

Reporting Head and Neck CTA and Cerebral CT Perfusion 70471-70473

CPT® Assistant.

January 2026; Volume 36: Issue 1

For the CPT 2026 code set, Category III code 0042T was deleted, and new codes 70471-70473 were established to report computed tomographic angiography (CTA) with contrast of the head and neck and computed tomographic (CT) cerebral perfusion (CTP). In addition, parenthetical notes were added or revised to provide instructions for reporting these services and to remove references to deleted code 0042T. This article provides an overview of these changes.

Diagnostic Radiology (Diagnostic Imaging)

Head and Neck

70471 Computed tomographic angiography (CTA), head and neck, with contrast material(s), including noncontrast images, when performed, and image postprocessing

(Do not report 70471 in conjunction with 70450, when performed during the same session)

(Do not report 70471 in conjunction with 70460, 70470, 70473, 70490, 70491, 70492, 70496, 70498, 76376, 76377)

(For noninvasive arterial plaque analysis using software processing of data from computerized tomographic angiography to quantify structure and composition of the vessel wall, including assessment for lipid-rich necrotic core plaque, see 0710T, 0711T, 0712T, 0713T)

70472 Computed tomographic (CT) cerebral perfusion analysis with contrast material(s), including image postprocessing performed with concurrent CT or CT angiography of the same anatomy (List separately in addition to code for primary procedure)

(Use 70472 in conjunction with 70450, 70460, 70470, 70471, 70496)

(Do not report 70472 in conjunction with 70473, 76376, 76377)

70473 Computed tomographic (CT) cerebral perfusion analysis with contrast material(s), including image postprocessing performed without concurrent CT or CT angiography of the same anatomy

(Do not report 70473 in conjunction with 70450, 70460, 70470, 70471, 70472, 70496, 76376, 76377)

Codes 70471-70473 were established to identify CTA of the head and neck, and CTP procedures, including the use of contrast material(s) for imaging head, neck, or brain vessels and imaging postprocessing. Code 70471 describes a head and neck CTA with contrast, including noncontrast imaging when performed during the same imaging session. Add-on code 70472 describes a CTP analysis performed with a concurrent head or brain CT or CTA. Code 70473 describes a CTP analysis without concurrent CT or CTA of the same anatomy, ie, it should not be reported in conjunction with another CT or CTA of the same anatomy from the same imaging session.

The parenthetical notes following these codes:

1. restrict reporting other head and neck CT procedures during the same imaging session when the CT represented by the code is the primary procedure (70471);
2. direct users to the appropriate codes to report in addition to a CT cerebral perfusion analysis with contrast when performed with CT or CTA of the same anatomy (70472); and
3. direct users to the appropriate codes to report a noninvasive arterial plaque analysis using software processing of data from a CTA for structural



quantification and composition (0710T-0713T).

Additional parenthetical notes were placed throughout the code set to provide instructions. Parenthetical notes following codes 70496 and 70498 clarify intended use regarding restrictions and exceptions for these codes and related services. For example, a parenthetical note following code 70496 restricts reporting this code in conjunction with code 70450 when both are performed during the same session, and an additional parenthetical note directs users to report code 70471 for CTA of the head and neck when performed during the same session.

Coding Tip

Codes 70496 and 70450 may be reported on the same date if performed at different encounters with modifier 59, Distinct Procedural Service, appended.

Other parenthetical notes throughout the code set reflect the addition of new codes 70471-70473 to existing exclusionary parenthetical notes (eg, parenthetical notes following 76376, 76377).

The following clinical examples and procedural descriptions reflect typical clinical scenarios for which these new codes would be appropriately reported.

Clinical Example (70471)

A 60-year-old male, who has sudden onset left-sided weakness, has a code stroke activated in the emergency department.

Description of Procedure (70471)

Interpret scout views of the area to be imaged. Review axial computed tomography (CT) images of the head and neck before contrast (if obtained). Supervise processing of two-dimensional reconstructions. Interpret the axial source images and the multiplanar reformats in brain, subdural, stroke, vascular, and bone windows. Evaluate brain parenchyma; the ventricular system; subdural and subarachnoid spaces; meninges; the calvarium; the sella,

cavernous sinuses, and petrous temporal bones; the skull base; fissures; foramina; and superficial soft tissues. Evaluate for origins of the patient's symptoms, such as ischemia or infarction, hemorrhage, mass effect, hydrocephalus, white matter disease, congenital anomalies, and disorders of brain coverings. Evaluate major vascular structures for evidence of thrombosis, aneurysmal dilatation, dissection, and atherosclerotic calcification. In the neck, evaluate the parotid glands, submandibular glands, thyroid gland, paranasal sinuses, orbits (globes, orbital fat, extraocular muscles, lacrimal glands, optic nerves), nasal cavity, nasopharynx, oropharynx, oral cavity, hypopharynx, and larynx. Evaluate parapharyngeal, retropharyngeal, and carotid spaces; neck muscles; and lymph nodes. Evaluate the vasculature for stenosis, occlusion, or thrombosis is evaluated. Evaluate the cervical spine and facial bones. Count and measure masses and/or enlarged lymph nodes.

