

headandneck 5000

A descriptive analysis of nasal cavity tumours from Head and Neck 5000

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Scientific outline

Introduction: Malignant tumours of the nasal cavity are rare. When considered together with tumours of the paranasal sinuses, they represent 3% of all head and neck malignancies [1]. Due to the low incidence of nasal cavity cancer, few individual centres have extensive experience in managing the disease. Furthermore, in the majority of studies, tumours of the nasal cavity and paranasal sinuses are published together, despite having different disease characteristics and treatment outcomes; 5-year disease specific survival in nasal cavity cancer is 77% compared to 44-62% for cancer of the paranasal sinuses [2].

Existing data on nasal cavity cancer are therefore derived from small studies[1-3].

Analysis of nasal cavity cancer is further complicated by the wide histological variation of tumours of this anatomical site. The majority of tumours are squamous cell carcinomas, but a range of other histological subtypes are also reported, including adenocarcinoma, adenoid cystic carcinoma, and undifferentiated carcinoma [1].

The low prevalence and wide histological variation of nasal cavity cancer mean that larger studies are required to perform an accurate descriptive analysis of this group of tumours. Interrogation of the Head and Neck 5000 dataset provides one such opportunity.

Methods: The Head and Neck 5000 database will be analysed to identify cases of nasal cavity cancer (ICD-10 C30, 'nasal cavity')

Demographic data will be entered into contingency tables and analysed using STATA (Release 14, StataCorp, TX, USA) to determine the frequency of individual variables. Outcome data will include age, gender, ethnicity, smoking & alcohol history, sexual history and occupational history, comorbidity, tumour stage, histological type, pattern of lymph node involvement, treatment, loco-regional or distant recurrence and mortality at 12-months.

Pathological data will be interrogated to identify the anatomical sub-site of the tumours within the sinonasal cavity. Where necessary the original reporting pathologist will be contacted to identify the site of the primary tumour.

These data will be used to perform a descriptive analysis of patients with nasal cavity cancer from Head and Neck 5000. This will provide a new insight into a rare group of head and neck malignancies, which may be used to inform discussion with patients and guide future research.

Summary: Cancer of the nasal cavity is rare. Existing data on the characteristics of nasal cavity cancer are derived from a small number of studies in which nasal cavity cancer is examined with other tumours of the head and neck. As a result, demographic information on patients with nasal cavity cancer, as well as data on tumour characteristics and treatment outcome are limited. Head and Neck 5000 provides a valuable opportunity to examine this rare group of tumours in detail. This study will use existing data from Head and Neck 5000 to provide an accurate descriptive analysis of nasal cavity cancer. This will improve the current understanding of this rare group of tumours in the UK setting.

References

1. Becker, C., G. Kayser, and J. Pfeiffer, *Squamous cell cancer of the nasal cavity: New insights and implications for diagnosis and treatment*. Head Neck, 2016.
2. Dulguerov, P., et al., *Nasal and paranasal sinus carcinoma: are we making progress? A series of 220 patients and a systematic review*. Cancer, 2001. 92(12): p. 3012-29.
3. Zheng, W., et al., *Risk factors for cancers of the nasal cavity and paranasal sinuses among white men in the United States*. Am J Epidemiol, 1993. 138(11): p. 965-72.