CIGNA MEDICAL COVERAGE POLICIES – RADIOLOGY

Neck Imaging Guidelines

Effective Date: February 3, 2026

Instructions for use

The following coverage policy applies to health benefit plans administered by Cigna. Coverage policies are intended to provide guidance in interpreting certain standard Cigna benefit plans and are used by medical directors and other health care professionals in making medical necessity and other coverage determinations. Please note the terms of a customer's particular benefit plan document may differ significantly from the standard benefit plans upon which these coverage policies are based. For example, a customer's benefit plan document may contain a specific exclusion related to a topic addressed in a coverage policy.

In the event of a conflict, a customer's benefit plan document always supersedes the information in the coverage policy. In the absence of federal or state coverage mandates, benefits are ultimately determined by the terms of the applicable benefit plan document. Coverage determinations in each specific instance require consideration of:

1. The terms of the applicable benefit plan document in effect on the date of service
2. Any applicable laws and regulations
3. Any relevant collateral source materials including coverage policies
4. The specific facts of the particular situation

Coverage policies relate exclusively to the administration of health benefit plans. Coverage policies are not recommendations for treatment and should never be used as treatment guidelines.

This evidence-based medical coverage policy has been developed by EviCore, Inc. Some information in this coverage policy may not apply to all benefit plans administered by Cigna.

These guidelines include procedures EviCore does not review for Cigna. Please refer to the **Cigna CPT code list** for the current list of high-tech imaging procedures that EviCore reviews for Cigna.

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General (Neck-1)

Guideline Page

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Abbreviations for Neck Imaging Guidelines

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Abbreviations for Neck Imaging Guidelines	
ACSS	anterior cervical spine surgery
ALS	amyotrophic lateral sclerosis
CT	computed tomography
ENT	Ear, Nose, Throat
FNA	fine needle aspiration
FEES	fiberoptic endoscopic evaluation of swallowing
FFL	flexible fiberoptic laryngoscopy
FOE	fiberoptic exam for laryngoscopy
GERD	gastroesophageal reflux disease
GI	gastrointestinal
HIV	human immunodeficiency virus
HPV	human papillomavirus
MEN-2	multiple endocrine neoplasia
MRI	magnetic resonance imaging
TNE	transnasal esophagoscopy
VFSS	videofluoroscopic swallow study

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General Guidelines (Neck-1.0)

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- A pertinent clinical evaluation since the onset or change in symptoms including a detailed history, physical examination, appropriate laboratory studies, and basic imaging such as plain radiography or ultrasound should be performed prior to considering advanced imaging (CT, MR, Nuclear Medicine), unless the individual is undergoing guideline-supported scheduled imaging evaluation. A meaningful technological contact (telehealth visit, telephone call, electronic mail or messaging) since the onset or change in symptoms can serve as a pertinent clinical evaluation.
- Advanced imaging of the neck covers the following areas:
  - Skull base (thus, a separate CPT® code for head imaging in order to visualize the skull base is not medically necessary)
  - Nasopharynx
  - Upper oral cavity to the head of the clavicle
  - Parotid glands and the supraclavicular region
- Ultrasound of neck soft tissues including thyroid, parathyroid, parotid and other salivary glands, lymph nodes, cysts, etc. is coded as CPT® 76536. This can be helpful in more ill-defined masses or fullness and differentiating adenopathy from mass or cyst, to define further advanced imaging.
- CT Neck
  - CT Neck is usually obtained with contrast only (CPT® 70491).
    - With the exception of 4D CT Neck without and with contrast (CPT® 70492) for parathyroid adenoma localization, little significant information is added by performing a CT Neck without and with contrast (CPT® 70492), and there is the risk of added radiation exposure, especially to the thyroid.
    - CT Neck without contrast (CPT® 70490) can be difficult to interpret due to difficulty identifying the blood vessels.
      - Exceptions include:
        - Contrast is generally not medically necessary when evaluating known or suspected tracheal anomalies with CT.
        - Additionally, non-contrast CT is medically necessary for the evaluation of salivary duct stones in the appropriate clinical circumstance where intravenous contrast may obscure high attenuation stones. Dual-phase CT imaging (without and with IV contrast) is not medically necessary in this situation.
    - Contrast enhanced CT is helpful in the assessment of cervical adenopathy and preoperative planning, including in the setting of thyroid carcinomas.

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  - Contrast may cause intense and prolonged enhancement of the thyroid gland which interferes with radioactive iodine nuclear medicine studies.
  - Use of IV contrast is an important adjunct, however, because it helps to delineate the anatomic relationship between the primary tumor and metastatic disease. Iodine is generally cleared within four to eight weeks in most individuals, so concern about iodine burden from IV contrast causing a clinically significant delay in subsequent whole-body scans (WBSs) or radioactive iodine (RAI) treatment after the imaging followed by surgery is generally unfounded. The benefit gained from improved anatomic imaging generally outweighs any potential risk of a several week delay in RAI imaging or therapy. Where there is concern, a urinary iodine to creatinine ratio can be measured.

- MRI Neck
  - MRI Neck is used less frequently than CT Neck.
  - MRI Neck without and with contrast (CPT® 70543) is medically necessary if CT suggests the need for further imaging or if ultrasound or CT suggests any of the following:
    - Neurogenic tumor (schwannoma, neurofibroma, glomus tumor, etc.)
    - Vascular malformations
    - Deep neck masses
    - Angiofibromas
    - Cystic neck mass
    - Concern for malignancy (see **Squamous Cell Carcinomas of the Head and Neck (ONC-3)**, **Salivary Gland Cancers (ONC-4)**, or **Thyroid Cancer (ONC-6)** as appropriate)
  - MRI Neck without and with contrast (CPT® 70543) is medically necessary if the head and neck surgeon or neurosurgeon, or the provider in consultation with the head and neck surgeon or neurosurgeon, has reasonable clinical concern:
    - for a skull base or nasopharyngeal neoplasm, or potential perineural invasion/ cranial nerve involvement.[2]
    - that extensive dental amalgam may obscure the anatomy on CT in individuals with oral cavity neoplasm.

Health Equity Considerations

Health equity is the highest level of health for all individuals; health inequity is the avoidable difference in health status or distribution of health resources due to the social conditions in which individuals are born, grow, live, work, and age. Social determinants of health are the conditions in the environment that affect a wide range of health, functioning, and quality of life outcomes and risks. Examples include the following: safe housing, transportation, and neighborhoods; racism, discrimination, and violence;

education, job opportunities, and income; access to nutritious foods and physical activity opportunities; access to clean air and water; and language and literacy skills.

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References (Neck-1)

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1. Haugen BR, Alexander EK, Bible KC, et al. 2015 American Thyroid Association Management Guidelines for Adult Patients with Thyroid Nodules and Differentiated Thyroid Cancer: The American Thyroid Association Guidelines Task Force on Thyroid Nodules and Differentiated Thyroid Cancer. *Thyroid*. 2016;26(1):1-133. doi:10.1089/thy.2015.0020
2. Pynnonen MA, Gillespie MB, Roman B, et al. Clinical Practice Guideline: Evaluation of the Neck Mass in Adults. *Otolaryngol Head Neck Surg*. 2017;157(2_suppl):S1-S30. doi:10.1177/0194599817722550
3. National Comprehensive Cancer Network® (NCCN®) Guidelines® Version 4.2024 – May 1, 2024. Head and Neck Cancers. https://www.nccn.org/professionals/physician_gls/pdf/head-and-neck.pdf. Referenced with permission from the NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Head and Neck Cancers Version 4.2024. © 2024 National Comprehensive Cancer Network® (NCCN®). All rights reserved. NCCN Guidelines® and illustrations herein may not be reproduced in any form for any purpose without the express written permission of the NCCN. To view the most recent and complete version of the NCCN Guidelines®, go online to NCCN.org.
4. Purcell YM, Kavanagh RG, Cahalane AM, Carroll AG, Khoo SG, Killeen RP. The Diagnostic Accuracy of Contrast-Enhanced CT of the Neck for the Investigation of Sialolithiasis. *AJNR Am J Neuroradiol*. 2017;38(11):2161-2166. doi:10.3174/ajnr.A5353
5. Yunusova L, Rizaev J, Aoyama T, et al. Magnetic resonance imaging in the diagnosis of cystic lesions of the neck. *Ann Cancer Res Ther*. 2021;29(1):102-109. doi:10.4993/acrt.29.102

Dysphagia and Upper Digestive Tract Disorders (Neck-3)

Guideline Page

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Dysphagia and Upper Digestive Tract Disorders (Neck-3.1)

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- **General considerations**
  - A detailed history of the dysphagia symptoms is important to distinguish neurogenic, pharyngeal and esophageal disorders.
  - Dysphagia (difficulty swallowing) can be the result of a wide range of benign and malignant processes that affects the body's ability to move food or liquid from the mouth to the pharynx and into the esophagus.
  - A short duration (weeks to months) of rapidly progressive esophageal dysphagia with associated weight loss is highly suggestive of esophageal cancer.
  - Advanced imaging for individuals presenting with isolated globus rarely impacts clinical management. In a study of 148 neck CTs and 104 barium esophagrams done for the evaluation of globus sensation, there were no malignancies detected.
- **Gastroesophageal reflux disease (GERD)**
  - Non-cardiac chest pain suspected of being GERD should be evaluated first to exclude cardiac and other etiologies. See **Non-Cardiac Chest Pain-Imaging (CH-4.1)** in the Chest Imaging Guidelines and Indications for EGD (EGD-1) in the Gastrointestinal Endoscopic Procedure Guidelines.
  - Gastric emptying study (CPT® 78264) for individuals with refractory GERD symptoms, and gastroparesis is being considered.
- **Suspected foreign body impaction and ingested foreign bodies**
  - Plain x-rays are medically necessary as initial imaging.
  - If imaging is inconclusive, and/or there is suspicion of a radiolucent foreign body (such as fish or chicken bones, wood, plastic, thin metal objects, aluminum can pop-ups, etc.):
    - CT Neck and/or Chest with or without contrast (CPT® 70491 or CPT® 70490 or CPT® 71260 or CPT® 71250).
    - If requested, 3-D reconstruction (CPT® 76377) is medically necessary in this setting.
  - The use of oral contrast is discouraged (to avoid the aspiration of contrast material) for acute dysphagia or foreign body impaction, as the contrast may not pass, may be aspirated, and can interfere with subsequent endoscopic intervention.
- **Oropharyngeal dysphagia**
  - Oropharyngeal dysphagia (difficulty in transferring food from the mouth to the pharynx)

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    - Suspected neurologic causes: See appropriate sections in *Head Imaging Guidelines*
    - Initial evaluation is with A) a swallow study AND B) direct visualization (with laryngoscopy and/or upper endoscopy).
        - A) Video fluoroscopic swallowing study (VFSS) – (Dynamic radiographic evaluation of swallowing during speech pathologist-guided oral intake of various consistencies). Also referred to as a modified barium swallow study (MBSS).
        - B) Flexible fiberoptic laryngoscopy (FFL), FiberOptic Exam for laryngoscopy (FOE), TransNasal Esophagoscopy (TNE), and/or FEES (Fiberoptic Endoscopic Evaluation of Swallowing). FEES is a dynamic evaluation of swallowing via direct visualization using transnasal laryngoscopy during speech pathologist-guided oral intake of various consistencies.
        - CT Neck with contrast (CPT® 70491) is medically necessary for any documented anatomic abnormalities suggested by direct visualization—i.e., on exam with flexible laryngoscopy or rigid video stroboscopy or FEES.
            - Completion of a radiographic swallow study, though potentially helpful, is NOT medically necessary prior to the requested advanced imaging in such a case.
- **Esophageal dysphagia**
    - Esophageal dysphagia (difficulty in transferring food down the esophagus in the retrosternal region, e.g., food sticking in the neck or chest)
        - Initial evaluation is with barium esophagram or upper gastrointestinal endoscopy.
        - If requested, esophageal manometry is medically necessary.
        - Advanced imaging is medically necessary for the evaluation of structural abnormalities demonstrated on either esophagram or direct visualization (i.e., laryngoscopy/upper GI endoscopy), such as external compression, tumor, stricture, diverticulum, etc.
            - Contrasted CT Neck (CPT® 70491), CT Chest (CPT® 71260), **and/or** CT Abdomen (CPT® 74160) depending on the location of the abnormality identified.
- **Suspected perforation, abscess, or fistula**
    - CT Neck, Chest, **and/or** Abdomen, contrast is medically necessary (preferably with contrast- CPT® 70491, CPT® 71260, CPT® 74160), depending on location.
- **Hiatal hernia**
    - See **Hiatal Hernia (AB-12.3)** in the Abdomen Imaging Guidelines.
- **Globus sensation**
    - Direct visualization with laryngoscopy and/or upper endoscopy should be performed prior to advanced imaging.

