

# **Chapter 26**

## **MALIGNANT SALIVARY GLAND TUMORS OF THE PAROTID GLAND**

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### **INTRODUCTION**

Salivary gland cancers are uncommon with an annual incidence of approximately 3 cases per 100,000 in the United States, accounting for less than 3% of all head and neck cancers, 0,5% of all cancer types (1). Their rarity of occurrence and diversity of types create a diagnostic challenge. Approximately 70% of salivary cancers occur in the parotid gland (2) and 25% of parotid gland tumors are malignant (3). A slight predominance for women is seen in malignant parotid tumors, and these tumors has a peak incidence in the fifth to seventh decades of life. Approximately 90% of parotid neoplasms present in the superficial lobe (4). The risk of malignancy and histological distribution of malignant tumors differ between major and minor salivary glands, shown as in Figure 1 (5).

The ethiological factors for salivary gland tumors are not fully understood. A clearly established risk factor for parotid malignancies is radiation exposure (6,7). Despite parotid being communicated with the oral cavity, there is no proof for human papillomavirus to influence the parotid carcinogenesis (8). It is important to understand the behavior of each tumor type to develop a suitable treatment plan for a patient with a salivary gland malignancy. The latest histological classification of salivary gland tumors according to WHO is shown in Table 1 (9) and the distribution rates of malignant tumors of the parotid gland are shown in Figure 2 (10) and tumor behavior by histologic subtypes are noted in Table 2. Herein, primary salivary cancers with an emphasis on the parotid gland is discussed. It provides an overview of selected parotid cancers and up-to-date trends in management.

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tion, perineural involvement, extra parenchymal spread, and nodal metastases. Adjuvant radiation therapy plays a major role in locoregional disease control in high-risk cases. Chemotherapy is mainly used for inoperable, recurrent, or metastatic disease.

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