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Office-based ultrasound-guided FNA superior in diagnosing head and neck lesions

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Office-based, surgeon-performed, ultrasound-guided, fine needle aspiration (FNA) of head and neck lesions yields a statistically significant higher diagnostic rate compared to the standard palpation technique, indicates new research in the March 2010 issue of *Otolaryngology - Head and Neck Surgery*.

FNA is a diagnostic procedure used to investigate superficial lumps or masses. In this technique, a thin, hollow needle is inserted into a mass to extract cells for examination. FNA biopsies are a safe minor surgical procedure. Often, a major surgical (excisional or open) biopsy can be avoided by performing a needle aspiration biopsy instead. FNA biopsies in the head and neck have also proven to be an invaluable tool in establishing the diagnosis of lesions and masses from a broad range of sites, including the thyroid, salivary glands, and lymph nodes.

The efficacy of ultrasound-guided FNA has been well documented in many areas of the body, leading to its acceptance as the standard of care among radiologists and many cytopathologists. However, while the utility of ultrasound in the head and neck is widely appreciated and employed by the radiology community, clinicians in the United States have not embraced office-based ultrasound. The study authors sought to provide additional evidence and support for this procedure in order to ensure appropriate use by the clinical community.

In this randomized, controlled trial of 81 adults, researchers divided participants into two groups, using either ultrasound-guided or traditional

palpation-guided FNA to evaluate an identified head and neck mass. The researchers then measured variables and outcomes for tissue adequacy rates, tissue type, and operator variability.

Following three passes using either palpation or ultrasound-guidance, a comparative tissue adequacy rate of 84 percent for ultrasound-guidance (versus 58 percent for standard palpation) was established. With regard to tissue type, a statistically significant comparative diagnostic advantage for ultrasound guidance was observed in thyroid tissue, while remaining statistically insignificant for lymphatic and salivary tissues.

The authors write, "With respect to FNA of palpable head and neck masses, ultrasound guidance in the hands of the clinician yields a statistically significant improved specimen adequacy rate after three passes, when compared to traditional palpation technique. This represents a discernable clinical benefit for the patient in terms of reducing the number of passes required, as well as the need and cost for a repeat office FNA or a referral for ultrasound guidance."

Provided by American Academy of Otolaryngology -- Head and Neck Surgery

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