  - Unremarkable laryngoscopy and/or upper endoscopy does not preclude advanced imaging if **red flag** symptoms are also present:
    - weight loss
    - odynophagia/throat pain
    - referred otalgia
    - hoarseness
    - hemoptysis, **AND/OR**
    - other unilateral presentation of concerning symptoms.
  - CT Neck with contrast (CPT® 70491) for ANY of the following:
    - Negative or equivocal findings on laryngoscopy and/or upper endoscopy with any **red flag** present
    - Known history of upper aerodigestive or esophageal malignancy
    - Known history of lymphoma
    - History of previous neck, esophageal, or gastric surgery–see below, and see **Background and Supporting Information** for post-operative oropharyngeal dysphagia associated with Anterior Cervical Spine Surgery (ACSS).
    - Palpable abnormality on physical examination such as neck mass
- **Post-operative dysphagia**
  - Dysphagia following surgery on the oropharynx, soft tissues of the neck, cervical spine, esophagus, or stomach:
    - In the immediate post-operative period, within 3 months of the surgery, the concern is for fluid collections, anastomotic leaks, perforations, and abscess. Prior laryngoscopy/upper endoscopy and barium esophagram are not medically necessary initially.
      - CT Neck with contrast (CPT® 70491) **AND/OR** CT Chest with contrast (CPT® 71260)
    - In the delayed post-operative period—three months or greater from surgery, the primary modalities for evaluation are history, physical, endoscopy (laryngoscopy or EGD) and/or barium esophagram/videofluoroscopic swallow study (VFSS) to direct any additional advanced imaging. See also *Background and Supporting Information*.
      - If the results of endoscopy and/or barium esophagram or VFSS are abnormal or inconclusive, the following is medically necessary:
        - CT Neck with contrast (CPT®70491) **AND/OR** CT Chest with contrast (CPT® 71260)
- **Suspected vascular ring** (See **Dysphagia (PEDNECK-5)**)
  - Advanced imaging can be performed if a vascular ring is suspected by, or in consultation with, the treating specialty, i.e., cardiothoracic surgery, cardiology, otolaryngology, and/or pulmonology. More commonly, this congenital pathology would be suspected in a much younger population; however, dysphagia lusoria

is a relatively rare condition involving a vascular ring (usually an aberrant right subclavian artery). As children, these individuals are asymptomatic but develop worsening dysphagia later in adulthood, presumably secondary to increasing calcification and blood pressure.

- CTA Chest (CPT® 71275) **OR** MRA Chest (CPT® 71555) are the preferred imaging studies in the evaluation of a suspected vascular ring.
- CT Chest with contrast (CPT® 71260) **OR** MRI Chest without contrast (CPT® 71550), **OR** MRI Chest without and with contrast (CPT® 71552) can be performed as alternative exams in the evaluation of suspected vascular ring.

Background and Supporting Information

- Advanced imaging is not medically necessary for the evaluation of GERD, the diagnosis of which is usually made on the basis of clinical history, in conjunction with endoscopy, pH monitoring, Upper GI Barium Studies, and occasionally manometry.
- Globus sensation is a feeling of a lump or foreign body in the throat. In general, laryngoscopy, endoscopy, and physical examination will rule out malignant causes and advanced imaging is not medically necessary for evaluation. It is considered a mild form of dysphagia.
- Postoperative oropharyngeal dysphagia is one of the most common complications following anterior cervical spine surgery (ACSS), and is considered by some to be an inevitable result of this surgery, rather than a surgical complication.
- Severe dysphagia after ACSS should prompt immediate evaluation to exclude any potentially reversible surgical complication such as bone graft dislodgement, hematoma or retropharyngeal abscess.
- In general, history, exam, plain films, laryngoscopy, and videofluoroscopic swallow studies are considered the primary modalities for evaluation. The videofluoroscopic swallow study, in fact, is the gold standard in evaluation, and is very sensitive in individuals post-ACSS, and should be considered the initial evaluation in individuals who are status post ACSS with globus sensation, or mild dysphagia.

Evidence Discussion

Dysphagia

- Imaging studies are complementary to endoscopy (and in certain cases, also manometry) in the evaluation of dysphagia. The optimal imaging study depends on the nature and location of the dysphagia, as well as clinical setting. Fluoroscopy, however, is usually the first line choice.[4]
- Modified barium swallow study (videofluoroscopic procedure performed in conjunction with a speech therapist) is generally first line for oropharyngeal dysphagia. CT is generally not medically necessary because it does not assess motility, nor the oropharyngeal and esophageal mucosa as well. CT may be helpful for subsequent

evaluation if initial studies are not revealing, or if there are suspicious findings on direct visualization.[10]

- Barium esophagram is medically necessary for initial imaging of retrosternal dysphagia. CT is generally not medically necessary because it does not assess motility, nor esophageal mucosa as well. CT may be helpful if subsequent evaluation if initial studies are not revealing, or if there are suspicious findings on direct visualization and/or barium esophagram.[10]
- Fluoroscopy still remains the imaging of choice for initial evaluation of early (as well as late) post-operative dysphagia, within the oropharyngeal or retrosternal regions. Utilizing a water-soluble contrast first, followed by barium if necessary, suspected leaks or fistulas may be investigated. Esophagrams are highly specific for leaks, but not as sensitive as CT. If high clinical suspicion remains following negative esophagram, esophagography and CT combined have a sensitivity and negative predictive value of 100%, but a specificity of 27% and positive predictive value of 56%.[10]
- For oropharyngeal and retrosternal dysphagia, contrasted CT of the neck and/or chest is medically necessary when there is concern of early post-operative complications, such as leak, fluid collection, abscess, or hematoma.[10]

Dysphagia and Upper Digestive Tract Disorders Health Equity Considerations

- Dysphagia is more common in individuals who are female, White/Caucasian, non-Hispanic, of older age, low income, of public insurance, and unemployed.
- Individuals who are female and White/Caucasian are less likely to pursue diagnostic testing for upper digestive tract disorders.
- GERD is more common in females, but the rate of complications is higher in males.
- Hispanic and Latino Americans have the highest prevalence of GERD among all minority populations.
- Reflux is more common in individuals who are female, White/Caucasian, non-Hispanic, and of public insurance.

References (Neck-3)

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1. Taheriniya A, Safaie H, Rozveh JK, Azizmanesh M, Chaghamirzayi P. Uncommon cause of chest pain: Case report of esophageal foreign body diagnosed by chest computed tomography scan. *Radiol Case Rep.* 2024;20(1):162-165. Published 2024 Oct 18. doi:10.1016/j.radcr.2024.09.122
2. Takada M, Kashiwagi R, Sakane M, Tabata F, Kuroda Y. 3D-CT diagnosis for ingested foreign bodies. *Am J Emerg Med*. 2000;18(2):192-193. doi:10.1016/s0735-6757(00)90018-4
3. ASGE Standards of Practice Committee, Ikenberry SO, Jue TL, et al. Management of ingested foreign bodies and food impactions. *Gastrointest Endosc*. 2011;73(6):1085-1091. doi:10.1016/j.gie.2010.11.010
4. ASGE Standards of Practice Committee, Pasha SF, Acosta RD, et al. The role of endoscopy in the evaluation and management of dysphagia. *Gastrointest Endosc*. 2014;79(2):191-201. doi:10.1016/j.gie.2013.07.042
5. Katz PO, Dunbar KB, Schnoll-Sussman FH, Greer KB, Yadlapati R, Spechler SJ.ACG clinical guideline for the diagnosis and management of gastroesophagealreflux disease. *Am J Gastroenterol*. 2022;1171(1):27 56.doi:10.14309/ajg.0000000000001538
6. Liu LWC, Andrews CN, Armstrong D, et al. Clinical Practice Guidelines for the Assessment of Uninvestigated Esophageal Dysphagia. *J Can Assoc Gastroenterol*. 2018;1(1):5-19. Published 2018 Feb 9. doi:10.1093/jcag/gwx008
7. Zerbib F, Rommel N, Pandolfino J, Gyawali CP. ESNM/ANMS Review. Diagnosis and management of globus sensation: A clinical challenge. *Neurogastroenterol Motil*. 2020;32(9):e13850. doi:10.1111/nmo.13850
8. Expert Panel on Vascular Imaging, Gunn AJ, Kalva SP, et al. ACR Appropriateness Criteria® Nontraumatic Aortic Disease. *J Am Coll Radiol*. 2021;18(5S):S106-S118. doi:10.1016/j.jacr.2021.02.004
9. Expert Panel on Cardiac Imaging:, Woodard PK, Ho VB, et al. ACR Appropriateness Criteria® Known or Suspected Congenital Heart Disease in the Adult. *J Am Coll Radiol*. 2017;14(5S):S166-S176. doi:10.1016/j.jacr.2017.02.036
10. Expert Panel on Gastrointestinal Imaging:, Levy AD, Carucci LR, et al. ACR Appropriateness Criteria® Dysphagia. *J Am Coll Radiol*. 2019;16(5S):S104-S115. doi:10.1016/j.jacr.2019.02.007
11. Poletto E, Mallon MG, Stevens RM, Avitabile CM. Imaging Review of Aortic Vascular Rings and Pulmonary Sling. *J Am Osteopath Coll Radiol*. 2017;6(2):5-14
12. Hellinger JC, Daubert M, Lee EY, Epelman M. Congenital thoracic vascular anomalies: evaluation with state-of-the-art MR imaging and MDCT. *Radiol Clin North Am*. 2011;49(5):969-996. doi:10.1016/j.rcl.2011.06.013 2011;49(5):969-996. doi:10.1016/j.rcl.2011.06.013
13. Manning MA, Shafa S, Mehrotra AK, Grenier RE, Levy AD. Role of Multimodality Imaging in Gastroesophageal Reflux Disease and Its Complications, with Clinical and Pathologic Correlation. *RadioGraphics*. 2020;40(1):44-71. doi:10.1148/rg.2020190029
14. Yoshimura N, Fukahara K, Yamashita A, et al. Congenital vascular ring. *Surg Today*. 2020;50(10):1151-1158. doi:10.1007/s00595-019-01907-5
15. Hanneman K, Newman B, Chan F. Congenital Variants and Anomalies of the Aortic Arch. *Radiographics*. 2017;37(1):32-51. doi:10.1148/rg.2017160033
16. Anderson KK, Arnold PM. Oropharyngeal dysphagia after anterior cervical spine surgery: a review. *Global Spine J*. 2013;3(4):273-286. doi:10.1055/s-0033-1354253
17. Leinwand K, Brumbaugh DE, Kramer RE. Button Battery Ingestion in Children: A Paradigm for Management of Severe Pediatric Foreign Body Ingestions. *Gastrointest Endosc Clin N Am*. 2016;26(1):99-118. doi:10.1016/j.giec.2015.08.003
18. Alhilali L, Seo SH, Branstetter BF 4th, Fakhran S. Yield of neck CT and barium esophagram in patients with globus sensation. *AJNR Am J Neuroradiol*. 2014;35(2):386-389. doi:10.3174/ajnr.A3683
19. Lantos JE, Levine MS, Rubesin SE, Lau CT, Torigian DA. Comparison between esophagography and chest computed tomography for evaluation of leaks after esophagectomy and gastric pull-through. *J Thorac Imaging*. 2013;28(2):121-128. doi:10.1097/RTI.0b013e31826ff062
20. Ghazanfar H, Shehi E, Makker J, Patel H. The Role of Imaging Modalities in Diagnosing Dysphagia: A Clinical Review. *Cureus*. 2021;13(7):e16786. Published 2021 Jul 31. doi:10.7759/cureus.16786

