eviCore healthcare Clinical Decision Support Tool Diagnostic Strategies: This tool addresses common symptoms and symptom complexes. Imaging requests for individuals with atypical symptoms or clinical presentations that are not specifically addressed will require physician review. Consultation with the referring physician, specialist and/or individual’s Primary Care Physician (PCP) may provide additional insight.

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# Neck Imaging Guidelines

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## Abbreviations For Neck Imaging Guidelines

<table>
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<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tr>
<td>ALS</td>
<td>amyotrophic lateral sclerosis</td>
</tr>
<tr>
<td>CT</td>
<td>computed tomography</td>
</tr>
<tr>
<td>ENT</td>
<td>Ear, Nose, Throat</td>
</tr>
<tr>
<td>FNA</td>
<td>fine needle aspiration</td>
</tr>
<tr>
<td>GERD</td>
<td>gastroesophageal reflux disease</td>
</tr>
<tr>
<td>GI</td>
<td>gastrointestinal</td>
</tr>
<tr>
<td>HIV</td>
<td>human immunodeficiency virus</td>
</tr>
<tr>
<td>MRI</td>
<td>magnetic resonance imaging</td>
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Neck-1: General

- A current clinical evaluation (within 60 days), which includes a relevant history and physical examination and appropriate laboratory studies and non-advanced imaging modalities, such as plain x-ray or ultrasound, are required prior to considering advanced imaging. Other meaningful contact (telephone call, electronic mail or messaging) by an established patient can substitute for a face-to-face 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 necessary).
  - Nasopharynx
  - Upper oral cavity to the head of the clavicle
  - Parotid glands and the supraclavicular region

- Ultrasound of the soft tissues of the neck 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.

- Neck CT
  - A Neck CT is usually obtained with contrast only (CPT® 70491).
    - Little significant information is added by performing a Neck CT 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.
    - Exception: Contrast is not generally used when evaluating the trachea with CT. Evaluate salivary duct stones in the appropriate clinical circumstance where intravenous contrast may obscure high attenuation stones.
    - Contrast enhanced CT is helpful in the assessment of cervical adenopathy and preoperative planning in the setting of thyroid carcinomas.
      - Contrast is recommended as an adjunct to US for patients with clinical suspicion for advanced disease, including invasive primary tumor, or clinically apparent multiple or bulky lymph node involvement.
      - 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 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 patients, 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 several week delay in RAI imaging or therapy. Where there is concern, a urinary iodine to creatinine ratio can be measured.
Neck MRI
- MR Neck is used less frequently than Neck CT.
- MRI Neck without and with contrast (CPT® 70543) is appropriate 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

References
Neck-2: Cerebrovascular and Carotid Disease

- See these related topics in the Head Imaging Guidelines:
  - HD-1.5: General Guidelines – CT and MR Angiography: (CTA and MRA)
  - HD-12: Aneurysm and AVM
  - HD-21: Stroke/TIA
  - HD-22: Cerebral Vasculitis
  - HD-23: Dizziness, Vertigo and Syncope
  - HD-31: Tinnitus
  - HD-32: Eye Disorders

- See **PVD-3: Cerebrovascular and Carotid Disease** in Peripheral Vascular Disease Imaging Guidelines.
Neck-3.1: Dysphagia and Esophageal Disorders

Gastroesophageal Reflux Disease (GERD)
- Advanced imaging is generally not indicated for the evaluation of GERD, the diagnosis of which is usually made on the basis of clinical history, in conjunction with endoscopy, pH monitoring, and occasionally manometry. Exceptions would include the following:
  - Non-cardiac chest pain suspected of being GERD should be evaluated first to exclude cardiac and other etiologies. Refer to Section CH-4.1: Non-Cardiac Chest Pain-Imaging.
  - For patients with refractory GERD symptoms, and gastroparesis is being considered, a gastric emptying study (CPT® 78264) can be approved.

