**Patterns of Migraine Disease in Otolaryngology**

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Migraine is an inherited syndrome of abnormal neurologic activity in the central nervous system. Migraine is classically defined by the quality of head pain and the presence of associated neurologic symptoms, but it has become increasingly apparent that the cardinal symptom of head pain need not be present during a migraine episode.

It is probable that the prevalence of migraine in otolaryngology patients is significantly higher than in the general population.

This prospective study uses validated screening tools to evaluate the prevalence of otologic and sinonasal complaints that might be related to migraine disease The study aims are 1) to describe the demographics and prevalence of migraine sufferers seen in an otolaryngologist’s office in association with their primary ear, nose, or throat complaint and clinical diagnosis; 2) to determine the otologic and sinonasal symptoms among the patients who screen positive for migraine using previously validated questionnaires; and 3) to further analyze clinical characteristics of sinus and otologic disease in this population using custom patient and clinician questionnaires.

Patients were recruited in a prospective manner at 14 clinical sites (8 academic, 6 community) between June 2015 and March 2017. Of the 1,458 patients screened, 235 (16.1%) screened positive for migraine(MAT+).

In our study, 16.1% of all screened patients were MAT+ (13% in the general population (*p*<0.001)), and the prevalence of vestibular symptoms was significant. Only 18% of MAT+ patients did not report some form of vestibular sensitivity (spinning, light-headedness, rocking or swaying, unsteadiness or feeling of being displaced in space). In contrast to the spinning sensation characteristic of BPPV or MD, the MAT+ patients suffered most commonly from light-headedness (68.5%), unsteadiness (48.6%), the sensation of feeling displaced in space (30.2%), and rocking or swaying (24.3%).

A large portion of MAT+ patients in our study complained of aural pressure (61.9%) and tinnitus (70.5%),

In our study 2/3 of those patients who screened positive for migraine disease were undiagnosed. This high rate of missed diagnosis among otolaryngologists highlights the flawed ICHD-3 diagnostic system and inadequate training of otolaryngologists in the understanding and recognition of migraine disease. Given the potential large number of people with undiagnosed migraine, there is a significant opportunity to reduce patient suffering and reduce unnecessary and costly treatments and interventions.