21. Min YK, Baek S, Kang EK, Nam SJ. Characteristics of Patients With Esophageal Dysphagia Assessed by Chest X-Ray Imaging After Videofluoroscopic Swallowing Study. *Ann Rehabil Med*. 2020;44(1):38-47. doi:10.5535/arm.2020.44.1.38
22. Le KHN, Low EE, Yadlapati R. Evaluation of Esophageal Dysphagia in Elderly Patients. *Curr Gastroenterol Rep*. 2023;25(7):146-159. doi:10.1007/s11894-023-00876-7
23. Chen JW, Vela MF, Peterson KA, Carlson DA. AGA Clinical Practice Update on the Diagnosis and Management of Extraesophageal Gastroesophageal Reflux Disease: Expert Review. *Clin Gastroenterol Hepatol*. 2023;21(6):1414-1421.e3. doi:10.1016/j.cgh.2023.01.040
24. ASGE Standards of Practice Committee, Desai M, Ruan W, et al. American Society for Gastrointestinal Endoscopy guideline on the diagnosis and management of GERD: summary and recommendations. *Gastrointest Endosc*. 2025;101(2):267-284. doi:10.1016/j.gie.2024.10.008
25. Zheng M, Zhou S, Hur K, Chambers T, O'Dell K, Johns M. Disparities in the prevalence of self-reported dysphagia and treatment among U.S. adults. *Am J Otolaryngol*. 2023;44(2):103774. doi:10.1016/j.amjoto.2022.103774
26. Zagloul MM, Bock JM, Blumin JH, et al. Evaluation of Social Determinants of Health on Dysphagia Care Pathways at a Tertiary Care Facility. *Laryngoscope*. 2024;134(3):1139-1146. doi:10.1002/lary.31040
27. Bains K, Iqbal H, Attri A, et al. Impact of Gender on Gastroesophageal Reflux Disease Complications: Analysis of 27 Million Hospitalizations. *J Gastrointestin Liver Dis*. 2024;33(1):19-24. Published 2024 Mar 29. doi:10.15403/jgld-5174
28. Kamal AN, Wang CJ, Triadafilopoulos G, Clarke JO. Healthcare Disparities in Gastroesophageal Reflux Disease for Hispanic and Latino Americans: A Solution-Oriented Approach for Improvement. *Am J Gastroenterol*. 2023;118(2):193-196. doi:10.14309/ajg.0000000000001976
29. Osafo NK, Bock JM, Blumin JH, Adams JA, Friedland D, Luo J. Socioeconomic Determinants of Health and Reflux Management: Insights from a Tertiary Medical Center. *Laryngoscope*. 2025;135(4):1335-1342. doi:10.1002/lary.31872

Neck Mass/Swelling/ Adenopathy (Neck-5)

Guideline Page

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Neck Mass/Swelling/Adenopathy (Neck-5.1)

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- Cervical lymphadenitis is common and follows most viral or bacterial infections of the ears, nose and throat. Painful acute lymphadenopathy should be treated with a trial of conservative therapy for 2-weeks, including antibiotics if appropriate. If there is improvement with conservative treatment, advanced imaging is not medically necessary. If the adenopathy persists, it can be imaged as per below**.**
- Ultrasound (CPT® 76536) is medically necessary for **ANY** of the following:
  - Cervical adenopathy/lymphadenitis or an inflammatory, infective, or reactive mass that has failed a 2-week trial of treatment (including antibiotics if appropriate) or observation
  - Anterior neck masses
  - Posterior neck masses
  - Any ill-defined mass, fullness or asymmetry
- CT Neck with contrast (CPT® 70491) is medically necessary if:
  - Neck mass with any ONE of the following:
    - Size ≥1.5cm
    - Mass present ≥2 weeks or of uncertain duration
    - Non-tender neck masses
    - Firm texture or fixation of the mass
    - Suspected peritonsillar, retropharyngeal or other cervical space abscess
    - Ulceration of skin overlying the neck mass
    - Ear pain ipsilateral to the neck mass
    - Associated onset of hoarseness persistent for greater than 3-weeks
    - Associated onset of throat pain, tonsil asymmetry, oral or oropharyngeal ulceration, weight loss, or hemoptysis
    - History of malignancy that would be primary or metastatic to the neck
    - Prior ultrasound results, if performed, are suspicious or indeterminate for malignancy
  - Isolated tonsil asymmetry with concerning features such as suspicious appearance, firmness, palatal immobility, rapid unilateral enlargement, history of malignancy, or immune compromise.
  - Carcinoma found in a lymph node or other neck mass
  - Suspected or known sarcoidosis
  - Preoperative evaluation of any neck mass
  - Foreign body migration with neck swelling

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- MRI Orbit/Face/Neck without and with contrast (CPT® 70543) is medically necessary if:
  - CT suggests the need for further imaging
  - Ultrasound or CT suggests neurogenic tumor (schwannoma, neurofibroma, glomus tumor, etc.), vascular malformations, cystic neck mass, deep neck masses, or angiofibroma.
- MRI Orbit/Face/Neck without and with contrast (CPT® 70543) is also medically necessary without prior CT Neck or ultrasound requirement, if the head and neck specialist, or the provider in consultation with the head and neck specialist, has reasonable clinical concern for:
  - skull base or nasopharyngeal neoplasm, **OR**
  - potential perineural invasion/cranial nerve involvement, **AND/OR**
  - extensive dental amalgam which may obscure the anatomy on CT in individuals with oral cavity neoplasm.
- Congenital cervical sinus, fistula, or cyst for preoperative planning:
  - MRI Orbit/Face/Neck without and with contrast (CPT® 70543) **OR**
  - CT Neck with contrast (CPT® 70491)
    - For fourth branchial cleft cyst/sinus/fistula, barium swallow is medically necessary in addition to the above conventional imaging.

Background and Supporting Information

- Inflammatory neck adenopathy is often associated with upper respiratory infection, pharyngitis, dental infection, HIV and toxoplasmosis. Occasionally it is associated with sarcoidosis and tuberculosis.
- Malignancy is a greater possibility in adults that are heavy drinkers and smokers, but HPV associated disease is on the rise and there can be a high suspicion for malignancy even without these traditional risk factors.
- ENT evaluation can be helpful in determining the need for advanced imaging.
- Although CT and MRI can have characteristic appearances for certain entities, biopsy and histological diagnosis are the only way to obtain a definitive diagnosis. The preferred initial method of biopsy is Ultrasound guided core needle biopsy of the mass.
- The most common causes of neoplastic cervical adenopathy are metastasis from head and neck tumors or lymphoma.
- Tonsil asymmetry is a common exam finding in both adults and children and is often benign. In cases of associated suspicious characteristics, neck imaging is medically necessary, even if there is not an associated neck mass.
- MRI has great specificity for determining the boundaries and prevalence of developmental neck cysts. It may thus be considered optimal to use only MRI, which leads to a correct diagnosis in more than 90% of cases.

- For the evaluation of neck masses by CT or MRI, the diagnostic accuracy is 96%, the sensitivity is 96.30%, and the specificity is 95.65%.

Evidence Discussion

- 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 individuals 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.[17]
- 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.[17]
- 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.[11]

References (Neck-5)

v1.0.2026

1. Expert Panel on Neurologic Imaging:, Aulino JM, Kirsch CFE, et al. ACR Appropriateness Criteria® Neck Mass-Adenopathy. *J Am Coll Radiol*. 2019;16(5S):S150-S160. doi:10.1016/j.jacr.2019.02.025
2. Shulman ST, Bisno AL, Clegg HW, et al. Clinical practice guideline for the diagnosis and management of group A streptococcal pharyngitis: 2012 update by the Infectious Diseases Society of America [published correction appears in Clin Infect Dis. 2014 May;58(10):1496. Dosage error in article text]. *Clin Infect Dis*. 2012;55(10):e86-e102. doi:10.1093/cid/cis629
3. Pynnonen MA, Gillespie MB, Roman B, et al. Clinical Practice Guideline: Evaluation of the Neck Mass in Adults Executive Summary. *Otolaryngol Head Neck Surg*. 2017;157(3):355-371. doi:10.1177/0194599817723609
4. Chapman MN, Fujita A, Sung EK, et al. Sarcoidosis in the Head and Neck: An Illustrative Review of Clinical Presentations and Imaging Findings. *AJR Am J Roentgenol*. 2017;208(1):66-75. doi:10.2214/AJR.16.16058
5. McKnight CD, Glastonbury CM, Ibrahim M, Rivas-Rodriguez F, Srinivasan A. Techniques and Approaches for Safe, High-Yield CT-Guided Suprahyoid Head and Neck Biopsies. *AJR Am J Roentgenol*. 2017;208(1):76-83. doi:10.2214/AJR.16.16558
6. Pynnonen MA, Gillespie MB, Roman B, et al. Clinical Practice Guideline: Evaluation of the Neck Mass in Adults. *Otolaryngol Head Neck Surg*. 2017;157(2_suppl):S1-S30. doi:10.1177/0194599817722550
7. National Comprehensive Cancer Network® (NCCN®) Guidelines® Version 4.2024 – May 1, 2024. Head and Neck Cancers. https://www.nccn.org/professionals/physician_gls/pdf/head-and-neck.pdf. Referenced with permission from the NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Head and Neck Cancers Version 4.2024. © 2024 National Comprehensive Cancer Network® (NCCN®). All rights reserved. NCCN Guidelines® and illustrations herein may not be reproduced in any form for any purpose without the express written permission of the NCCN. To view the most recent and complete version of the NCCN Guidelines®, go online to NCCN.org.
8. Yunusova L, Rizaev J, Aoyama T, et al. Magnetic resonance imaging in the diagnosis of cystic lesions of the neck. *Ann Cancer Res Ther*. 2021;29(1):102-109. doi:10.4993/acrt.29.102
9. Stachler RJ, Francis DO, Schwartz SR, et al. Clinical Practice Guideline: Hoarseness (Dysphonia) (Update) [published correction appears in Otolaryngol Head Neck Surg. 2018 Aug;159(2):403]. *Otolaryngol Head Neck Surg*. 2018;158(1_suppl):S1-S42. doi:10.1177/0194599817751030
10. Edwards D, Sheehan S, Ingrams D. Unilateral tonsil enlargement in children and adults: is routine histology tonsillectomy warranted? A multi-centre series of 323 patients. *J Laryngol Otol*. 2023;137(9):1022-1026. doi:10.1017/S002221512200216X
11. Feier J, Self Q, Karabachev A, Brundage W, Sajisevi M. Assessing the role of ultrasound for the evaluation of adult neck masses. *Laryngoscope Investig Otolaryngol*. 2022;8(1):135-139. Published 2022 Dec 21. doi:10.1002/lio2.995
12. Ortiz-Figueroa LT, Mercado-Vargas Y, Zacharia T. Radiology of malignant cervical adenopathy. *Operative Techniques in Otolaryngology*. 2024;35(1):304-311. doi:10.1016/j.otot.2024.08.010
13. Patel N, Gharai S, Brindle KA, Khati NJ. Imaging Spectrum of Extrathyroidal Neck Masses. *Ultrasound Q*. 2025;41(1):e00708. Published 2025 Feb 7. doi:10.1097/RUQ.0000000000000708
14. Moss WJ, Finegersh A, Narayanan A, et al. Characterizing Posterior Neck Masses: A Single-Institution Retrospective and Systematic Review. *Ear Nose Throat J.* 2021;100(5_suppl):766S-770S. doi:10.1177/0145561319881845
15. Limardo AC, Blanco L, Menendez J, Ortega A. Evaluation of a primary lateral neck mass in adults: Cross sectional study. *J Surg Med*. 2020;4(10):891-897. doi:10.28982/josam.703630
16. Saiful Islam AH, Mawaddah A, Wong TLW. Chronic neck swelling: A case report of migrating fish bone. *UTMJ*.2024;101(1).
17. Walasangikar V, Musale A, Gaikwad S. Evaluation of neck masses by CT or MRI. *International Journal of Health Sciences*. 2021;5(S2), 637-657. doi:10.53730/ijhs.v5nS2.13705
18. Fanous A, Morcrette G, Fabre M, Couloigner V, Galmiche-Rolland L. Diagnostic Approach to Congenital Cystic Masses of the Neck from a Clinical and Pathological Perspective. *Dermatopathology (Basel)*. 2021;8(3):342-358. Published 2021 Aug 1. doi:10.3390/dermatopathology8030039

Recurrent Laryngeal Nerve Palsy (Neck-7)

Guideline Page

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Recurrent Laryngeal Nerve Palsy (Neck-7.1)

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- The following are medically necessary with new diagnosis of idiopathic unilateral vocal fold paralysis/immobility or weakness, as identified on videostroboscopy or laryngoscopy by an Otolaryngologist—Head and Neck surgeon, or a clinician in consultation with such a specialist:
  - MRI Brain without and with contrast (CPT® 70553) **OR** MRI Brain without contrast (CPT® 70551)

    AND
  - MRI Orbit/Face/Neck with and without contrast (CPT® 70543) **OR** CT Neck with contrast (CPT® 70491)

    AND
  - CT Chest with contrast (CPT® 71260) is medically necessary for left vocal fold paralysis and may be medically necessary for right vocal fold paralysis. If requested, see **Background and Supporting Information**.

