Chronic sinusitis associated with certain rare head and neck cancers among elderly
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In a study published online by JAMA Otolaryngology-Head & Neck Surgery, Daniel C. Beachler, Ph.D., M.H.S., and Eric A. Engels, M.D., M.P.H., of the National Cancer Institute, Bethesda, Md., evaluated the associations of chronic sinusitis with subsequent head and neck cancer in an elderly population.

Acute sinusitis is a common inflammatory condition of the sinuses often caused by viral or bacterial infections. The condition is considered chronic when the episode persists longer than 12 weeks. Chronic sinusitis may be involved in the cause of certain head and neck cancers (HNCs), due to immunodeficiency or inflammation. However, the risk of specific HNCs among people with chronic sinusitis is largely unknown.

For this study, the researchers used the Surveillance, Epidemiology, and End Results (SEER)-Medicare database and included 483,546 Medicare beneficiaries from SEER areas in a 5 percent random subcohort, and 826,436 from the entire source population who developed cancer (including 21,716 with HNC).

Most individuals were female (58 percent), and the average age at entry was 73 years. Chronic sinusitis was associated with risk of developing HNC, particularly nasopharyngeal cancer (NPC), human papillomavirus-related oropharyngeal cancer (HPV-OPC), and nasal cavity and paranasal sinus cancer (NCPSC). Most of this increased risk was limited to risk within 1 year of the chronic sinusitis diagnosis, as associations were largely reduced 1 year or more after chronic sinusitis. All 3 HNC subtypes had cumulative incidence of less than 0.07 percent 8 years after chronic sinusitis diagnosis.

The authors write that these findings suggest that sinusitis-related inflammation and/or immunodeficiency play, at most, a minor role in the development of these cancers.

"Despite the fact that people with chronic sinusitis have an increased risk for certain subtypes of HNCs, the absolute risk of these cancers is low. The cumulative incidence of NPC, HPV-OPC, and NCPSC was less than 0.10 percent after 8 years of follow-up after a chronic sinusitis diagnosis. There are currently no general U.S. guidelines for HNC screening, but given the low absolute risk, our findings do not support a need for HNC screening in individuals with chronic sinusitis."


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