

Study on Anatomical Variations of Nose and Paranasal sinuses in patients with sinonasal polyposis

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Abstract

Background Sinonasal anatomical variations are common and its knowledge plays an integral part in the management of sinonasal disease. Although sinonasal anatomic variations have been postulated as a risk factor for sinus disease, its role in the pathogenesis of nasal polyp is still unclear. This study was done to determine the prevalence of sinonasal anatomical variations by CT imaging and examine its association with sinonasal polyposis. Methodology A descriptive cross sectional study was conducted from January, 2019 to January, 2020 at a tertiary care center in Nepal after receiving ethical approval from the Institutional Review Committee of the hospital. Patients above 17 years of age having sinonasal polyp and not responding to 3-4 weeks of medical treatment were included in the study. Convenience sampling was done. Data were collected and entered in Microsoft Excel and analyzed using Statistical Package for the Social Sciences version 24.0. Results Among 72 patients, the prevalence of anatomical variations of nose and paranasal sinuses was found to be in 62 patients (86.11%). Agger nasi (79.09%) and deviated nasal septum (72.5%) were the common variations noted. Single variation was found in 29% and multiple variations in 70.9% Conclusion Our study showed that the prevalence of sinonasal anatomical variations was higher in patients with sinonasal polyp and the severity of polyp increases with the presence of more than one variation in a patient. Key words Computed tomography scan, sinonasal anatomical variations, sinonasal polyp

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