Title: Trends in Surgery for Sinonasal Malignancy between 1988 and 2009.

Authors: David Ouyang, Ivan ElSayad, Sue Yom  
Institutions: 1. Department of Radiation Oncology, University of California San Francisco, San Francisco, CA, United States, 2. Department of Head and Neck Surgery, University of California San Francisco, San Fancisco, CA, United States

Background:

Methods: We performed a retrospective cohort study with times trends of patients admitted for surgical resection of sinonasal malignancy in the National Inpatient Sample (NIS) between 1988 and 2009. Subset analysis was performed on patient cohorts with skull base involvement, orbit or maxillary involvement, or requiring radical neck dissection. Patient characteristics as well as hospital attributes were correlated with patient morbidity and mortality.

Results: Over the course of 22 years, we identified 3850 cases of sinonasal surgery patients from 1214 hospitals. 30 (0.8%) cases resulted in death and 572 (14.9%) cases had surgical complications. Patient age was associated with higher morbidity and mortality. Complicated cases requiring neck dissection, had skull base or orbit/maxillary involvement had higher rates of complications but were not associated with higher mortality. High volume hospitals were associated with higher complication rates, but this was the result of more complicated case mix.

Conclusions: