Two Cases of Medullary Thyroid Carcinoma
M Jong,*MB Bch (Hons Belfast), MRCP (UK), F X Sundram,**FAMS, MSc (Nucl Med), DMRT

Abstract

Introduction: Medullary thyroid carcinoma (MTC) is a rare thyroid malignancy but accounts for a significant mortality. We present 2 cases of MTC and review the literature regarding its management and genetic screening. Clinical Picture: Patient 1 presented after a routine health screening and subsequently was found to have a germline mutation for MEN 2A. Patient 2 presented with sweating irritability and a thyroid mass which illustrates the progressive relentless nature of the disease and highlights current imaging practice. Treatment: Both patients underwent extensive surgery and received postoperative ablative dose of radioactive iodine. Patient 2 also had a large dose I-131 MIBG therapy and further surgery. Outcome: In Patient 1, postoperative calcitonins remained elevated indicating residual disease. Patient 2 underwent further radioguided surgery; however, his postoperative calcitonins remained elevated. Conclusion: MTC can be relentless. Routine genetic screening of all patients with MTC, Tc-99m pentavalent (V) DMSA imaging, near total thyroidectomy with routine central neck dissections and removal of all lymph nodes in the central neck compartment should be performed.

Key words: Carcinoembryonic antigen, Codon 638, Multiple endocrine neoplasia 2A, RET-proto-oncogene mutations, Tc-99m (V) DMSA imaging, Tc-99m sestamibi

* Registrar in Endocrinology
Department of General Medicine
Tan Tock Seng Hospital

** Head and Senior Consultant
Department of Nuclear Medicine
Singapore General Hospital

Address for Reprints: Dr Michelle Jong, Registrar in Endocrinology, Department of General Medicine, Tan Tock Seng Hospital, 11 Jalan Tan Tock Seng, Singapore 308433.
E-mail: michelle_jong@notes_ttsh.gov.sg