Review axial CT angiographic (CTA) images of the head and neck after administration of contrast. Supervise processing of two-dimensional and three-dimensional reconstructions. Interpret the axial source CTA images, the multiplanar reformats, and three-dimensional reformats in soft tissue, vascular, and bone windows. Evaluate brain parenchyma; the ventricular system; subdural and subarachnoid spaces; meninges; the calvarium; the sella, cavernous sinuses, and petrous temporal bones; the skull base; fissures; foramina; and superficial soft tissues. Evaluate in detail the major vascular structures for evidence of thrombosis, embolus, aneurysmal dilatation, arteriovenous malformations, dissection, vascular anomalies, vascular variants, or atherosclerotic calcification. Assess for active extravasation of contrast in patients with intracranial bleeding. Assess perfusion and collateral differences between the cerebral hemispheres. Assess dural venous sinuses and jugular bulbs for stenosis, thrombus, and fistulas. Evaluate the cervical cord, vertebrae, and visualized lung apices. Evaluate the neck soft tissues, including orbits, sinuses, nasopharynx, oropharynx, oral cavity, larynx, hypopharynx, visualized trachea, and esophagus. Evaluate parotid, submandibular, and thyroid glands. Evaluate for enlarged lymph nodes. Assess bony structures for fracture and abnormal lesions. Evaluate in detail the major arteries in the neck for stenosis (based on the North American Symptomatic Carotid Endarterectomy Trial criteria) requiring either direct (obtaining measurements of diameters) or indirect comparison of the segment of stenosis with a normal segment distal to the area of stenosis. Evaluate for thrombosis, embolus, aneurysms and/or pseudoaneurysms, vascular anomalies, vascular loops, dissections, vasculitis, and external compressions of the major arteries in the neck. Assess the right innominate artery, bilateral common carotid, external carotid, internal carotid, and vertebral arteries. Evaluate the aortic arch, visualized subclavian arteries, and visualized pulmonary vessels. Generate additional three-dimensional reformats that may help guide any open surgical procedure. Compare to all pertinent, available previous studies. Dictate a report.

Clinical Example (70472)

A 63-year-old male presents with difficulty speaking and left arm numbness. Computed tomography (CT) cerebral perfusion is performed during the same session as a CT angiography (CTA) of the head and neck to determine if the patient is a candidate for neuroendovascular intervention. A previously performed CT head without contrast did not demonstrate intracranial hemorrhage. **[Note:** This is an add-on service. Only consider the additional work related to the performance of CT cerebral perfusion analysis with contrast material(s), including image postprocessing performed with concurrent CT or CTA of the same anatomy.]

Description of Procedure (70472)

Obtain and interpret scout views of the area to be imaged. Evaluate the multi-timepoint axial images for correct timing of contrast and degree of motion throughout the examination. Interpret the multi-timepoint axial source images in brain, subdural, stroke, vascular, and bone windows. Supervise post-processed source images provided by the technologist, including arterial input function, venous outflow function, and evaluating the provided time curves of these functions. Additional post-processing imaging includes detailed color-encoded maps such as, but not limited to, relative cerebral blood volume, relative cerebral blood flow, mean transit time, and Tmax (time-to-maximum). Radiologists compare the color-encoded maps for mismatches. Perform quantitative measurements of areas of abnormality. Compare to all pertinent available, previous studies. Dictate a report.

Clinical Example (70473)

A 62-year-old male, whose proximal right middle cerebral artery thrombus was identified before his transfer from an outside facility for a thrombectomy, had a computed tomography (CT) angiography of the head and neck performed at the outside facility before the transfer. A CT cerebral perfusion was performed upon arrival at thrombectomy facility to determine if a penumbra is present.

Description of Procedure (70473)

Interpret scout views of the area to be imaged. Evaluate the multi-timepoint axial images for correct timing of contrast and degree of motion throughout



the examination. Interpret the multi-timepoint axial source images in brain, subdural, stroke, vascular, and bone windows. Evaluate brain parenchyma; the ventricular system; subdural and subarachnoid spaces; meninges; calvarium; sella, cavernous sinuses, and petrous temporal bones; the skull base; fissures; foramina; and superficial soft tissues. Evaluate for origins of the patient's symptoms, such as ischemia or infarction, hemorrhage, mass effect, hydrocephalus, white matter disease, congenital anomalies, and disorders of brain coverings. Evaluate major vascular structures for evidence of thrombosis, aneurysmal dilatation, dissection, or atherosclerotic calcification. Post-process source images, including choosing arterial input function, venous outflow function, and evaluating time curves of these functions. Further post-processing includes creating different color-encoded maps such as, but not limited to, relative cerebral blood volume, relative cerebral blood flow, mean transit time, and Tmax (time-to-maximum). Compare the color-encoded maps for mismatches. Perform quantitative measurements of areas of abnormality. Compare to all pertinent, available previous studies. Document the radiation-dose administered and ensure database entry if appropriate. Dictate a report.