

cal grading of salivary gland carcinomas along with clinical staging are the two most important considerations in determining the treatment and prognosis. Interestingly, clinical stage appears to be a more important prognostic indicator than histological grade (Ellis and Auclair 1996; Speight and Barrett 2002).

Generally, grading is used for mucoepidermoid carcinomas, adenocarcinomas, NOS, adenoid cystic carcinomas, and squamous cell carcinomas (Ellis and Auclair 1996; Speight and Barrett 2002), whereas other salivary gland carcinomas are generally collectively categorized according to histologic grade (Ellis and Auclair 1996; Goode, Auclair, and Ellis 1998; Guzzo et al. 2002; Spiro et al. 1978; Stephen et al. 1986) (Table 7.2).

Staging of Salivary Gland Tumors

Tumors of the major salivary glands are staged according to size, extraparenchymal extension, lymph node involvement (in parotid tumors, whether or not the facial nerve is involved), and presence of metastases (Fu et al. 1977; Kuhel et al. 1992; Levitt et al. 1981; Spiro, Huvos, and Strong 1975). Tumors arising in the minor salivary glands are staged according to the anatomic site of origin (e.g., oral cavity and sinuses).

The American Joint Committee on Cancer (AJCC) has designated staging by TNM classification (2002) (www.cancerstaging.net) (Table 7.3).

Table 7.3. Staging of salivary gland tumors.

TNM Definitions

Major Salivary Glands

Primary Tumor (T)

TX: Primary tumor cannot be assessed

T0: No evidence of primary tumor

T1: Tumor ≤ 2 cm in greatest dimension without extraparenchymal extension*

T2: Tumor > 2 cm but ≤ 4 cm in greatest dimension without extraparenchymal extension*

T3: Tumor > 4 cm and/or tumor having extraparenchymal extension*

T4a: Tumor invades skin, mandible, ear canal, and/or facial nerve

T4b: Tumor invades skull base and/or pterygoid plates and/or encases carotid artery

*Extraparenchymal extension is clinical or macroscopic evidence of invasion of soft tissues. Microscopic evidence alone does not constitute extraparenchymal extension for classification purposes.

Regional Lymph Nodes (N)

NX: Regional lymph nodes cannot be assessed

N0: No regional lymph node metastasis

N1: Metastasis in a single ipsilateral lymph node, ≤ 3 cm in greatest dimension

N2: Metastasis in a single ipsilateral lymph node, > 3 cm but ≤ 6 cm in greatest dimension, or in multiple ipsilateral lymph nodes, ≤ 6 cm in greatest dimension, or in bilateral or contralateral lymph nodes, ≤ 6 cm in greatest dimension

N2a: Metastasis in a single ipsilateral lymph node > 3 cm but ≤ 6 cm in greatest dimension

N2b: Metastasis in multiple ipsilateral lymph nodes, ≤ 6 cm in greatest dimension

N2c: Metastasis in bilateral or contralateral lymph nodes, ≤ 6 cm in greatest dimension

N3: Metastasis in a lymph node > 6 cm in greatest dimension

Distant Metastasis (M)

MX: Distant metastasis cannot be assessed

M0: No distant metastasis

M1: Distant metastasis