Suspected foreign body impaction and ingested foreign bodies:
- Initial imaging is performed with appropriate plain films.
- If imaging is negative, 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
  - 3-D reconstruction (CPT® 76377) can be approved in this setting
- The use of oral contrast is discouraged for acute dysphagia or foreign body impaction, as the contrast may not pass, may be aspirated, and can interfere with subsequent endoscopic intervention.

Oropharyngeal or esophageal dysphagia.
- Oropharyngeal (difficulty in transferring food from the mouth to the pharynx)
  - Suspected neurologic causes: see appropriate sections in Head Imaging Guidelines
  - Video fluoroscopic swallowing study
- Esophageal dysphagia (difficulty in transferring food down the esophagus in the retrosternal region, e.g. food sticking in the chest)
  - Initial barium esophagram or upper gastrointestinal endoscopy
  - Esophageal manometry if indicated
  - Structural lesions identified on esophagram or endoscopy requiring further evaluation (e.g. tumors, extrinsic compression):
    - CT neck (CPT® 70491), CT chest (CPT® 71260) and/or CT abdomen (CPT® 74160) depending on the level of the lesion.

Suspected perforation, abscess, or fistula
- CT neck, chest, and/or abdomen, preferably with IV contrast, as requested, depending on location

Evaluation of structural abnormalities demonstrated on barium esophagram or endoscopy (e.g., external compression, tumor, stricture, diverticulum, etc.)
- CT chest (CPT® 71260), CT neck (CPT® 70491), and/or CT abdomen (CPT® 71260) depending on location

Hiatal hernia
Refer to Section **AB-12.3: Hiatal Hernia**

**Globus Sensation**
- 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 usually not needed for evaluation.
  - If alarm symptoms are present (dysphagia, weight loss, odynophagia, throat pain, hoarseness, and lateralization of symptoms)
    - Laryngoscopy and upper endoscopy should be performed prior to advanced imaging.
    - If negative or equivocal findings on the above studies, or if there is a known history of upper aerodigestive or esophageal malignancy, or lymphoma, or a history of previous neck, esophageal, or gastric surgery, or a palpable abnormality on physical examination:
      - CT neck with contrast (CPT® 70491)

**Suspected Vascular Ring**
- CT angiography Chest with contrast (CPT® 71275) can be used in the evaluation of suspected vascular ring
- MRI Chest without contrast, or MRI Chest without and with contrast (CPT® 71550 or CPT® 71552), can be performed if vascular ring is suspected

**Practice Notes**
- A detailed history of the dysphagia symptoms is important to distinguish neurogenic, pharyngeal and esophageal disorders
- Dysphagia (difficulty swallowing) can be caused by a wide range of benign and malignant causes 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 patients 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.

**References**


Neck-4.1: Imaging

- Ultrasound (CPT® 76536) can be considered for any of the following: 
  1. Inflammatory, infective, or reactive adenopathy but has failed a 2 week trial of treatment or observation (including antibiotics if appropriate).
  2. To further evaluate an ill-defined mass
  3. High suspicion of malignancy

- Neck CT with contrast (CPT® 70491) can be considered if:
  1. Carcinoma found in a lymph node or in an organ known not to be primary (See ONC-31.7: Carcinoma of Unknown Primary Site)
  2. Ultrasound is indeterminate or suspicious for malignancy.

Practice Notes

- Chest x-ray is helpful to identify primary lung disease, involvement of mediastinal lymph nodes or other metastases.

- Inflammatory neck adenopathy is often associated with upper respiratory infection, pharyngitis, dental infection. Occasionally, it is associated with sarcoidosis, toxoplasmosis and HIV.

- Most common causes of neoplastic adenopathy are metastasis from head and neck tumors and lymphoma.

References


# Neck-5: Neck Masses

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Neck Imaging

Neck-5: Neck Masses

See Pediatric Neck Imaging Guidelines, if under age 18.

