

RETROPHARYNGEAL NODAL METASTASES FROM THYROID CARCINOMA: A NEW TECHNIQUE FOR IMAGING, BIOPSY, AND INTRAOPERATIVE LOCALIZATION

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Background/Purpose: The objective is to describe a technique of transoral sonography (TOUS) and TOUS-guided biopsy using an endocavitary (endovaginal or endorectal) US transducer to visualize and biopsy retropharyngeal metastatic nodes (Rouviere's nodes) in patients with a history of thyroid cancer.

Methods: We use a Prosound a10 scanner (Hitachi-Aloka, Wallingford, CT) equipped with an endorectal or endovaginal transducer. The probe is inserted in the oral cavity and placed against the pharyngeal posterior wall. Color and power Doppler imaging are used to identify the internal carotid artery and internal jugular vein. A metallic needle guide is attached to the endocavitary probe for TOUS-guided fine-needle aspiration biopsy.

Results: TOUS readily provides clear images of masses in the retropharyngeal space including metastatic nodes from thyroid cancer. With a Diff-Quick stain, a cytopathologic result confirming (or excluding) the diagnosis of metastatic thyroid cancer can be obtained within 15 minutes. Localization of the visualized node can also be done intraoperatively.

Discussion & Conclusion: TOUS is an effective imaging modality to visualize, biopsy, and localize preoperatively metastatic retropharyngeal nodes in patients with thyroid cancer. TOUS-guided needle biopsy is an elegant alternative to CT-guided needle biopsy for these nodes.