Background and Supporting Information

- The right and left recurrent laryngeal nerves supply the motor innervation of the right and left vocal folds/cords, respectively. They are branches off of the Vagus Nerve, CN X. The entire pathway from origin to endpoint of this nerve must be visualized in cases of presumed idiopathic vocal fold paralysis, newly identified by laryngoscopy, to search for a possible cause. From the origin of the vagus at the medulla oblongata to the looping down into the superior mediastinum and back to the neck of its branching nerve (the recurrent laryngeal nerve)—advanced imaging is medically necessary to screen for a cause for otherwise idiopathic vocal fold paralysis/paresis. The greater the degree of motion impairment, the more likely it is to find a cause on imaging.
- The superior mediastinum is most noteworthy for containing the take-off point of the three great branches of the aortic arch: the brachiocephalic trunk (also known as the innominate artery), the left common carotid artery, and the left subclavian artery.
- The extent of the CT Neck with contrast, to be inclusive of the entirety of the course of the recurrent laryngeal nerve in question, would have to extend to the "thoracic inlet" portion of the superior mediastinum on the right, and the "aortic triangle" portion of the superior mediastinum on the left.
- Contrasted CT Chest is medically necessary with left vocal cord palsy due to the lower course of the recurrent laryngeal nerve branch on the left side of the body. It curves inferior to the aortic arch and ascends in the groove between the trachea and

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the esophagus. However, the course of the recurrent laryngeal nerve on the right side may be as low as the level at which the brachiocephalic artery meets the subclavian artery, and this area of the thoracic inlet may or may not be contained within the anatomic extent of a CT neck at all institutions.

Evidence Discussion

Evaluation of Idiopathic Unilateral Vocal Fold Paralysis/Immobility

- Idiopathic unilateral vocal fold immobility is a diagnosis of exclusion. When it is noted that a vocal cord is immobile on laryngoscopy, the etiology must be sought. If it is not apparent on history and laryngoscopy, this work-up involves imaging the entire pathway of the motor nerve supply to the involved side of the larynx—from the brain to the superior mediastinum.[1]
- Repeat imaging for a pre-existing diagnosis of idiopathic unilateral vocal cord paralysis may be considered on a case by case basis. Recommendations include possibly repeating advanced imaging as above within 5 years after initial diagnosis and workup, or performing regular (annual) clinical evaluations with imaging reserved for the development of new symptoms or exam findings.[5]

Recurrent Laryngeal Nerve Palsy Health Equity Considerations

- Individuals with a higher socioeconomic status typically receive a greater number of interventions for recurrent laryngeal nerve palsy, as well as a longer duration of care.

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References (Neck-7)

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1. Misono S, Merati AL. Evidence-based practice: evaluation and management of unilateral vocal fold paralysis. *Otolaryngol Clin North Am*. 2012;45(5):1083-1108. doi:10.1016/j.otc.2012.06.011
2. Paddle PM, Mansor MB, Song PC, Franco RA Jr. Diagnostic Yield of Computed Tomography in the Evaluation of Idiopathic Vocal Fold Paresis. *Otolaryngol Head Neck Surg*. 2015;153(3):414-419. doi:10.1177/0194599815593268
3. Chew HS, Goh JCG, Tham DYA. Diagnostic yield of computed tomography in the evaluation of unilateral vocal fold palsy. *J Laryngol Otol*. 2021;135(3):255-258. doi:10.1017/S0022215121000463
4. Stachler RJ, Francis DO, Schwartz SR, et al. Clinical Practice Guideline: Hoarseness (Dysphonia) (Update) [published correction appears in Otolaryngol Head Neck Surg. 2018 Aug;159(2):403]. *Otolaryngol Head Neck Surg*. 2018;158(1_suppl):S1-S42. doi:10.1177/0194599817751030
5. Noel JE, Jeffery CC, Damrose E. Repeat Imaging in Idiopathic Unilateral Vocal Fold Paralysis: Is It Necessary?. *Ann Otol Rhinol Laryngol*. 2016;125(12):1010-1014. doi:10.1177/0003489416670654
6. Ivey CM. Vocal Fold Paresis. *Otolaryngol Clin North Am*. 2019;52(4):637-648. doi:10.1016/j.otc.2019.03.008
7. Politano S, Morell F, Calamari K, DeSilva B, Matrka L. Yield of Imaging to Evaluate Unilateral Vocal Fold Paralysis of Unknown Etiology. *Laryngoscope*. 2021;131(8):1840-1844. doi:10.1002/lary.29152
8. Pueringer J, Brennan M, Weinsheim T, Sataloff RT. Does the Severity of Vocal Fold Paresis on Laryngeal Electromyography Correlate With Radiographic Findings on Cross Sectional Imaging?. *J Voice*. Published online February 10, 2023. doi:10.1016/j.jvoice.2023.01.018
9. Nourmahnad A, Raslan S, Ezeh UC, Rossborough J, Ma R, Anis MM. Association of Sociodemographic Factors on the Presentation and Management of Unilateral Vocal Fold Immobility. *Laryngoscope*. 2024;134(1):297-304. doi:10.1002/lary.30917

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Thyroid and Parathyroid (Neck-8)

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Thyroid Nodule (Neck-8.1)

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- **Serum thyrotropin (TSH)** should be measured in the initial evaluation of thyroid nodule/mass/asymmetry/goiter but is not medically necessary for follow-up imaging.
- **Ultrasound (US) Neck (CPT ® 76536)** is medically necessary prior to advanced imaging for a palpable thyroid nodule/mass/asymmetry/goiter, including such examples as:
  - Nodules incidentally found on CT, MRI, or PET (focal activity)
  - Palpable solitary nodule
  - Palpable multinodular goiter
  - Suspicion of a nodule in an individual with a difficult neck examination
  - Prior history of neck radiation
  - Family history of medullary carcinoma, multiple endocrine neoplasia (MEN-2), or papillary thyroid carcinoma
  - Unexplained cervical lymphadenopathy
  - Preoperative thyroidectomy
- See **Thyroid Cancer-Surveillance/Follow-Up (ONC-6.4)** for thyroid nodules that are biopsy proven thyroid cancer but are being monitored on active surveillance.
- A thyroid nodule detected for the first time during pregnancy should be managed in the same way as in non-pregnant individuals, except for avoiding the use of radioactive agents for diagnostic and therapeutic purposes.
- **Nuclear scan (CPT ® 78013 or CPT ® 78014)** is medically necessary if the serum TSH is subnormal and ANY of the following:
  - Single or multiple thyroid nodules
  - Suspicion of ectopic thyroid tissue
  - Presence of thyroid nodule in the setting of Grave's disease.
- **CT Neck with contrast (CPT ® 70491), or CT Neck without contrast (CPT ® 70490), or MRI Orbit/Face/Neck without contrast (CPT ® 70540), or MRI Orbit/Face/Neck without and with contrast (CPT ® 70543):**

  Imaging should be done only after initial thyroid ultrasound has been performed.

  MRI and CT are not medically necessary for routine thyroid nodule evaluation and should only be considered after US for:
  - evaluation of extent of known substernal goiter.
  - suspected airway compression, (i.e., subjective sense of dyspnea or choking sensation in the clinical history with known multinodular goiter).
  - presence of pathologic lymph nodes in cervical regions not visualized on ultrasound.

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  - clinically suspected advanced thyroid disease, including invasive primary tumor.
  - any preoperative planning for thyroid disease.
- **CT Chest without contrast (CPT ® 71250) or with contrast (CPT ® 71260)** is also medically necessary for:
  - preoperative planning for individuals with substernal extension of the thyroid, pulmonary symptoms, or abnormalities on chest x-ray, and should be ordered by a surgeon or in consultation with a surgeon.
- **Thyroglossal duct cysts (TGDC)** are the most common type of congenital neck cyst of the midline neck, and may be first diagnosed in adulthood, though more commonly in early childhood.
  - A physical exam feature includes the rise and fall of the midline mass with protrusion and retraction of the tongue, due to its embryonal connection to the foramen cecum.
  - There is a small risk (about 1%) of incidental malignant degeneration within the TGDC, particularly within adults, and therefore, it is uniformly managed surgically. The Sistrunk procedure, which involves resection of the TGDC and its complete tract within the surrounding midline tissues—to include the middle third of the hyoid bone, is considered the gold standard in surgical management with a less than 5% risk of recurrence.
  - Advanced imaging, per surgeon's request—or a provider in consultation with the head and neck surgeon, to include Neck Ultrasound (CPT® 76536) **AND/OR** CT Neck with contrast (CPT® 70491) or MRI Neck with and without contrast (CPT® 70543), is medically necessary pre-operatively, or for the evaluation of a suspected recurrence.

Background and Supporting Information

- The American College of Radiology (ACR) Thyroid Imaging, Reporting, and Data System (TI-RADS), consisting of five levels, is utilized for recommendations in determining US follow-up vs FNA of thyroid nodule(s). TI-RADS levels are determined based on the ultrasound appearance of the nodule.
- The American Thyroid Association (ATA) guidelines from 2015 also use imaging characteristics and size for thyroid nodule risk stratification; however, size cutoffs are slightly more generous when compared to ACR-TIRADs. Sonographic imaging and/or biopsy requests in accordance with ATA criteria are appropriate.
- Fine-Needle Aspiration (FNA) biopsy is medically necessary for suspicious and/or large thyroid nodules prior to CT or MRI imaging.
- Ultrasound is not used to screen: 1) the general population, 2) individuals with normal thyroid on palpation with a low risk of thyroid cancer, 3) individuals with hyperthyroidism, 4) individuals with hypothyroidism or 5) individuals with thyroiditis. Conversely, US is medically necessary in individuals who have no symptoms but are high-risk as a result of: history of head and neck irradiation, total body irradiation

for bone marrow transplant, exposure to fallout from radiation during childhood or adolescence, as well as family history of thyroid cancer syndromes such as MEN-2, medullary or papillary thyroid cancer, Cowden's disease, familial adenomatous polyposis, Carney complex, and Werner syndrome/progeria.

- There is insufficient evidence supporting the use of PET to distinguish indeterminate thyroid nodules that are benign from those that are malignant.
- 18FDG-PET imaging is not medically necessary for the evaluation of thyroid nodules with indeterminate cytology. Routine preoperative 18FDG-PET scanning is not medically necessary.
- Elastography provides information about nodule stiffness that is complementary to gray scale ultrasound findings in nodules with indeterminate cytology or ultrasound findings. It should not be used as a substitute for gray scale ultrasound.
- Use of ultrasound contrast medium is not medically necessary for the diagnostic evaluation of thyroid nodules and its current use is restricted to definition of size and limits of necrotic zones after minimally invasive nodule ablation techniques.
- For prior history of neck radiation and family history of medullary carcinoma, MEN-2, or papillary thyroid carcinoma, US Neck can be ordered as a baseline test. With an indeterminate or abnormal initial US, follow-up studies should be directed by the relevant Neck or Oncology guideline criteria.

Evidence Discussion

- Ultrasound (US) plays a key role in determining which nodules display characteristics suspicious for malignancy and warrant biopsy. Of palpable thyroid nodules, the American College of Radiology (ACR) states, "US provides high-resolution imaging to show that the palpable abnormality is within the thyroid and is the best study to characterize the nodule for the risk of malignancy".[5] US is also the best study to demonstrate goiter size and evaluate thyroid morphology.[5] US has a sensitivity of 88%, a specificity of 86%, and a diagnostic accuracy of 92%.[14]
- Nuclear imaging with a radionuclide uptake and scan also plays an important role in thyroid imaging. In the setting of a suppressed thyroid stimulating hormone (TSH) level, nuclear imaging helps to determine whether the individual has thyrotoxicosis.
- A thyroid nuclear scan, in conjunction with thyroid ultrasound, is also useful in the setting of a multinodular goiter and a normal TSH to identify hypofunctioning or isofunctioning nodules which should be targeted for biopsy.[5]
- Neck CT is useful in determining the extent of a substernal goiter, evaluating whether a goiter is causing tracheal compression or deviation, assessing the extent of invasive thyroid cancer, or for preoperative imaging. It does not have a role in distinguishing benign from malignant thyroid nodules.[5]
- Neck CT is preferred to neck MRI, as there is less respiratory motion artifact.[5]
- FDG-PET/CT does not have a role in the initial imaging of a thyroid nodule.[5]

Thyroid Health Equity Considerations

- Racial and ethnic minorities with thyroid disease have worse health outcomes for both benign and malignant disease.
- Socioeconomic status, insurance status, and differential access to healthcare all contribute to disparities in health outcomes.