Neck-5.1: Imaging

- Ultrasound (CPT® 76536) is the initial study for:
  - Anterior neck masses
  - Lateral or posterior neck masses that are tender and have been observed for 2 weeks under physician care and reassessed (generally an acute, infections, or inflammatory mass).
  - Otherwise ill-defined masses, fullness or asymmetry
- Neck CT with contrast (CPT® 70491) is supported for:
  - Lateral or posterior neck masses that are non-tender and discrete in the adult (> age 18)
  - History of malignancy that would be primary or metastatic to the neck
  - Suspected peritonsillar, retropharyngeal or other head and neck abscesses
  - If sarcoidosis is suspected the Neck CT with contrast (CPT® 70491) should be followed by biopsy.
  - Preoperative evaluations of any neck mass
- Neck MRI without and with contrast (CPT® 70543) if:
  - CT suggests the need for further imaging.
  - Ultrasound or CT suggests neurogenic tumor (schwannoma, neurofibroma, glomus tumor, etc.), vascular malformations, deep neck masses and angiofibromas.
- Uncomplicated Pharyngitis or Tonsillitis should undergo conservative therapy including antibiotics, if appropriate. Advanced imaging is not indicated.

Practice Notes

- Although CT is considered the preferred initial modality in neck mass in adults, the use of US is steadily increasing and should be considered when malignancy is not obvious.
- Most lateral neck masses are enlarged lymph nodes.
- Malignancy is a greater possibility in adults that are heavy drinkers and smokers.
- 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.
References
2. Shulman ST, Bisno Al, Clegg HW, et al.
Neck-6: Malignancies Involving the Neck

See the following in the Oncology Imaging Guidelines:
- **ONC-3**: Squamous Cell Carcinomas of the Head and Neck
- **ONC-4**: Salivary Gland Cancers
- **ONC-6**: Thyroid Cancer
- **ONC-9**: Esophageal Cancer
- **ONC-27**: Non-Hodgkin Lymphoma
- **ONC-28**: Hodgkin Lymphoma
Neck-7: Recurrent Laryngeal Palsy

See HD-7: Recurrent Laryngeal Palsy in the Head Imaging Guidelines
# Neck-8: Thyroid and Parathyroid

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Neck-8.1: Thyroid Nodule

- Serum thyrotropin (TSH) should be measured in the initial evaluation of thyroid nodule/mass/asymmetry/goiter. If the serum TSH is subnormal, a nuclear scan (CPT® 78013 or CPT® 78014) should be performed as the initial imaging study.

- Ultrasound (US) of the Neck (CPT® 76536) is the appropriate initial study for evaluation of suspected thyroid abnormalities, including goiter and thyroid mass(es) in the following clinical scenarios2,3,6 (See Neck-5.1: Imaging regarding nonthyroidal anterior neck masses):
  - Normal or High serum thyrotropin (TSH)1,3,6
  - Low TSH and nuclear scan shows non-functioning nodule1,6,8
  - Incidentally found on CT, MRI, or PET (focal activity)2,3,6
  - Nodules ≤ 1 cm with very low suspicion US pattern including spongiform pattern and pure cysts do not require repeat US.6
  - For more suspicious or larger nodules, if Fine Needle Aspiration (FNA) is not performed or was not diagnostic for malignancy, US can be repeated:
    - If US features are highly suspicious: repeat US every 6 months for up to 24 months.
    - If US features are of low to intermediate suspicion: repeat US at 12 and 24 months.
    - If nodule is stable after 24 months, follow-up ultrasound exams (CPT® 76536) can be performed every 3 to 5 years for interval surveillance.12

- FNA should be considered for thyroid nodules using the American Thyroid Association criteria listed below. Note that FNA procedures do not require prior authorization.6

