




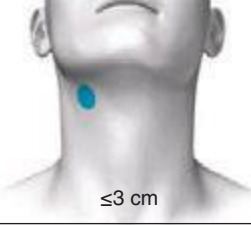
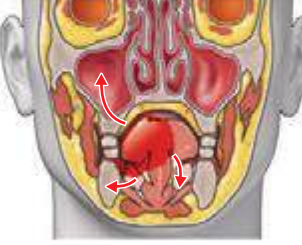
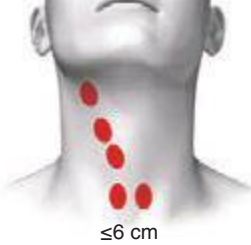

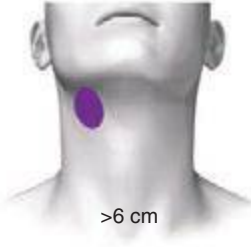


**504** endoscopic examination under anesthesia, which may include laryngoscopy, esophagoscopy, and bronchoscopy; during this procedure, multiple biopsy samples are obtained to establish a primary diagnosis, define the extent of primary disease, and identify any additional premalignant lesions or second primaries.

Head and neck tumors are classified according to the tumor-node-metastasis (TNM) system of the American Joint Committee on Cancer (Fig. 106-2). This classification varies according to the specific anatomic subsite. In general, primary tumors are classified as T1 to T3 by increasing size, whereas T4 usually represents invasion of another

structure such as bone, muscle, or root of tongue. Lymph nodes are staged by size, number, and location (ipsilateral vs contralateral to the primary). Distant metastases are found in <10% of patients at initial diagnosis and are more common in patients with advanced lymph node stage; microscopic involvement of the lungs, bones, or liver is more common, particularly in patients with advanced neck lymph node disease. Modern imaging techniques may increase the number of patients with clinically detectable distant metastases in the future.

In patients with lymph node involvement and no visible primary, the diagnosis should be made by lymph node excision (Fig. 106-1). If

Definition of TNM			Stage groupings		
<b>Stage I</b> <b>T1</b>  Tumor ≤ 2 cm in greatest dimension without extraparenchymal extension	<b>N0</b>  N0- No regional lymph node metastasis	<b>T1</b> <b>N0</b> <b>M0</b>			
<b>Stage II</b> <b>T2</b>  Tumor ≥ 2 cm but not more than 4 cm in greatest dimension without extraparenchymal extension	<b>N0</b>  N0- No regional lymph node metastasis	<b>T2</b> <b>N0</b> <b>M0</b>			
<b>Stage III</b> <b>T3</b>  Tumor ≥ 4 cm and/or tumor having extraparenchymal extension	<b>N1</b>  N1- Metastasis in a single ipsilateral lymph node, ≤ 3 cm in greatest dimension	<b>T3</b> <b>N0</b> <b>M0</b> <b>T1</b> <b>N1</b> <b>M0</b> <b>T2</b> <b>N1</b> <b>M0</b> <b>T3</b> <b>N1</b> <b>M0</b>			
<b>Stage IVA</b> <b>T4a</b>  Tumor invades skin, mandible, ear canal, and/or fascial nerve	<b>N2</b>  N2a- Metastasis in a single ipsilateral lymph node, >3 cm but ≤6 cm N2b- Metastasis in a multiple ipsilateral lymph node, none >6 cm N2c- Metastasis in a bilateral or contralateral lymph nodes, none >6 cm	<b>T4a</b> <b>N0</b> <b>M0</b> <b>T4a</b> <b>N1</b> <b>M0</b> <b>T1</b> <b>N2</b> <b>M0</b> <b>T2</b> <b>N2</b> <b>M0</b> <b>T3</b> <b>N2</b> <b>M0</b> <b>T4a</b> <b>N2</b> <b>M0</b>			
<b>Stage IVB</b> <b>T4b</b>  Tumor invades skull base and/or pterygoid plates and/or encases carotid artery	<b>N3</b>  N3- Metastasis in a lymph node >6 cm in greatest dimension	<b>T4b</b> <b>Any N</b> <b>M0</b> <b>Any T</b> <b>N3</b> <b>M0</b>			
<b>Stage IVC</b>	<b>M1</b>	<b>Any T</b> <b>Any N</b> <b>M1</b>			

**FIGURE 106-2** Tumor-node-metastasis (TNM) staging system.