surgical strategy.

Correspondence to: Claudia Misso, Viale degli Oleandri 9, 80131 Napoli, Italy. Tel +39-0744-205334; fax +39-0744-205334; e-mail claudiamisso@hotmail.com

Received August 13, 2007; accepted January 13, 2009.