

Evidence Discussion (NECK-5.1)

- CT has several benefits that support its utilization as a primary imaging modality, including its availability and cost. CT imaging is generally easily tolerated by patients because of short scanning time (<5 minutes) and large scanner bore. While CT utilizes ionizing radiation, the average dose of 3 mSv (equivalent to approximately 150 chest x-rays) is considered acceptable in the adult population.
- MRI is preferred for tumors of the nasopharynx or when there is a cranial nerve concern on physical examination because of its sensitivity to abnormalities of the skull base and in the detection of perineural spread. MRI also offers improved tissue contrast and can help detect subclinical tumors not evident with nasal endoscopy.
- Ultrasound is also used to characterize neck masses, to guide tissue sampling, and to search for additional masses. It is both noninvasive and inexpensive. Ultrasound is, however, best suited for evaluation of superficial tissue, in situations where there will be a delay in obtaining CT or MRI, if the use of contrast medium is contraindicated, or as an adjunct to expedite FNA biopsy.

References

Wippold II F, Cornelius RS, Berger KL, et al. ACR Appropriateness Criteria® Neckmass/adenopathy. American College of Radiology (ACR). Date or origin: 2009. Revised 2018.

Pynnonen MA, Gillespie MB, et al. Clinical practice guideline: evaluation of the neck mass in adults. Otolaryngology–Head and Neck Surgery. 2017 Sep;157(2_suppl):S1-S30.