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Parathyroid Imaging (Neck-8.3)

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- Classic primary hyperparathyroidism
  - Parathyroid Planar Imaging (CPT® 78070), Parathyroid Planar Imaging with SPECT (CPT® 78071), or Parathyroid Planar Imaging with SPECT/CT (preferred study) (CPT® 78072) AND/OR Ultrasound (CPT® 76536) AND/OR 4D CT Neck without and with contrast (CPT® 70492) are medically necessary if BOTH of the following conditions are met:
    - PTH and Calcium levels are elevated (See **Background and Supporting Information**).
    - Intention of the study is preoperative localization
      - All parathyroid nuclear scan codes (CPT® 78070, CPT® 78071, CPT® 78072) include thyroid subtraction when performed and no additional thyroid nuclear scan CPT codes are required unless otherwise indicated in **Thyroid Nodule (Neck-8.1)**.
      - Reporting or billing CPT® 78800 for the purpose of intraoperative parathyroid localization using a gamma probe is not medically necessary if performed along with a parathyroid nuclear scan (CPT® 78070, CPT® 78071, CPT® 78072).
      - Ultrasound (CPT® 76536) can be ordered independently to evaluate the thyroid per criteria in **Thyroid Nodule (Neck-8.1)**.
      - 3D Imaging (CPT® 76377) is medically necessary with a 4D CT Neck.
  - MRI Neck without and with contrast (CPT® 70543) for cases of re-operation, difficult localization or ionizing radiation contraindication as ordered by an Endocrinologist, Parathyroid surgeon, or Radiologist or any provider in consultation with one of these specialists.
  - CT Chest with contrast (CPT® 71260) in rare circumstances in the evaluation of ectopic mediastinal parathyroid adenomas as ordered by an Endocrinologist, Parathyroid surgeon, or Radiologist or any provider in consultation with one of these specialists.
  - Choline PET/CT (CPT® 78815 or CPT® 78816) is considered experimental and investigational for preoperative localization in cases of primary hyperparathyroidism.
  - Repeat imaging is medically necessary both in individuals with prior non-localizing imaging who have not yet undergone parathyroid exploration OR in cases of hyperparathyroidism that recurs or persists after parathyroid surgery if reimaging is being ordered by a surgeon or any provider after consultation with a surgeon with expertise in parathyroidectomy.

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- Primary hyperparathyroidism variants
  - Primary hyperparathyroidism with non-elevated serum calcium (serum calcium level normal and PTH elevated)
    - Confirmatory study is elevated ionized calcium, elevated albumin corrected calcium or elevated historic calcium levels.
  - Hypercalcemia with inappropriately non-suppressed PTH (calcium level elevated and PTH normal)
    - PTH level ≥25 pg/mL is consistent with primary hyperparathyroidism.
    - See **Background and Supporting Information** for more information.
  - Intention of parathyroid imaging should be for pre-operative localization.
  - Use the same guidance on imaging modalities as described in "classic" primary hyperparathyroidism.

Primary Hyperparathyroidism variants:

	Calcium	PTH	Confirms/strongly suggests primary hyperparathyroidism
Classic primary hyperparathyroidism	High	High	Yes
Primary hyperparathyroidism with non-elevated serum calcium	Normal	High	Elevated ionized albumin corrected or historic calcium levels*
Hypercalcemia with inappropriately non-suppressed PTH	High	Normal	PTH ≥25 pg/ml

- Normocalcemic hyperparathyroidism
  - Serum calcium levels (including ionized calcium levels) are always normal and PTH levels are elevated.
  - Secondary causes of PTH elevation are excluded. See Background and Supporting Information for differential diagnosis of secondary hyperparathyroidism.
  - Calcium, PTH and clinical status should be monitored annually.
    - In the event of laboratory progression to hypercalcemia, refer to "classic" primary hyperparathyroidism for imaging guidance.
    - In the event of clinical progression (decline in bone mineral density or new fracture/renal stone/nephrocalcinosis), imaging for the intent of preoperative

localization is as requested by or after consultation with a specialist or any provider in consultation with a specialist.

- Secondary renal hyperparathyroidism
  - Serum calcium levels are low or normal (but may also be elevated in more advanced disease) and PTH levels are very elevated.
  - Imaging for the intent of preoperative localization as requested by or after consultation with a specialist if all of the following are met:
    - Individual has stage 3a-stage 5 chronic kidney disease (GFR<60).
    - PTH level is >9x upper limit of normal reference range for the lab testing facility (~585 pg/mL) despite standard medical or pharmacologic therapy (calcimimetics, calcitriol and/or vitamin D analogs).
- Tertiary hyperparathyroidism
  - Serum calcium and PTH levels are elevated as a result of long standing secondary hyperparathyroidism in individuals on renal replacement therapy or after renal transplant.
  - Imaging for the intent of preoperative localization as requested by or in consultation with a specialist.

Hyperparathyroidism subtypes:

	Calcium	PTH	Clinical Hallmarks
Normocalcemic Hyperparathyroidism	Normal	High	Calcium never elevated
Secondary Renal Hyperparathyroidism	Low/Normal/High	Very High	Stage 3a-5 CKD, PTH >9x ULN
Tertiary Hyperparathyroidism	High	High	ESRD/renal transplant

Background and Supporting Information

- Hypercalcemia in individuals with primary hyperparathyroidism may be determined by elevated serum calcium, elevated serum ionized calcium, elevated serum calcium level corrected for albumin, or historic calcium elevation. A comparison of serial measurements of calcium is helpful in determining the presence of true hypercalcemia as calcium levels may be variable over time.
- Parathyroidectomy candidacy should be determined by the provider; however, national guidelines recognize the following criteria for surgery:
  - All individuals <50 years of age, regardless of whether objective features are present or absent

- All symptomatic individuals, including those with kidney stones, hypercalcemic crises, pathologic fractures or other associated symptoms
- Individuals with findings concerning for parathyroid cancer (very high calcium >13)
- All asymptomatic individuals with the following:
  - Serum calcium >1.0 mg/dl (0.25 mmol/l) above the normal range
  - BMD by DEXA: T-score ≤2.5 at the lumbar spine, total hip femoral neck or distal 1/3 radius (The forearm- i.e., distal 1/3 radius is preferentially impacted by primary hyperparathyroidism as this area is rich in cortical bone.)
  - Vertebral fracture by x-ray, CT, MRI and vertebral fracture assessment
  - Estimated glomerular filtration rate of less than 60 ml/min
  - Urinary calcium excretion >400 mg in 24 hours
  - Nephrolithiasis or nephrocalcinosis by x-ray, ultrasound or CT
- Asymptomatic individuals who cannot participate in appropriate medical surveillance
- Asymptomatic individuals desiring definitive surgical management

- For cases of “normocalcemic hyperparathyroidism” in which primary hyperparathyroidism is not confirmed, additional investigation for secondary causes of hyperparathyroidism (renal insufficiency, hypercalciuria as a primary renal abnormality, vitamin D deficiency and gastrointestinal malabsorption problems such as short gut syndrome, celiac disease, Crohn's disease or a prior Roux-en-Y bypass surgery) is medically necessary.
- For cases of hypercalcemia in which primary hyperparathyroidism is not confirmed, additional consideration for other causes of hypercalcemia (malignancy including PTH-RP mediated and myeloma, granulomatous disease, FHH, medications including thiazide diuretics, excessive calcium/vitamin D supplementation and the history of or present lithium use) is medically necessary.

Evidence Discussion

- The purpose of parathyroid imaging is to aid in localizing hyperfunctioning parathyroid gland(s) for the purpose of curative surgery. Imaging has no role in the diagnosis of hyperparathyroidism.[1]
- There may be a need for more than one modality in the localization of a parathyroid adenoma as studies have shown no one modality is superior over others.[1]
- The sensitivity and positive predictive value of imaging modalities will vary in different situations, such as whether the individual has a single parathyroid adenoma or if multiple parathyroid glands are involved, if the imaging is for an initial surgical intervention versus a re-operation, and whether the individual has primary, secondary, or tertiary hyperparathyroidism.[1]

Parathyroid Incidentaloma (Neck-8.4)

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- A mass incidentally found on neck imaging that may represent an enlarged parathyroid gland should prompt laboratory testing including calcium and PTH levels.
  - If laboratory abnormalities suggest hyperparathyroidism, i.e., "functioning parathyroid incidentaloma", see **Hyperparathyroidism (NECK- 8.3)** for imaging recommendations.
  - If there are no laboratory abnormalities and diagnoses other than parathyroid incidentaloma are suspected, see **Neck Mass/Swelling/Adenopathy (NECK- 5.1)** for imaging recommendations.
  - Parathyroid nuclear scans are commonly requested for an evaluation of a parathyroid incidentaloma; however, the sensitivity of these scans are low in individuals with normal calcium/PTH and no clinical symptoms of primary hyperparathyroidism. Reliance on either a positive scan or negative scan to decide if surgery is medically necessary is not supported by current literature.
- If a parathyroid incidentaloma is suspected on imaging prior to planned thyroid surgery or other head/neck surgery, the following studies are medically necessary if ordered by the surgical team or any provider in consultation with the surgical team:
  - Parathyroid Planar Imaging (CPT® 78070), Parathyroid Planar Imaging with SPECT (CPT® 78071), or Parathyroid Planar Imaging with SPECT/CT (CPT® 78072) AND/OR Ultrasound (CPT® 76536) AND/OR 4D CT Neck without and with contrast (CPT® 70492)
- Ultrasound (US) Neck (CPT® 76536) is medically necessary annually if the mass was not removed surgically.

Background and Supporting Information

- "Parathyroid incidentalomas" include parathyroid adenomas found unexpectedly at the time of surgery or seen on ultrasound.
- Normal sized parathyroid glands (~6mm) are not usually identified by most imaging modalities, so enlargement warrants laboratory evaluation to rule out pathologic causes such as primary hyperparathyroidism or rarely parathyroid carcinoma.
- Sonographic imaging features of a parathyroid incidentaloma (ovoid, hypoechoic, well circumscribed and adjacent to but separate from the thyroid either posteriorly or inferiorly) may have overlap with perithyroidal lymph nodes and exophytic thyroid nodules in a multinodular goiter.
- The literature does report cases of pathologically confirmed parathyroid adenomas/ hyperplasia in individuals with normal serum calcium and PTH levels, so these enlarged parathyroid glands may represent an early stage of hyperparathyroidism.

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It is unclear what percentage of non-functioning PTIs become hyper-secreting over time, but many of these masses are surgically managed.

- Normally sized and normally functioning parathyroid glands do not take up sestamibi or tetrofosmin. The likelihood of a positive parathyroid nuclear scan is low in the setting of normal calcium and PTH levels.
- Parathyroid fine needle aspiration biopsy has been used historically; however, its diagnostic use is limited due to the potential for hemorrhage and fibrosis which make eventual surgical dissection and pathologic interpretation more difficult.

Evidence Discussion

- With the advent of high resolution CT scans, ultrasounds, and other imaging modalities, along with their widespread use as diagnostic modalities, parathyroid lesions are increasingly being incidentally found on these imaging studies.[1]
- The distinct features of parathyroid lesions are readily seen on ultrasound imaging.[1]
- If lab work does not indicate hyperfunctioning of the parathyroid gland, then these lesions can be monitored annually with ultrasound, as parathyroid nuclear scans have low sensitivity for detection in individuals with normal parathyroid function.[1]
- Parathyroid nuclear scans, 4D CT of the Neck, and Neck ultrasound studies can be used in evaluation of parathyroid incidentalomas found prior to a pending neck surgery to aid in preoperative evaluation, as determined by the surgical team.[1]

References (Neck-8)

