Medullary Thyroid Cancer: It is a pain in the neck?

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Abstract:

Background: Medullary thyroid cancer (MTC) commonly presents with lymph node (LN) metastases, and has a worse prognosis than papillary thyroid cancer (PTC). Tumor size and LN involvement have been shown to affect stage of disease; however, to our knowledge, ours is the first study that attempts to correlate anterior neck pain on presentation with the extent of disease.

Methods: We performed a retrospective review of patients with MTC who underwent an operation from February 1998 through December 2008. We compared the symptom of anterior neck pain with the pathologic extent of disease. Our control group comprised patients who underwent an operation for PTC. Analysis was performed using the Fisher's exact test and the Mann-Whitney test.

Results: Of the 109 patients with MTC, 50 (46%) met our inclusion criteria. Of the 50 patients with MTC, 11 presented with neck pain, compared to 3 of the 50 patients with PTC (p = 0.041). Of those 11 patients, 9 (82%) had LN involvement on final pathology, as compared with 14 (36%) of the 39 without neck pain (p = 0.014). Of patients with neck pain, 18% were diagnosed at stage I to II and 82% at stage III to IV, compared to 64% at stage I to II and 36% at stage III to IV (p = 0.014).

Conclusions: Our study demonstrates that more patients with MTC present with anterior neck pain than do patients with PTC and that patients with MTC and neck pain have an increased risk of LN metastases. The results of this study suggest that MTC patients, who present with concomitant neck pain, should undergo a total thyroidectomy, prophylactic bilateral central neck dissection, and ipsilateral lateral neck dissection.

Key Word: Medullary thyroid cancer, lymph node, papillary thyroid cancer

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