

ABSTRACT

TITLE OF THE STUDY: THE ROLE OF HUMAN PAPILLOMA VIRUS IN THE ETIOLOGY OF PRIMARY MALIGNANT SINONASAL TUMORS

DEPARTMENT: OTORHINOLARYNGOLOGY

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OBJECTIVES:

To investigate the association of HPV and primary malignant sinonasal tumors, the demographics and various risk factors of patients with malignant sinonasal tumors attending ENT OPD in a tertiary care hospital.

METHODS:

In a prospective case control study design for a period of 2 years, this study was conducted in the ENT OPD in a tertiary care hospital. Patients eligible for the study were evaluated and divided into cases and controls based on the diagnosis. With informed consent, tissue taken during the surgery for HPV DNA analysis by PCR. Sample size was calculated to be 50 in each arm. The data was entered in EPIDATA version 3.1 Statistical analysis was performed using statistical software SPSS (version 13.0). Chi square test was used to find association.

RESULTS:

In the case arm, the male to female ratio was 5:1 ($p < 0.05$). Sinonasal malignancies were seen in middle to elderly age group whereas sinonasal polyposis and chronic sinusitis was more seen in younger age groups ($p = 0.02$). Symptoms of epistaxis and facial swelling point towards malignancy ($p < 0.05$). The median duration was 3 months (IQR=2-6) for cases and for controls 24 months (IQR=8-42), ($p < 0.001$). Our study revealed a strong association of smoking (OR = 1.5, $p = 0.2$) and snuff usage (OR=3, $p < 0.05$) with sinonasal malignancies. HPV DNA was not detected in cases or controls.