

PAPILLARY THYROID CARCINOMA METASTATIC TO THE PARAPHARYNGEAL SPACE: A CASE SERIES

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Background/Purpose: Papillary thyroid carcinoma (PTC) is the most commonly encountered type of thyroid carcinoma. There is a high rate of metastases and micrometastases to the cervical lymph nodes, typically affecting the paratracheal and jugular lymph nodes. Metastasis to the lateral retropharyngeal or parapharyngeal nodes is rare.

Methods: We describe four cases of parapharyngeal metastasis in patients with PTC on initial presentation. Two patients presented with a lateral neck mass; both were found to have thyroid nodules and a parapharyngeal node on CT and/or MRI. One patient had a parapharyngeal node incidentally discovered on a CT performed for sinus evaluation; thyroid nodules were found on a subsequent thyroid ultrasound. The fourth patient underwent ultrasonography of the neck for abnormal thyroid function tests, and was found to have thyroid nodules and an enlarged lateral cervical lymph node. Further evaluation with CT and MRI also revealed a parapharyngeal node.

Results: All four patients underwent total thyroidectomy, selective neck dissection, and a transcervical approach to the parapharyngeal node. The parapharyngeal node in one patient was unable to be excised due to lack of access. All four patients underwent post-operative RAI ablation.

Discussion & Conclusion: While parapharyngeal metastasis of PTC is rare, it is a recognized pattern of lymphatic dissemination from thyroid carcinoma. Rouviere reported the lymphatic connection between the posterosuperior lymphatic trunk and the upper thyroid pole, which serves as a potential pathway for metastases to the parapharyngeal and retropharyngeal space. One must have a high index of clinical suspicion for a possible thyroid source when evaluating a patient with parapharyngeal mass.