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Thyroid

1. Hoang JK, Langer JE, Middleton WD, et al. Managing incidental thyroid nodules detected on imaging: white paper of the ACR incidental Thyroid Findings Committee. *J Am Coll Radiol*. 2015;12(2):143-150. doi:10.1016/j.jacr.2014.09.038
2. Gharib H, Papini E, Garber JR, et al. American Association Of Clinical Endocrinologists, American College Of Endocrinology, And Associazione Medici Endocrinologi medical guidelines for clinical practice for the diagnosis and management of thyroid nodules–2016 update. *Endocr Pract*. 2016;22(5):622-639. doi:10.4158/EP161208.GL
3. Haugen BR, Alexander EK, Bible KC, et al. 2015 American Thyroid Association Management Guidelines for Adult Patients with Thyroid Nodules and Differentiated Thyroid Cancer: The American Thyroid Association Guidelines Task Force on Thyroid Nodules and Differentiated Thyroid Cancer. *Thyroid*. 2016;26(1):1-133. doi:10.1089/thy.2015.0020
4. Donangelo I, Suh SY. Subclinical hyperthyroidism: when to consider treatment. *Am Fam Physician*. 2017;95(11):710-716.
5. Expert Panel on Neurological Imaging:, Hoang JK, Oldan JD, et al. ACR Appropriateness Criteria® Thyroid Disease. *J Am Coll Radiol*. 2019;16(5S):S300-S314. doi:10.1016/j.jacr.2019.02.004
6. Ross DS, Burch HB, Cooper DS, et al. 2016 American Thyroid Association Guidelines for Diagnosis and Management of Hyperthyroidism and Other Causes of Thyrotoxicosis [published correction appears in Thyroid. 2017 Nov;27(11):1462. doi: 10.1089/thy.2016.0229.correx]. *Thyroid*. 2016;26(10):1343-1421. doi:10.1089/thy.2016.0229
7. Tessler FN, Middleton WD, Grant EG, et al. ACR Thyroid Imaging, Reporting and Data System (TI-RADS): White Paper of the ACR TI-RADS Committee. *J Am Coll Radiol*. 2017;14(5):587-595. doi:10.1016/j.jacr.2017.01.046
8. Corvino A, Pignata S, Campanino MR, et al. Thyroglossal duct cysts and site-specific differential diagnoses: imaging findings with emphasis on ultrasound assessment. *J Ultrasound*. 2020;23(2):139-149. doi:10.1007/s40477-020-00433-2
9. Chou J, Walters A, Hage R, et al. Thyroglossal duct cysts: anatomy, embryology and treatment. *Surg Radiol Anat*. 2013;35(10):875-881. doi:10.1007/s00276-013-1115-3
10. Hanson MA, Shaha AR, Wu JX. Surgical approach to the substernal goiter. *Best Pract Res Clin Endocrinol Metab*. 2019;33(4):101312. doi:10.1016/j.beem.2019.101312
11. Hamill C, Ellis P, Johnston PC. Ultrasound for the assessment of thyroid nodules: an overview for non-radiologists. *Br J Hosp Med (Lond).* 2022;83(7):1-7. doi:10.12968/hmed.2022.0071
12. Bernet VJ, Chindris AM. Update on the Evaluation of Thyroid Nodules. *J Nucl Med*. 2021;62(Suppl 2):13S-19S. doi:10.2967/jnumed.120.246025
13. Sharbidre KG, Lockhart ME, Tessler FN. Incidental Thyroid Nodules on Imaging: Relevance and Management. *Radiol Clin North Am*. 2021;59(4):525-533. doi:10.1016/j.rcl.2021.03.004
14. Shi M, Nong D, Xin M, Lin L. Accuracy of Ultrasound Diagnosis of Benign and Malignant Thyroid Nodules: A Systematic Review and Meta-Analysis. *Int J Clin Pract*. 2022;2022:5056082. Published 2022 Sep 13. doi:10.1155/2022/5056082
15. Wiersinga WM, Poppe KG, Effraimidis G. Hyperthyroidism: aetiology, pathogenesis, diagnosis, management, complications, and prognosis. *Lancet Diabetes Endocrinol*. 2023;11(4):282-298. doi:10.1016/S2213-8587(23)00005-0
16. Chen DW, Yeh MW. Disparities in Thyroid Care. *Endocrinol Metab Clin North Am*. 2022;51(2):229-241. doi:10.1016/j.ecl.2021.11.017

Parathyroid

1. Wilhelm SM, Wang TS, Ruan DT, et al. The American Association of Endocrine Surgeons Guidelines for Definitive Management of Primary Hyperparathyroidism. *JAMA Surg*. 2016;151(10):959-968. doi:10.1001/jamasurg.2016.2310
2. Parnell KE, Oltmann SC. The surgical management of primary hyperparathyroidism: an updated review. *Int J Endocr Oncol*. 2018;5(1). doi:10.2217/ije-2017-0019
3. ACR–SPR Practice Parameter For The Performance of Parathyroid Scintigraphy. Revised 2019.
4. Orr LE, Mckenzie TJ, Thompson GB, Farley DR, Wermers RA, Lyden ML. Surgery for Primary Hyperparathyroidism with Normal Non-suppressed Parathyroid Hormone can be Both Challenging and Successful. *World J Surg*. 2018;42(2):409-414. doi:10.1007/s00268-017-4323-x
5. Bahl M. Preoperative Parathyroid Imaging: Trends in Utilization and Comparative Accuracy of Sonography, Scintigraphy, and 4-Dimensional Computed Tomography. *J Comput Assist Tomogr*. 2019;43(2):264-268. doi:10.1097/RCT.0000000000000821
6. Kukar M, Platz TA, Schaffner TJ, et al. The use of modified four-dimensional computed tomography in patients with primary hyperparathyroidism: an argument for the abandonment of routine sestamibi single-positron emission computed tomography (SPECT). *Ann Surg Oncol*. 2015;22(1):139-145. doi:10.1245/s10434-014-3940-y
7. Solorzano CC, Carneiro-Pla D. Minimizing cost and maximizing success in the preoperative localization strategy for primary hyperparathyroidism. *Surg Clin North Am*. 2014;94(3):587-605. doi:10.1016/j.suc.2014.02.006
8. Wang TS, Cheung K, Farrokhyar F, Roman SA, Sosa JA. Would scan, but which scan? A cost-utility analysis to optimize preoperative imaging for primary hyperparathyroidism. *Surgery*. 2011;150(6):1286-1294. doi:10.1016/j.surg.2011.09.016
9. Mortenson MM, Evans DB, Lee JE, et al. Parathyroid exploration in the reoperative neck: improved preoperative localization with 4D-computed tomography. *J Am Coll Surg*. 2008;206(5):888-896. doi:10.1016/j.jamcollsurg.2007.12.044
10. Boccalatte LA, Higuera F, Gómez NL, et al. Usefulness of 18F-Fluorocholine Positron Emission Tomography-Computed Tomography in Locating Lesions in Hyperparathyroidism: A Systematic Review. *JAMA Otolaryngol Head Neck Surg*. 2019;145(8):743-750. doi:10.1001/jamaoto.2019.0574
11. Broos WAM, van der Zant FM, Knol RJJ, Wondergem M. Choline PET/CT in parathyroid imaging: a systematic review. *Nucl Med Commun*. 2019;40(2):96-105. doi:10.1097/MNM.0000000000000952
12. Parvinian A, Martin-Macintosh EL, Goenka AH, et al. ^{11}C-Choline PET/CT for Detection and Localization of Parathyroid Adenomas. *AJR Am J Roentgenol*. 2018;210(2):418-422. doi:10.2214/AJR.17.18312
13. Cusano NE, Silverberg SJ, Bilezikian JP. Normocalcemic primary hyperparathyroidism. *J Clin Densitom*. 2013;16(1):33-39. doi:10.1016/j.jocd.2012.12.001
14. Erratum: Kidney Disease: Improving Global Outcomes (KDIGO) CKD-MBD Update Work Group. KDIGO 2017 Clinical Practice Guideline Update for the Diagnosis, Evaluation, Prevention, and Treatment of Chronic Kidney Disease-Mineral and Bone Disorder (CKD-MBD). *Kidney Int Suppl*. 2017;7:1-59. *Kidney Int Suppl (2011)*. 2017;7(3):e1. doi:10.1016/j.kisu.2017.10.001
15. Expert Panel on Neurological Imaging, Zander D, Bunch PM, et al. ACR Appropriateness Criteria® Parathyroid Adenoma. *J Am Coll Radiol*. 2021;18(11S):S406-S422. doi:10.1016/j.jacr.2021.08.013
16. Bilezikian JP, Khan AA, Silverberg SJ, et al. Evaluation and Management of Primary Hyperparathyroidism: Summary Statement and Guidelines from the Fifth International Workshop. *J Bone Miner Res*. 2022;37(11):2293-2314. doi:10.1002/jbmr.4677
17. Zarei A, Karthik S, Chowdhury FU, Patel CN, Scarsbrook AF, Vaidyanathan S. Multimodality imaging in primary hyperparathyroidism. *Clin Radiol.* 2022;77(6):e401-e416. doi:10.1016/j.crad.2022.02.018
18. Lalonde MN, Correia RD, Syktiotis GP, Schaefer N, Matter M, Prior JO. Parathyroid Imaging. *Semin Nucl Med*. 2023;53(4):490-502. doi:10.1053/j.semnuclmed.2023.02.004
19. Morris MA, Saboury B, Ahlman M, et al. Parathyroid Imaging: Past, Present, and Future. *Front Endocrinol (Lausanne)*. 2022;12:760419. Published 2022 Feb 25. doi:10.3389/fendo.2021.760419
20. Kelly HR, Bunch PM. Parathyroid Computed Tomography: Pearls, Pitfalls, and Our Approach. *Neuroimaging Clin N Am*. 2022;32(2):413-431. doi:10.1016/j.nic.2022.01.006

Parathyroid Incidentaloma

1. Patel KN, Yip L, Lubitz CC, et al. The American Association of Endocrine Surgeons Guidelines for the Definitive Surgical Management of Thyroid Disease in Adults. *Ann Surg*. 2020;271(3):e21-e93. doi:10.1097/SLA.0000000000003580
2. Sung JY. Parathyroid ultrasonography: the evolving role of the radiologist. *Ultrasonography*. 2015;34(4):268-274. doi:10.14366/usg.14071
3. Ince S, Buldanli M, Cinar A, Hancerliogullari O, Okuyucu K. EVALUATION AND MANAGEMENT OF PARATHYROID INCIDENTALOMAS DETECTED BY ROUTINE NECK ULTRASONOGRAPHY WITH A MULTIDISCIPLINARY CLINICAL APPROACH. *Acta Endocrinol (Buchar)*. 2024;20(2):179-185. doi:10.4183/aeb.2024.179
4. Bilezikian JP, Khan AA, Silverberg SJ, et al. Evaluation and Management of Primary Hyperparathyroidism: Summary Statement and Guidelines from the Fifth International Workshop. *J Bone Miner Res*. 2022;37(11):2293-2314. doi:10.1002/jbmr.4677

Imaging of the Larynx, Trachea, and Bronchus (Neck-9)

Guideline Page

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Imaging of the Larynx, Trachea, and Bronchus (Neck-9.1)

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- Initial evaluation for suspected laryngotracheal pathology:
  - Direct visualization of the upper airway (via laryngoscopy, with or without bronchoscopy), and can also include
  - Plain x-rays of the neck with or without chest x-ray
- To further evaluate definite abnormalities found on either of the above, including laryngotracheal, tracheal, or bronchial anomalies, foreign bodies or persistent segmental or lobar lung collapse:
  - CT Neck with contrast (CPT® 70491) **OR** CT Neck without contrast (CPT® 70490) **AND/OR**
  - CT Chest with contrast (CPT® 71260) **OR** CT Chest without contrast (CPT® 71250), depending on the anatomic level of the lesion.
    - MRI Orbit/Face/Neck without contrast (CPT® 70540) OR MRI Neck without and with contrast (CPT® 70543) is medically necessary as a supplement to CT Neck or CT Chest if additional assessment is needed.
    - See **Squamous Cell Carcinomas of the Head and Neck—Suspected/ Diagnosis (ONC-3.1)** for suspected laryngotracheal tumor.
- For suspected subglottic stenosis (SGS) after evaluation by a specialist or in consultation with a specialist who has directly visualized the upper airway:
  - CT Neck with contrast (CPT® 70491) **OR** CT Neck without contrast (CPT® 70490) is medically necessary.
- For obstructive physiology in the setting of tracheomalacia:
  - Expiratory HRCT (CPT® 71250) is medically necessary.

Background and Supporting Information

- Bronchoscopy can further evaluate the distal endobronchial tree.
- Suspected laryngotracheal disease can be identified by inspiratory or biphasic stridor and a characteristic flow-volume loop of PFTs.
- The visualization of tracheal or bronchial "inspissation" or thickening of secretions without an abnormality, is not a risk for malignancy.
- CT with multiplanar reformatting has proven comparable to rigid bronchoscopy with a 100% sensitivity and specificity of detecting SGS and for measuring length and grade of stenosis.

