## Commentary

Nasopharynx is the uppermost portion of the pharynx. It is part of upper respiratory tract serving as a conduit between the nasal cavity and the oropharynx. It houses few important structures namely from lateral, the openings of the Eustachian tube (ET), torus tubarius, Fossa of Rosenmuller (FOR), and the adenoid (nasopharyngeal tonsil) in the midline. As the location of the region is posterior to the nasal cavity, examination of the nose by anterior rhinoscopy for a suspected lesion in the nasopharynx often reveals a negative finding. The use of post-nasal space mirror in posterior rhinoscopy is considered suboptimal in these days to evaluate the nasopharyngeal region. The subtle changes of the mucosal lesion may be easily overlooked. Thus, a nasoendoscopy using a zero degree rigid endoscope or a flexible nasopharyngolaryngoscope should always be performed. In the index case, owing to the big size, the mass was detected from the oral cavity inspection, as a bulged on the soft palate.<sup>[1]</sup> If the mass was smaller at presentation, it would have been easily missed.

On the contrary, the most common pathology in the nasopharynx is the nasopharyngeal carcinoma (NPC), which is almost always originates from the FOR. The special feature of NPC is that it produces classical clinical features before it can attain the size as big as the visualized chordoma in the index case. The commonest presentation of an NPC is the cervical lymphadenopathy. It constituted more than 80% of clinical signs at presentation of NPC patients in our center.<sup>[2]</sup> This figure is consistent with reported findings in other reports as well. Besides that, unilateral conductive hearing loss (CHL) can be the sole presenting feature, owing to the primary site, the FOR which is located just lateral to the ET opening. The growing mass from the FOR can easily impinge or occlude, leading to the impairment of the ET function. Pressure different or collection of effusion in the middle ear leads to CHL. In this part of the world (Asia particularly South East Asia) where the NPC is endemic, an adult patient with unilateral CHL should be suspected NPC until proven otherwise. In our local series, more than 50% of NPC patients were having otitis media effusion, mostly unilateral.<sup>[2]</sup>

Other rare presentations include abducens nerve palsy causing diplopia, obstructive symptoms leading to snoring, hyponasality, and sleep apnea. Traumatized surface of the mass or exophytic lesion of NPC may produce epistaxis. In the absence of the mass in FOR but with strong clinical suspicious of NPC, the radiological imaging such as computed tomography scan or magnetic resonance (MR) imaging is valuable to pick up the sub-mucosal type of NPC.<sup>[3]</sup> In areas of NPC endemics, for example China, the use of MR imaging as a screening tool is justified with its 100% sensitivity (and statistically significant) for NPC detection as compared to the endoscopy (90%, P < 0.01) and even comparable with endoscopic biopsy (95%), deferring the need to undergo invasive random sampling.<sup>[4]</sup>

Besides NPC, other rare pathology of a mass in the nasopharynx has been reported. These include rhabdomyosarcoma and lymphoma, though they are more commonly diagnosed in younger children.<sup>[5]</sup> Even adenoid hypertrophy itself can sometimes mimic the presentation of a neoplastic lesion. One of the most important consistent differentiating points of these masses from NPC is the location. They are more commonly found in the center, particularly on the roof of nasopharynx, as compared to the laterally-situated NPC from FOR. Even if the mass was found to be from FOR, the possibility of other type of tumor only can be ruled out only by histological study of a punch biopsy specimen. A rare case of carcinosarcoma was reported in a case of a young lady presented with epistaxis from a FOR mass.<sup>[6]</sup> Nasopharyngeal tuberculosis also has been reported masquerading an NPC.<sup>[7]</sup> In the reported case, it was not only the mass was found in the FOR, there was also presence of bilateral cervical lymphadenopathy.

As the primary neoplastic lesion in the nasopharynx can extend superiorly to the cavernous sinus, and *vice versa*, the lesion from base of skull can go inferiorly presenting as a nasopharyngeal mass such as in the index case, a good communication must be established between these two anatomical neighborhood disciplines in medicine, the neurosurgery, and otorhinolaryngology.

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