

Neck Case 32

EXAM: CT head and neck with contrast

INDICATION: 45-year-old male with history of T4 N0 squamous cell carcinoma the pharynx status-post chemoradiation.

TECHNIQUE: Helical axial 5.0 mm, and 0.75 mm thick slices were obtained through the brain prior to and during IV contrast administration. The images were viewed in brain, soft tissue, and bone windows. In addition, 3.0 mm, and 0.75 mm thick axial slices were obtained from the skull base to the thoracic outlet during IV contrast administration. Images were viewed in soft tissue, bone, and lung windows.

FINDINGS:

Again seen is a right pterygopalatine fossa soft tissue mass, which expands the right sphenopalatine fossa, erodes through the right sphenoid, as well as through the inferior orbital fissure into the right orbital apex, erodes through the lamina papyracea into the right posterior ethmoid sinus, with extension into the right sphenoid sinus, and right nasal cavity. There is likely mass effect on the right optic nerve, given that no discrete fat plane is seen between the soft tissue mass, and nerve. There is subtle soft tissue thickening/enhancement in the right cavernous sinus with involvement of right Meckel's cave. This thickening/enhancement cannot be delineated from the cavernous portion of the right internal carotid artery. Right foramen ovale is expanded when compared to the left. There is soft tissue thickening/enhancement along the right prepontine cistern. The right vidian canal is not well-visualized, and has also likely been eroded through. There is soft tissue thickening seen in the right nasopharynx/parapharyngeal/retropharyngeal/prevertebral space, likely involving the right torus tubarius. There is right globe adduction, which is likely related to mass effect on the right abducens nerve in the cavernous sinus. Fluid is seen within the right mastoid air cells, likely related to right parapharyngeal/retropharyngeal/prevertebral space involvement. These findings appear to be increased from the prior study.

No ischemia or parenchymal hemorrhage. No abnormal enhancement in the brain parenchyma. No midline shift. Ventricles are nondilated. Parotid, submandibular, and thyroid glands are unremarkable. No significant cervical lymphadenopathy per imaging criteria. Vocal cords, vallecula, and pyriform sinuses are unremarkable. Tongue base is grossly unremarkable. Lung apices are clear. Mild uncovertebral hypertrophy, and facet arthropathy is seen throughout the cervical spine, consistent with spondylosis. Multiple missing teeth.

IMPRESSION:

1. Interval increase in mass which involves the right pterygopalatine/sphenopalatine fossa, right paranasal sinuses/nasal cavity/orbit/cavernous sinus/prepontine cistern, and right nasopharynx/parapharyngeal/retropharyngeal/prevertebral spaces. Mass effect or involvement

of the right optic nerve/cavernous portion of the internal carotid artery are not entirely excluded, given close proximity of the mass to these structures. There are also findings suggestive for perineural spread of tumor given enlargement of the right foramen ovale and right foramen rotundum, with erosion through the right vidian canal. Given right globe adduction, there is also likely compromise of the right cranial nerve VI, presumably within the right cavernous sinus.