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Evidence Discussion

- Radiographs by means of neck and chest radiographs are sensitive for only those radioopaque foreign bodies but have value in providing information regarding other chest pathology such as presence of consolidation, atelectasis and bronchiectasis.[6]
- CT is more sensitive than x ray in identifying airway foreign bodies due to its higher resolution.[7]
- CT scan can rapidly and accurately identify laryngo-tracheo-bronchial abnormalities prior to bronchoscopy such as pneumonia, airway stenosis, atelectasis, effusion and consolidation.[7-9]
- CT provides a sensitivity of more than 96% and a specificity of more than 97% in comparison to bronchoscopy for detecting tracheomalacia. CT provides the advantage of simultaneously evaluating mediastinal, vascular and lung pathologies.[10]

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References (Neck-9)

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1. Obusez EC, Jamjoom L, Kirsch J, Gildea T, Mohammed TL. Computed tomography correlation of airway disease with bronchoscopy: part I--nonneoplastic large airway diseases. *Curr Probl Diagn Radiol*. 2014;43(5):268-277. doi:10.1067/j.cpradiol.2014.05.002
2. Gould MK, Donington J, Lynch WR, et al. Evaluation of individuals with pulmonary nodules: when is it lung cancer? Diagnosis and management of lung cancer, 3rd ed: American College of Chest Physicians evidence-based clinical practice guidelines. *Chest*. 2013;143(5 Suppl):e93S-e120S. doi:10.1378/chest.12-2351
3. Expert Panel on Thoracic Imaging: Christensen JD, Harowicz M, et al. ACR Appropriateness Criteria® Chronic Dyspnea-Noncardiovascular Origin. 2024.
4. Pasick LJ, Anis MM, Rosow DE. An Updated Review of Subglottic Stenosis: Etiology, Evaluation, and Management. *Curr Pulmonol Rep*. 2022;11(2):29-38. doi:10.1007/s13665-022-00286-6
5. Bajaj D, Sachdeva A, Deepak D. Foreign body aspiration. *J Thorac Dis*. 2021;13(8):5159-5175. doi:10.21037/jtd.2020.03.94
6. Kara K, Ozdemir C, Tural Onur S, Satici C, Tokgoz Akyil F, Nedime Sokucu S. Late Diagnosis of Foreign Body Aspiration in Adults: Case Series and Review of the Literature. *Respir Care*. 2024;69(3):317-324. Published 2024 Feb 28. doi:10.4187/respcare.10723
7. Liu X, Ni F, Guo T, et al. Risk factors associated with radiolucent foreign body inhalation in adults: a 10-year retrospective cohort study. *Respir Res*. 2022;23(1):238. Published 2022 Sep 10. doi:10.1186/s12931-022-02165-9
8. Abdel Razek AA. Imaging of connective tissue diseases of the head and neck. *Neuroradiol J*. 2016;29(3):222-230. doi:10.1177/1971400916639605
9. Wallis C, Alexopoulou E, Antón-Pacheco JL, et al. ERS statement on tracheomalacia and bronchomalacia in children. *Eur Respir J*. 2019;54(3):1900382. Published 2019 Sep 28. doi:10.1183/13993003.00382-2019
10. McCullagh KL, Shah RN, Huang BY. Anatomy of the Larynx and Cervical Trachea. *Neuroimaging Clin N Am.* 2022;32(4):809-829. doi:10.1016/j.nic.2022.07.011

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Neck Pain/Neck Trauma (Neck-10)

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Neck Pain (Cervical) (Neck-10.1)

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- Neck pain is usually related to a specific process including pharyngitis, radiculopathy, adenopathy, mass, carotid dissection and torticollis, and therefore found elsewhere in these guidelines.
- For the evaluation of neck pain or other symptoms which may involve the cervical spine, including myelopathy and cervical radiculopathy, see Spine Imaging Guidelines .

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Torticollis and Dystonia (Neck-10.2)

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Older Child (beyond infancy) or Adult

- To identify fracture or malalignment in cases of trauma:
  - Initial evaluation of trauma (without a high-risk mechanism of injury–see **SP-3.2 Neck (Cervical Spine) Trauma**) is by plain radiographs of the cervical spine. If inconclusive:
    - CT Neck with contrast (CPT® 70491) **AND/OR**
    - CT Cervical Spine without contrast (CPT® 72125)
- In the clinical setting of cervical spine trauma with an associated neurologic deficit:
  - MRI Cervical Spine without contrast (CPT® 72141) is medically necessary.
- To evaluate for soft tissue or neurological cause in cases with no trauma history:
  - CT Neck with contrast (CPT® 70491), **AND/OR**
  - MRI Cervical Spine without contrast (CPT® 72141), **OR**
  - CT Cervical Spine without contrast (CPT® 72125)
    - Positive→ Further advanced imaging is not medically necessary if CT Neck or CT/MRI Cervical Spine has identified local cause.
    - Negative→ MRI Brain without and with contrast (CPT® 70553) to exclude CNS cause.

Evidence Discussion

- Plain radiography continues to be the primary imaging modality for the initial diagnosis of neck concerns in cases of trauma without high-risk mechanism of injury.[9,10]
- CT offers superior depiction of cortical bone and is more sensitive than radiographs in assessing facet degenerative disease, osteophyte formation, and other osseous structures.[9,10]
- Individuals with abnormal neurological findings benefit from MRI to help identify spinal cord abnormalities and soft tissue causes in the workup of dystonia and/or torticollis.[9,10]
- Risks associated with imaging include, but are not limited to, radiation exposure and contrast complications.[9,10]

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Eagle Syndrome (Neck-10.3)

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Also known as "calcified stylohyoid ligament", "elongation of styloid process", or "stylocarotid artery syndrome".

- **"Classic Eagle Syndrome"**
  - Typically seen in individuals after pharyngeal trauma or tonsillectomy
  - Characterized by ipsilateral dull, persistent pharyngeal pain, centered in the ipsilateral tonsillar fossa, that can be referred to the ear, and exacerbated by rotation of the head
  - Other symptoms may include dysphagia, sensation of foreign body in the throat, tinnitus, or cervicofacial pain.
  - If Eagle Syndrome is suspected on exam and/or lateral neck x-ray:
    - CT Maxillofacial with contrast (CPT® 70487) **OR** CT Maxillofacial without contrast (CPT® 70486) **AND/OR**
    - CT Neck with contrast (CPT® 70491) **OR** CT Neck without contrast (CPT® 70490)
- **"Stylocarotid Artery Syndrome"** (i.e., the anterior circulation equivalent of "bow hunter syndrome"—rotational vertebral artery occlusion syndrome)
  - It is characterized by the compression of the internal or external carotid artery (with their peri-vascular sympathetic fibers) by a laterally or medially deviated styloid process.
  - It is related to a pain along the distribution of the artery, which is provoked and exacerbated by rotation and compression of the neck.
  - It is not correlated with tonsillectomy.
  - If Stylocarotid Artery Syndrome is suspected on exam and/or lateral neck x-ray:
    - CT Maxillofacial with contrast (CPT® 70487) **AND/OR**
    - CT Neck with contrast (CPT® 70491)
    - Dynamic/Positional CTA (CPT® 70498) is also medically necessary to assess for concerns of vascular compression (see also **General Guidelines - CT and MR Angiography (CTA and MRA) (HD-1.5)** and **General Guidelines - Other Imaging Situations (HD-1.7)**
    - In cases of impingement of the internal carotid artery, there may be referred supraorbital pain and parietal headache. In cases of external carotid artery irritation, the pain radiates to the infraorbital region.
- CT scanning (and in particular, 3-D CT scanning) represents an extremely valuable imaging tool in individuals with Eagle syndrome. 3-D rendering (CPT® 76376 or CPT® 76377) is medically necessary as an add on to CT Neck (CPT® 70491 **or** CPT®

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70490), if requested, for accurate evaluation of the styloid process in relation to its anatomic relationship with the other head and neck structures, in surgical planning. See **3D Rendering (Preface-4.1)**.

Background and Supporting Information

- Torticollis or cervical dystonia is an abnormal twisting of the neck resulting in head rotation. Its causes are many and may be congenital or acquired and caused by trauma, infection/inflammation, neoplasm and/or idiopathic. It occurs more frequently in children and on the right side (75%).
- Eagle syndrome is characterized by recurrent pain in the oropharynx and face due to an elongated styloid process or calcified stylohyoid ligament. The styloid process is a slender outgrowth at the base of the temporal bone, immediately posterior to the mastoid apex.

Evidence Discussion

- If Eagle syndrome is suspected on exam and/or lateral neck x-ray, CT Maxillofacial or CT Neck are medically necessary.[4,7]
- CT is the preferred modality for evaluation of bony structures and detection of abnormalities associated with calcifications.[13]
- Indications for cervicocerebral computed tomography angiography (CTA) or magnetic resonance angiography (MRA) of the head and neck vessels or include the diagnosis, characterization and/or surveillance of a variety of vascular conditions, including vascular compression of the internal or external carotid artery by an elongated styloid process (Eagle Syndrome).[6]
- Risks of CTA include exposure to ionizing radiation; thus, magnetic resonance angiography (MRA) is available as an alternative to reduce radiation exposure. In addition, MRA is an alternative for individuals with iodinated contrast allergies or other contraindications to iodinated contrast.[6,14]
- MRA, as an alternative modality, is noninvasive, and does not require iodinated contrast. Limitations include artifacts due to motion, slow or turbulent flow, susceptibility effects, and claustrophobia. Additionally, MRA may not be a feasible option for those with contraindications to MRI such as incompatible pacemakers, cochlear implants, neurostimulators or other devices. In these scenarios, CTA may be the appropriate alternative.[6,14,15]

Neck Trauma (Neck-10.4)

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- CT Neck with contrast (CPT® 70491) OR CT Neck without contrast (CPT® 70490) is medically necessary in individuals with neck trauma who have an altered state of consciousness, distracting injuries or intoxication, midline tenderness to palpation, or neurological deficits.
- Penetrating neck trauma
  - CTA Neck (CPT® 70498) is medically necessary for evaluating vascular injury and/or aerodigestive injuries.
- Blunt neck trauma
  - For any evidence of blunt neck trauma, including but not limited to: neurologic deficit, infarction on CT Head, cervical seatbelt sign, and fractures of the skull, face, or spine, a CTA Neck (CPT® 70498) is medically necessary.
  - If CTA is negative but high clinical suspicion remains for esophageal injury, MRA Neck with contrast (CPT® 70548) OR MRA Neck without contrast (CPT® 70547) OR MRA Neck without and with contrast (CPT® 70549) is medically necessary.
- Laryngeal neck trauma
  - For any clinical suspicion of injury, CT Neck without contrast (CPT® 70490) is medically necessary.

Evidence Discussion

- CTA has high sensitivity and specificity for stable individuals with penetrating neck trauma.[18]
- CTA is the primary imaging modality to assess aerodigestive injuries from penetrating neck trauma. However, a high number of esophageal injuries are missed on CTA, so a negative CTA with suspicion for esophageal injury warrants additional testing.[16,19]
- MRA Neck can be useful to detect dissections and intramural hematoma from blunt neck trauma.[20]
- CT Neck without contrast is useful to assess laryngeal neck trauma, as it can assess the cartilaginous and bony components, as well as determine any fractures that may need stabilization.[21]

Background and Supporting Information

- For penetrating neck trauma, if diagnostic uncertainty remains after CTA Neck, follow-up tests may include ultrasound, esophagram, angiography, and triple endoscopy.

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References (Neck-10)

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1. Expert Panel on Neurological Imaging:, Eldaya RW, Parsons MW, et al. ACR Appropriateness Criteria® Cervical Neck Pain or Cervical Radiculopathy. 2024.
2. Haque S, Bilal Shafi BB, Kaleem M. Imaging of torticollis in children. *Radiographics*. 2012;32(2):557-571. doi:10.1148/rg.322105143
3. Boyko N, Eppinger MA, Straka-DeMarco D, Mazzola CA. Imaging of congenital torticollis in infants: a retrospective study of an institutional protocol. *J Neurosurg Pediatr*. 2017;20(2):191-195. doi:10.3171/2017.3.PEDS16277
4. Badhey A, Jategaonkar A, Anglin Kovacs AJ, et al. Eagle syndrome: A comprehensive review. *Clin Neurol Neurosurg*. 2017;159:34-38. doi:10.1016/j.clineuro.2017.04.021
5. Jalisi S, Jamal BT, Grillone GA. Surgical Management of Long-standing Eagle's Syndrome. *Ann Maxillofac Surg*. 2017;7(2):232-236. doi:10.4103/ams.ams_53_17
6. ACR-ASNR-SPR Practice Parameter for the Performance and Interpretation of Cervicocerebral Computed Tomography Angiography (CTA). Revised 2020.
7. Kent DT, Rath TJ, Snyderman C. Conventional and 3-Dimensional Computerized Tomography in Eagle's Syndrome, Glossopharyngeal Neuralgia, and Asymptomatic Controls. *Otolaryngol Head Neck Surg*. 2015;153(1):41-47. doi:10.1177/0194599815583047
8. Elimairi I, Baur DA, Altay MA, Quereshy FA, Minisandram A. Eagle's Syndrome. *Head Neck Pathol*. 2015;9(4):492-495. doi:10.1007/s12105-014-0599-4
9. Expert Panel on Neurological Imaging and Musculoskeletal Imaging:, Beckmann NM, West OC, et al. ACR Appropriateness Criteria® Suspected Spine Trauma. *J Am Coll Radiol*. 2019;16(5S):S264-S285. doi:10.1016/j.jacr.2019.02.002
10. Hoffman JR, Mower WR, Wolfson AB, Todd KH, Zucker MI. Validity of a set of clinical criteria to rule out injury to the cervical spine in patients with blunt trauma. National Emergency X-Radiography Utilization Study Group [published correction appears in N Engl J Med 2001 Feb 8;344(6):464]. *N Engl J Med*. 2000;343(2):94-99. doi:10.1056/NEJM200007133430203
11. ACR-ASNR-SNIS-SPR Practice Parameter for the Performance of Cervicocerebral Magnetic Resonance Angiography (MRA). Revised 2020.
12. Expert Panel on MR Safety, Kanal E, Barkovich AJ, et al. ACR guidance document on MR safe practices: 2013. *J Magn Reson Imaging*. 2013;37(3):501-530. doi:10.1002/jmri.24011
13. Swanson D, Evensky CH, Yusuf S, et al. Eagle Syndrome: Pathophysiology, Differential Diagnosis and Treatment Options. *Health Psychol Res*. 2023;10(5):67851. Published 2023 Feb 21. doi:10.52965/001c.67851
14. Lind K, Do-Nguyen A. Neck trauma: diagnosis and management in the emergency department. *Emerg Med Pract*. 2021;23(Suppl 4):1-29. Published 2021 Apr 15.
15. Loss L, Henry R, White A, et al. Penetrating neck trauma: a comprehensive review. *Trauma Surg Acute Care Open*. 2025;10(1):e001619. Published 2025 Mar 24. doi:10.1136/tsaco-2024-001619
16. Siletz A, Inaba K. Diagnostic approach to penetrating neck trauma: What you need to know. *J Trauma Acute Care Surg*. 2024;97(2):175-182. doi:10.1097/TA.0000000000004292
17. Badalamenti G, Ferrer C, Calvagna C, et al. Major vascular traumas to the neck, upper limbs, and chest: Clinical presentation, diagnostic approach, and management strategies. *Semin Vasc Surg*. 2023;36(2):258-267. doi:10.1053/j.semvascsurg.2023.04.010
18. Ibraheem K, Wong S, Smith A, et al. Computed tomography angiography in the "no-zone" approach era for penetrating neck trauma: A systematic review. *J Trauma Acute Care Surg*. 2020;89(6):1233-1238. doi:10.1097/TA.0000000000002919
19. Paladino L, Baron BJ, Shan G, Sinert R. Computed tomography angiography for aerodigestive injuries in penetrating neck trauma: A systematic review. *Acad Emerg Med*. 2021;28(10):1160-1172. doi:10.1111/acem.14298
20. Abu Mughli R, Wu T, Li J, et al. An Update in Imaging of Blunt Vascular Neck Injury. *Can Assoc Radiol J.* 2020;71(3):281-292. doi:10.1177/0846537120909468

