

Two Cases of Medullary Thyroid Carcinoma

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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.

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

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