



# Malignant Neoplasms of the Upper Jaw: a 17 years retrospective study

P. Schulz, Ke. Sagheb, Ka. Sagheb, V. V. Kumar, K. Tayler, Ch. Walter
Department of Oral and Maxillofacial Surgery, University Medical Center, Johannes-Gutenberg
University Mainz, Germany

## **Aims**

The squamous cell carcinoma (SCC) is the most common malignant neoplasm of the upper jaw. The manners of metastasing are quite well known. The focus of this study was the other less frequent, and therefore less often described, malignant non-SCC located in the maxilla. The aim of the present study was to analyze the distribution and the manners of metastases for non-SCC in the maxilla.

### **Methods**

Since 1994, all inpatients have had digitals files; therefore, all files from 1994-2011 were scanned using different keywords to obtain all patients with an oropharyngeal malignoma. All these files were manually analyzed for the location of the tumor, and only patients with malignomas in the maxilla were included. Tumors arising in the sinus maxillaries were excluded. The histopathological results and the further follow-up were checked for metastasis related to the primary tumor in the maxilla.

### Results

168 patients had a malignant tumor arising in the maxilla. 138 had an SCC and 30 patients following other malignant neoplasms were identified (graph 1). These 30 cases divide in 12 male patients with an average age at the first diagnose of 72 years and 18 female patients with an average age at the first diagnose of 57 years. From all cases of non SCC tumors reported here, only 10 per cent (n=3) exhibited cervical nodes metastases (CM). These were found in two adenocarcinoma and one osteosarcoma.

Malignoma	Patient (n)	T1-2 (n)	T3-4 (n)	N0 (n)	N+ (0)	Portion of N+ to all Malignoma
Adenoid cystic carcinoma	12	4	8	12	0	0%(n=12)
Adenocarcinoma	10	7	3	8	2	6,6%(n=2)
Osteosarcoma	3	2	1	2	1	3,3%(n=1)
Mucoepidermoid carcinoma	2	2	0	2	0	0%(n=0)
Chondrosarcoma	1	1	0	1	0	0%(n=0)
Spindle cell carcinoma	1	1	0	1	0	0%(n=0)
Malignant melanoma	1	1	0	1	0	0%(n=0)
Sum	30			27 (90%)	3 (10%)	

### Conclusion

Only 18% of malignant tumors arising in the maxilla were non-SCC. Despite the low number of non-SCC located in the maxilla, there is a clear tendency that non-SCC malignomas have a lower tendency to metastasize into cervical lymph nodes as compared to the SCC in the maxilla, which is described to be up to 38%. Since there are only few patients suffering from non-SCC malignomas in the maxilla, no specific treatment protocol can be given according to the site of the tumor.