<table>
<thead>
<tr>
<th>Sonographic Pattern</th>
<th>US features</th>
<th>Estimated risk % of Malignancy</th>
<th>FNA size cutoff (largest dimension)</th>
</tr>
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<td>High Suspicion</td>
<td>Solid hypoechoic nodule or solid hypoechoic component of a partially cystic nodule with one or more of the following features: Irregular margins (infiltrative, microlobulated), microcalcifications, taller than wide shape, rim calcifications with small extrusive soft tissue component, evidence of ETE</td>
<td>&gt;70-90</td>
<td>Recommend FNA at ≥ 1cm</td>
</tr>
<tr>
<td>Intermediate Suspicion</td>
<td>Hypoechoic solid nodule with smooth margins without microcalcifications, ETE, or taller than wide shape</td>
<td>10-20</td>
<td>Recommend FNA at ≥ 1cm</td>
</tr>
<tr>
<td>Low Suspicion</td>
<td>Isoechoic or hypoechoic solid nodule, or partially cystic nodule with eccentric solid areas, without microcalcifications, irregular margin or ETE, or taller than wide shape</td>
<td>5-10</td>
<td>Recommend FNA at ≥ 1.5 cm</td>
</tr>
<tr>
<td>Very Low Suspicion</td>
<td>Spongiform or partially cystic nodule without any of the sonographic features described in low, intermediate, or high suspicion patterns</td>
<td>&lt;3</td>
<td>Consider FNA at ≥ 2cm, Observation without FNA is also a reasonable option</td>
</tr>
<tr>
<td>Benign</td>
<td>Purely cystic nodules (no solid component)</td>
<td>&lt;1</td>
<td>No biopsy</td>
</tr>
</tbody>
</table>
Nuclear medicine thyroid scan (CPT® 78013 or CPT® 78014) is considered for any of the following:
- Non-diagnostic or indeterminate FNA of thyroid nodule, e.g. follicular lesion of undetermined significance to see if hot (functioning) nodule that may be benign vs cold nodule for treatment planning.\(^3\)
- Substernal goiter with any one of the following:
  - Dyspnea (including exertional)
  - Wheezing or stridor
  - Cough
  - Dysphagia
- Evaluate eligibility for radioiodine therapy\(^3\)
- Select nodules to biopsy in multinodular goiter even if TSH not low\(^1,6\)

Nuclear medicine thyroid scan (CPT® 78013 or CPT® 78014) is considered if low serum thyrotropin (TSH) and any of the following:
- Single or multiple thyroid nodules\(^3,6\)
- Suspicion of ectopic thyroid tissue\(^3\)
- Presence of thyroid nodule in the setting of Grave’s disease (to rule out cold nodule).\(^3\)

CT Neck with contrast (CPT® 70491) or CT Neck without contrast (CPT® 70490), or MRI Neck without and with contrast (CPT® 70543). MRI and CT are not indicated for routine thyroid nodule evaluation and should only be considered for:
- Evaluation of extent of known substernal goiter\(^3\)
- Airway compression\(^3\)
- Presence of pathologic lymph nodes in cervical regions not visualized on ultrasound\(^3\)
- Clinically suspected advanced disease confirmed by FNA, including invasive primary tumor\(^3,6\)
- Preoperative planning for any thyroid disease

A thyroid nodule detected for the first time during pregnancy should be managed in the same way as in non-pregnant patients, except for avoiding the use of radioactive agents for diagnostic and therapeutic purposes\(^3\)

**Practice Notes**

- The basis of thyroid nodule management is the use of ultrasonography (US), thyrotropin (TSH, formerly thyroid-stimulating hormone) assay, and FNA biopsy, together with clinical findings.
- Patient Features Suggesting Increased Risk for Thyroid Malignancy.
  - History of head and neck irradiation
  - Family history of medullary thyroid carcinoma, multiple endocrine neoplasia type 2, or papillary thyroid carcinoma
- Age < 14 or > 70 years
- Male sex
- Growth of the nodule
- Firm or hard nodule consistency
- Cervical adenopathy
- Fixed nodule
- Persistent dysphonia, dysphagia, or dyspnea

> Iodinated CT contrast may interfere with diagnostic nuclear medicine thyroid scans (scintigraphy) and radioiodine treatment.

> There is insufficient evidence supporting the use of PET to distinguish indeterminate thyroid nodules that are benign from those that are malignant.

