A pathological study of sinonasal epithelial tumours

Panchal et al have succinctly presented the epidemiology of sinonasal tumours from the pathology departmental perspective occurring in the Indian catchment area over a 10-year period. As the data were gathered primarily from pathological specimens, both specimens biopsy and excised, the data are skewed both in terms of epidemiology and clinical reporting. Nonetheless, the epidemiological information presented regarding the ratio of benign to malignant lesions as well as the histopathology of the malignant lesions is helpful from a reference standpoint. As with many such pathology-based studies, determining the true clinical presentation and outcomes with surgical and non-surgical treatment regimens, is lacking.

However, the data presented remind us of several serious elements concerning sinonasal cancer. First of all, clinicians must always remember that the finding of a papillomatous lesion on biopsy should be followed by complete excision since, as the authors point out, examination of the entire papillomas specimen may be required to identify the 15-30% of inverting papillomas. In addition, almost all sinonasal malignancies present in a very insidious manner. Determining the true site of origin is often difficult. With the extreme proximity of adjoining vital structures such as the orbit, skull base and facial bones even a small amount of “local” spread may subsequently require an extensive and potentially deformative surgical ablative procedure. Unfortunately, little progress has been made in the screening and early diagnosis of sinonasal malignancies. However, in developed nations, the widespread availability of three-dimensional imaging (computed tomography and magnetic resonance imaging) has allowed for the somewhat earlier identification of symptomatic and occasionally asymptomatic lesions and additionally more accurate determination of the site of origin and stage. We have recently published several papers on the staging and clinical outcomes for a wide variety of sinonasal malignancies. A wide variety of histopathologies may be encountered in sinonasal neoplasia and significantly different survivals may be encountered when matched for stage among these different pathologies.

As the authors’ data point out, sinonasal tumours and malignancies constitute only a very small fraction of solid tumours. As nations industrialize, with the burning of additional fossil fuels and rising air pollution rates, we are likely to see an increasing incidence of sinonasal tumours. Therefore, common nasal symptoms that present oddly should arouse suspicion for sinonasal neoplasia. For example, persistent unilateral epistaxis with pain should alert the clinician to the possibility of maxillary sinus cancer. In appropriate patients with risk factors such as smoking and wood dust exposure, there should be a low threshold for three-dimensional imaging and detailed nasal endoscopy. A higher index of suspicion is our only hope of diagnosing these tumours at an earlier stage, which will require a less morbid ablative procedure and will likely result in better survival and quality of life outcomes.

References