21. Malvi A, Jain S. Laryngeal Trauma, Its Types, and Management. *Cureus.* 2022;14(10):e29877. Published 2022 Oct 3. doi:10.7759/cureus.29877

Neck Imaging Guidelines

Salivary Gland Disorders (Neck-11)

Guideline Page

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Salivary Gland Disorders (Neck-11.1)

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- **Salivary Gland Stones, Sialadenitis or Stenosis:**
  - Sialography (contrast dye injection) under fluoroscopy, is medically necessary to rule out a salivary duct stone or stricture, using
    - Post-sialography CT (CT Maxillofacial without contrast [CPT® 70486] for Stensen's duct of the parotid gland, which would be most common; **or** CT Neck without contrast [CPT® 70490] for the level of the Wharton's Duct); **or** post-sialography MRI (MRI Orbit/Face/Neck without contrast [CPT® 70540])

    OR
  - CT Maxillofacial area with contrast (CPT® 70487) **OR**
  - CT Neck with contrast (CPT® 70491)
    - CT performed only without IV contrast (CPT® 70490) may be helpful in a small minority of cases, such as cases of follow-up for known salivary stones, or for post-sialography imaging, as described above **OR**
  - MRI Orbit/Face/Neck without and with contrast (CPT® 70543)
- **Parotid or Other Salivary Gland Mass**
  - The following are appropriate:
    - Ultrasound (CPT® 76536) is medically necessary as initial or additional imaging and does not need to be completed prior to the performance of advanced imaging.
    - MRI Orbit/Face/Neck without and with contrast preferred (CPT® 70543), **or** MRI Orbit/Face/Neck without contrast (CPT® 70540) **OR**
    - CT Neck with contrast (CPT® 70491) preferred **or** CT Maxillofacial area with contrast (CPT® 70487)
- **Repeat Imaging (CT or MRI, as above)**
  - There is currently no standard timeframe for repeat advanced imaging to follow known benign pathology of the salivary gland that has been resected—partially or completely, or only observed. This holds true even if the salivary lesion has the potential for recurrence or malignant transformation (i.e., pleomorphic adenoma).
  - Repeat advanced imaging, as requested by the surgeon or those in consultation with the surgical team, is medically necessary if relevant history and exam demonstrate signs:
    - concerning for complications of surgery, or
    - recurrence or progression of neoplasm/lesion

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Evidence Discussion

- Current history and comprehensive head & neck exam are required prior to any advanced imaging for suspected salivary gland pathology.[1]
- CT should be performed with IV contrast to distinguish vessels from lymph nodes and to confirm if a mass is hypervascular. *Dual-phase CT imaging (without and with IV contrast) is not medically necessary*.[2]
  - CT performed only without IV contrast may be helpful in a small minority of cases including cases of follow-up for known salivary stones or post-sialography studies.
- A recent study in the American Journal of Neuroradiology comparing contrast enhanced and non-contrast enhanced CT in the evaluation of sialolithiasis demonstrated excellent sensitivity and specificity with no false-positive results using contrast-enhanced CT alone (without the addition of non-contrasted images for comparison).[3] The sensitivity of contrast-enhanced CT is 96-98%, and the specificity is 88-100%.[7] Benefits of initial only contrast-enhanced CT include better evaluation of the ductal system, improved soft tissue contrast in assessing salivary masses and decreased radiation dose (compared to dual phase CT imaging (without and with IV contrast)).[3]
- The preferred modality to evaluate suspected parotid lesions is MRI of the face and/or neck with and without IV contrast. It can provide comprehensive information about the full extent of the mass (i.e., deep lobe involvement) and other local invasion (such as perineural tumor spread and possible extension into the temporal bone).[4]

Neck Imaging Guidelines

References (Neck-11)

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1. Wilson KF, Meier JD, Ward PD. Salivary gland disorders. *Am Fam Physician*. 2014;89(11):882-888.
2. Expert Panel on Neurologic Imaging:, Aulino JM, Kirsch CFE, et al. ACR Appropriateness Criteria® Neck Mass-Adenopathy. *J Am Coll Radiol*. 2019;16(5S):S150-S160. doi:10.1016/j.jacr.2019.02.025
3. Purcell YM, Kavanagh RG, Cahalane AM, Carroll AG, Khoo SG, Killeen RP. The Diagnostic Accuracy of Contrast-Enhanced CT of the Neck for the Investigation of Sialolithiasis. *AJNR Am J Neuroradiol*. 2017;38(11):2161-2166. doi:10.3174/ajnr.A5353
4. Wittekindt C, Streubel K, Arnold G, Stennert E, Guntinas-Lichius O. Recurrent pleomorphic adenoma of the parotid gland: analysis of 108 consecutive patients. *Head Neck*. 2007;29(9):822-828. doi:10.1002/hed.20613
5. Patel N, Gharai S, Brindle KA, Khati NJ. Imaging Spectrum of Extrathyroidal Neck Masses. *Ultrasound Q*. 2025;41(1):e00708. Published 2025 Feb 7. doi:10.1097/RUQ.0000000000000708
6. Friedman E, Cai Y, Chen B. Imaging of Major Salivary Gland Lesions and Disease. *Oral Maxillofac Surg Clin North Am*. 2023;35(3):435-449. doi:10.1016/j.coms.2023.02.007
7. Kim MJ, Milliren A, Gerold DJ Jr. Salivary Gland Disorders: Rapid Evidence Review. *Am Fam Physician*. 2024;109(6):550-559.
8. Moore J, Simpson MTW, Cohen N, Beyea JA, Phillips T. Approach to sialadenitis. *Can Fam Physician*. 2023;69(8):531-536. doi:10.46747/cfp.6908531

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Sore Throat, Odynophagia, and Hoarseness (Neck-12)

Guideline Page

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Definitions (Neck-12.0)

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- Hoarseness – Altered voice quality reported by the individual
- Dysphagia – Disordered or impaired swallowing i.e., food impactions, globus sensation, choking/aspiration, regurgitation (see **Dysphagia and Upper Digestive Tract Disorders (Neck-3.1)**)
- Odynophagia – Painful swallowing

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Sore Throat/Throat Pain/Odynophagia (Neck-12.1)

NK.ST.0012.1.A
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- See **Dysphagia and Upper Digestive Tract Disorders (Neck-3.1)** for dysphagia as the primary symptom.
- Sore Throat/Throat Pain/Odynophagia
  - Uncomplicated viral or streptococcal pharyngitis with sore throat
    - Imaging studies are not medically necessary. See **Neck Mass/Swelling/ Adenopathy (Neck-5.1)** for suspected complications of pharyngitis/tonsillitis, such as a cervical space abscess.
  - Postoperative throat pain or odynophagia after head and neck procedure with suspected complication of procedure:
    - CT Neck with contrast (CPT® 70491)
  - Sore throat/throat pain/odynophagia that is persistent or progressive for two or more weeks, in spite of any treatment measures or observation:
    - Initial evaluation is laryngoscopy
      - If the initial laryngoscopy is abnormal, or if it is negative, and if there is a continued concern for an occult lesion within the pharynx due to any red flag symptoms (weight loss, referred otalgia, hoarseness, hemoptysis, and/or unilateral presentation of symptoms):
        - CT Neck with contrast (CPT® 70491) **OR**
        - MRI Orbit/Face/Neck without and with contrast (CPT® 70543)
      - Alarm symptoms of persistent unilateral throat pain or odynophagia with ipsilateral referred otalgia is especially suspicious for a submucosal tumor of the head and neck (versus more distal esophageal pathology).
      - If subjective dysphagia AND odynophagia are both present and the initial laryngoscopy and neck exam are normal (i.e., no cervical space abscess or post-surgical complication is suspected), and no red flag symptoms are present, then barium esophagram (or GI upper endoscopy) is medically necessary prior to the advanced imaging studies of the neck listed above.

Evidence Discussion

- Both CT and MRI can be used to delineate masses and provide cross sectional visualization of lesions that are deep to the mucosal surface. CT has the advantage to being readily available, requiring less time and less expense when compared to MRI.[7,8]

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Hoarseness (Neck-12.2)

NK.ST.0012.2.A

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- Laryngoscopy is the primary diagnostic modality for evaluating individuals with hoarseness. Imaging studies, including CT and MRI, are not medically necessary in most individuals with hoarseness because most hoarseness is self-limited or caused by pathology that can be identified by laryngoscopy alone.
- The need for advanced imaging is based upon abnormal findings upon laryngoscopy, such as:
  - Immobile or partially mobile vocal cord [see **Recurrent Laryngeal Nerve Palsy (NECK-7.1)**]
  - Any growth, asymmetry, ulceration, or other suspected neoplasm of the glottis or supraglottis [see **Neck Mass/Swelling/Adenopathy (Neck 5.1)**; see also **ONC-3.0-3.4**].

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References (Neck-12)

v1.0.2026

1. Stachler RJ, Francis DO, Schwartz SR, et al. Clinical Practice Guideline: Hoarseness (Dysphonia) (Update) [published correction appears in *Otolaryngol Head Neck Surg*. 2018 Aug;159(2):403. doi:10.1177/0194599818766900]. *Otolaryngol Head Neck Surg*. 2018;158(1_suppl):S1-S42. doi:10.1177/0194599817751030
2. Pynnonen MA, Gillespie MB, Roman B, et al. Clinical Practice Guideline: Evaluation of the Neck Mass in Adults. *Otolaryngol Head Neck Surg*. 2017;157(2_suppl):S1-S30. doi:10.1177/0194599817722550
3. Shulman ST, Bisno AL, Clegg HW, et al. Clinical practice guideline for the diagnosis and management of group A streptococcal pharyngitis: 2012 update by the Infectious Diseases Society of America [published correction appears in *Clin Infect Dis*. 2014 May;58(10):1496. Dosage error in article text]. *Clin Infect Dis*. 2012;55(10):e86-e102. doi:10.1093/cid/cis629
4. Expert Panel on Gastrointestinal Imaging:, Levy AD, Carucci LR, et al. ACR Appropriateness Criteria® Dysphagia. *J Am Coll Radiol*. 2019;16(5S):S104-S115. doi:10.1016/j.jacr.2019.02.007
5. Belafsky PC. Odynophagia a Warning Sign and Indication for Timely Endoscopy. *ENT Today*. August 1, 2014. https://www.enttoday.org/article/literature-review-odynophagia-a-warning-sign-and-indication-for-timely-endoscopy/
6. Hwang C, Desai B, Desai A. Dysphagia and Odynophagia. In: Desai B, Desai A, eds. *Primary Care for Emergency Physicians*. Springer, Cham. 2017. doi:10.1007/978-3-319-44360-7_8
7. Rahim I, Napolitano A, Burd C, Lingam RK. Imaging of pharyngeal pathology. *Br J Radiol*. 2023;96(1149):20230046. doi:10.1259/bjr.20230046
8. McCormack SM, Nicewicz MJ. Complications and Diagnosis of Branchial Cleft Cysts: A Case Report. *Cureus*. 2022;14(12):e32667. Published 2022 Dec 18. doi:10.7759/cureus.32667