> \(^{18}\)FDG-PET imaging is not routinely recommended for the evaluation of thyroid nodules with indeterminate cytology. Routine preoperative \(^{18}\)FDG-PET scanning is not recommended.

**Neck-8.2: Hyperthyroidism**

> Hyperthyroidism suspected\(^4,7\)

- Thyroid Uptake Study (CPT® 78012 or CPT® 78014) if one of the following:
  - TSH below normal range and elevated free T4 and/or free T3, OR
  - Subclinical hyperthyroidism with TSH < 0.1 mU/L and normal free T4 and free T3.

**Neck-8.3: Parathyroid Imaging**

> Primary Hyperparathyroidism suspected

- Parathyroid Planar Imaging (CPT® 78070), Parathyroid Planar Imaging with SPECT (CPT® 78071), Parathyroid Planar Imaging with SPECT and CT (CPT® 78072) or Ultrasound(CPT® 76536) if either:
  - Elevated serum calcium and elevated serum parathyroid hormone level.
  - Serum calcium 1 mg/dL more over lab normal value
- CT or MRI Neck without and with contrast (CPT® 70492 or CPT® 70543):
  - Very high calcium (\(\geq 13\)) suggesting parathyroid carcinoma
  - Preoperative localization including 4D Neck CT without and with contrast (CPT® 70492 or CPT® 77293).\(^7\)
  - Recurrent or persistent hyperparathyroidism following neck exploration (MRI preferred).
- Chest CT with contrast may be indicated in rare circumstances in the evaluation of ectopic mediastinal parathyroid adenomas.\(^6\)

**Practice Notes**

> A thyroid nodule is distinct either on palpation or radiologically (incidentaloma). Nonpalpable nodules have the same risk of cancer as palpable. Nodules > 1 cm are evaluated, while smaller nodules are generally evaluated if suspicious, associated with adenopathy or a history of radiation or cancer exists.
Ultrasound is not used to screen: 1) the general population, 2) patients with normal thyroid on palpation with a low risk of thyroid cancer, 3) patients with hyperthyroidism, 4) patients with hypothyroidism or 5) patients with thyroiditis. Conversely, US can be considered in patients 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, family history, thyroid cancer syndromes such as MEN2, medullary or papillary thyroid cancer, Cowden’s disease, familial adenomatous polyposis, Carney complex, Werner syndrome/progeria.

Radionuclide thyroid scan can be considered to evaluate nodules when hyperthyroidism is present, for surveillance of thyroid cancer, or to detect non-palpable nodules. This scan is not useful for other nodules since hyper functioning nodules rarely harbor malignancy. Thyroid nodules > 4 cm may be considered for thyroid lobectomy due to a high incidence of both false negative FNA biopsies and malignancy (26%).

FNA may be repeated after an initial non-diagnostic cytology result, because repeat FNA with US guidance will yield a diagnostic cytology specimen in 75% of solid nodules and 50% of cystic nodules. However, up to 7% of nodules continue to yield non-diagnostic cytology results despite repeated biopsies and may be malignant at the time of surgery.

Thyroid nodules may be stratified as to risk of thyroid cancer based on sonographic findings of microcalcification, hypervascularity on Doppler ultrasound, solid or cystic nature of mass and margins of mass.

Incidental focal FDG-PET uptake often corresponds to a clinically relevant thyroid nodule and ultrasound is recommended; incidentally noted diffuse thyroid FDG-PET uptake most often corresponds to inflammatory uptake, however, ultrasound should be done to ensure that there is no evidence of clinically relevant nodularity.

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 recommended 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.
References

Thyroid


5. Guidelines and Protocols Advisory Committee, approved by the British Columbia Medical Association, and adopted by the Medical Services Commission. Thyroid function tests in the diagnoses and monitoring of adults. Effective January 1, 2010. Accessed November 16, 2017. [https://www2.gov.bc.ca/gov/content/health/practitioner-professional-resources/bc-guidelines/thyroid-testing](https://www2.gov.bc.ca/gov/content/health/practitioner-professional-resources/bc-guidelines/thyroid-testing).


