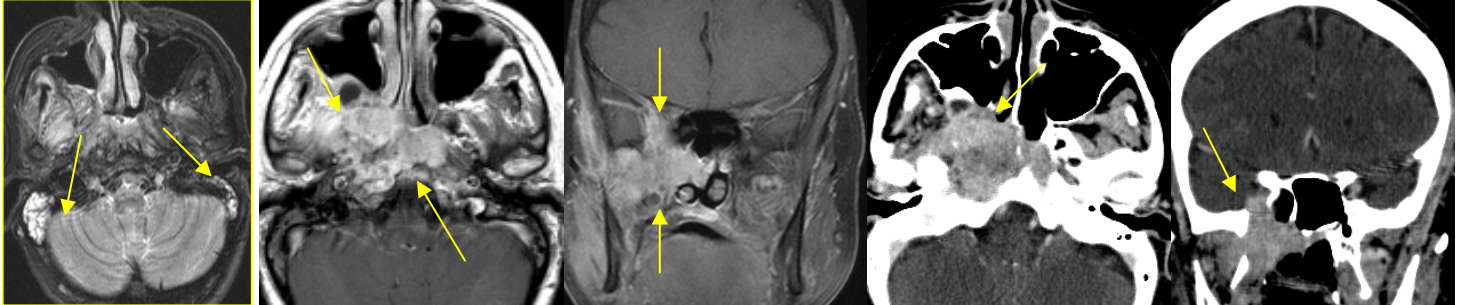


**CASE REPORT: OCCULT AGGRESSIVE NASOPHARYNGEAL CANCER**



**Fig.1 (Axial T2 MR) Fig. 2 & 3 (Axial and Coronal MR post contrast) Fig. 4 & 5 (Axial & Coronal CT post contrast)**

**CLINICAL PRESENTATION:** This is a 62-year-old male who presented to **Dr. Campano, MD (ENT)** in Lancaster with inability to breath through the nose, right-sided hearing loss, and difficulty fully opening the jaw. Intra-nasal endoscopy revealed scarring in the nasopharynx and the scope could not be passed beyond the upper nasopharynx as the posterior nasal tissue appeared fused to the back of the pharyngeal wall. An MRI and later a CT (for delineation of the bony skull base) of the neck were obtained at AIC to rule out any pathology.

**IMAGING FINDINGS:** **Fig. 1** is an axial T2 Fat Sat MRI image showing bilateral mastoid fluid worse on the right side (arrows). **Fig. 2 - 3** are axial and coronal post gadolinium MRI images with Fat Suppression. **Figs. 4-5** are axial and coronal CT images following non-ionic contrast administration. They demonstrate a large mass (arrows) in the right lateral pharyngeal space of the nasopharynx with midline extension and invasion of the clivus and base of the skull on the right side extending to the right middle cranial fossa. There is extension to medial aspect of the right orbit and to the pterygopalatine fossa. There is enlargement of foramen ovale with *perineural* (along V3 branch of the Trigeminal nerve) extension of tumor into the skull base and cranium. There is *perivascular* invasion as well with encasement of the internal carotid artery on the right. There is total occlusion at the level of the upper nasopharynx. Fluid in the mastoids is probably secondary to obstruction of the Eustachian tubes by the mass.

**DIAGNOSIS:** These findings are highly suggestive of a nasopharyngeal carcinoma. The differential diagnosis includes minor salivary gland malignancy and lymphoma, but considered less likely.

**DISCUSSION:** This large mass was not readily visible on clinical examination (only scarring was noted and inability to pass the scope). This demonstrates the value of cross-sectional imaging such as MRI and CT of the neck for symptoms such as hearing loss, throat pain/swelling, nasal obstruction, etc. PET scanning is used to stage the tumor and as a post-therapy follow-up. Radiation therapy is the initial treatment and chemotherapy is used for advanced cases. Primary nasopharyngeal cancers are usually not amenable to surgery.

Please do not hesitate to call me with any questions.

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