**Parathyroid**


Neck-9.1: Imaging

- Plain x-rays of the neck and chest and bronchoscopy are the initial imaging studies for evaluating patients with suspected tracheal and visualized bronchial pathology. Bronchoscopy can further evaluate the distal (endo) bronchial tree.
  - Suspected tracheal disease can be identified by inspiratory stridor and a characteristic flow-volume loop of PFTs.¹

- Neck CT with contrast (CPT® 70491) or without contrast (CPT® 70490) and/or Chest CT with contrast (CPT® 71260) or without contrast (CPT® 71250) can be performed to further evaluate abnormalities, which include tracheal or bronchial tumor, foreign bodies, or persistent segmental or lobar lung collapse seen on other imaging studies.¹²

- Expiratory HRCT (CPT® 71250) is indicated in patients with obstructive physiology tracheomalacia.¹

- Trachea or bronchial “inspissation” without an abnormality described above, is not a risk for malignancy.³

References


## Neck-10: Neck Pain

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**Neck-10.1: Neck Pain (Cervical)**

- 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.¹

- For the evaluation of neck pain or other symptoms which may involve the cervical spine, including myelopathy and cervical radiculopathy¹ See [Spine Imaging Guidelines](#).

**Neck-10.2: Torticollis and Dystonia**

**Newborn Infant:**

- Ultrasound of the Neck is the initial study to determine if congenital muscular torticollis is present
  - Positive → No further imaging is needed since the diagnosis is defined
  - Negative → CT Neck with contrast (CPT® 70491) or MRI Neck without and with contrast (CPT® 70543) to potentially identify other etiologies

**Older Child (beyond infancy) or Adult**

- For trauma, CT Neck with contrast (CPT® 70491) and/or CT Cervical Spine without contrast (CPT® 72125) is the initial study to identify fracture or mal-alignment

- For no trauma, CT Neck with contrast (CPT® 70491), and/or MRI Cervical Spine without contrast (CPT® 72141), or CT Cervical Spine without contrast (CPT® 72125) is the initial study to locate a soft tissue or neurological cause
  - Positive → Further advanced imaging is not required if CT Neck or CT Cervical Spine has identified local cause
  - Negative → MRI Brain without and with contrast (CPT® 70553) to exclude CNS cause

**Practice Notes**

- Torticollis or cervical dystonia is an abnormal twisting of the neck with head rotated or twisted. Its causes are many and may be congenital or acquired and caused by trauma, infection/inflammation, neoplasm and those less defined and idiopathic. It occurs more frequently in children and on the right side (75%).

- Retropharyngeal space abscess could be associated with torticollis because child would not move neck freely.
References


Neck-11: Salivary Gland Disorders

- Xerostomia (Dry Mouth)
  - Salivary Gland Nuclear Imaging (one of CPT® 78230, CPT® 78231, or CPT® 78232) can be considered for any one of the following:
    - Dry mouth and either:
      - Sjögren’s syndrome
      - Sialadenitis
      - History of head or neck radiation therapy
      - History of cerebral palsy
      - Parotid mass to allow preoperative diagnosis of Warthin’s tumor

- Salivary Gland Stones:
  - For suspected salivary duct or gland stone, CT of the Neck without contrast (CPT® 70490) or CT of the Neck without and with contrast (CPT® 70492) or CT of the Maxillofacial area without and with contrast (usually CPT® 70488) or MRI Neck without and with contrast (CPT® 70543).
  - Sialography (contrast dye injection) under fluoroscopy, may be performed to rule out a stone, with post sialography CT (CPT® 70486), or post sialography MRI (CPT® 70540).

- Parotid or Salivary Gland Mass
  - Any one of the following can be approved:
    - MRI Orbits/Face/Neck without and with contrast (CPT® 70543)
    - CT Neck with contrast (CPT® 70491)
    - CT Neck without contrast (CPT® 70490)

References