

Head and Neck Cancer Primer

Approximately 500,000 new cases of the oral cavity (mouth), pharyngeal (throat), and laryngeal (voice box) cancer are diagnosed worldwide each year. About 270,000 individuals die from head and neck cancer each year. Head and neck cancer makes up about 6% of all new cancers diagnosed (excluding skin cancer), and 5% of cancer mortality in general. In the United States, about 40,100 new cases are diagnosed each year and 11,800 will succumb each year.

Head and neck cancer occurs most commonly in tobacco users and alcohol drinkers. A history of extensive tobacco and alcohol use is found in approximately 75-80% of patients who develop head and neck cancer. Smoking cessation is beneficial, but it takes about 10-15 years for the risk of head and neck cancer to return to baseline. Tobacco contains over thirty carcinogens. Clearly, cessation of the use of tobacco containing products is the best way to prevent head and neck cancer. Once cancer develops, smoking cessation is still vitally important. Approximately, 50% will develop a second cancer independent of the first if smoking continues. If smoking ceases, only 10% will develop a second cancer.

Presenting symptoms of head and neck cancer may be oral cavity/throat pain for greater than 2 weeks, a non-healing ulcer in the mouth or throat, a change in how a denture fits, difficulty swallowing, hoarseness, ear pain or a mass in the mouth, throat or neck. Weight loss may also be associated.

Evaluation for head and neck cancer begins with a thorough interview. In the interview, information regarding type, duration and severity of symptoms, past medical history, medications, and smoking and alcohol history is gathered. A detailed physical exam is performed with inspection of cranial nerves, eyes, ears, nose, throat, larynx, and neck. A flexible nasopharyngoscopy or laryngovideostroboscopy may be performed (See Glossary).

If a suspicious lesion exists, a biopsy will need to be performed. If the lesion is in the nasal cavity, nasopharynx, oral cavity or throat, the biopsy is usually performed in the clinic under local anesthesia. If the lesion is in the larynx (voice box) or hypopharynx (bottom of the throat), the biopsy will be performed in the operating room under general anesthesia. If the lesion is a neck mass, a fine needle aspiration biopsy will be performed (See Glossary).

The most common type of cancer that is found in the head and neck is called squamous cell carcinoma (SCCA). It originates in the mucus membranes of the head and neck area. The location of where it initially develops is called the primary site. SCCA can spread or metastasize to other areas of the body. The cervical (neck) lymph nodes are usually the first place to which SCCA will spread. If cervical lymph nodes are involved, regional metastasis has occurred. SCCA can also spread beyond the cervical lymph nodes into the lung, liver, and bones. When cancer has spread into these areas, distant metastasis has occurred.

There are several ways to determine the extent of the disease. Physical examination for enlarged lymph nodes is always performed. Enlarged lymph nodes may be biopsied with a needle in procedure called fine needle aspiration biopsy (see Glossary). CT scans, MRI scans, plain X-rays, blood tests, and PET scans may be required (see Glossary) to help determine the extent of the disease.

Treatment of head and neck cancer depends on the site and stage of the disease. Staging is dependent on the size of the primary tumor and the presence and extent of regional and distant metastasis. In general, there are three major ways to treat cancer: surgery, radiation therapy, and chemotherapy. Treatment may be “single modality” or “multimodality”. Surgical and radiation therapies are the most common single modality treatments. Surgery with postoperative radiation therapy and chemoradiation therapy with or without salvage surgery are the most common multimodality treatments. Generally, multimodality treatments will have more numerous and more severe side effects than single modality treatments. As the stage of cancer increases, the need for multimodality treatment increases. The consequences of surgery are dependent on the location and extent of surgical intervention and may include both functional and cosmetic losses. Radiation therapy has some predictable acute and chronic long term side effects. Acute side effects include oral and throat inflammation, voice change, difficulty swallowing, loss of sense of taste and local skin inflammation. Many of these acute side effects resolve within 12 weeks of completing radiation therapy. Chronic side effects include dry mouth, possible long term loss of sense of taste, higher risk of tooth decay, impaired wound healing, and long term speech and swallowing difficulties. These side effects are permanent. The combination of chemotherapy and radiation therapy often magnifies some of the acute side effects.

In some cases, more than one treatment option may exist. The benefits and disadvantages should be thoroughly discussed with your physician. When considering treatment options, decisions are generally based on a hierarchy of questions. The most important question is which treatment will have the best cure rate? The next question is how will function be affected? The final question is how the physical appearance will be affected. By considering these questions, an individualized treatment plan can be selected.

Patients who have head and neck cancer require special care. Head and neck cancer results in the disruption of the most basic human functions of speech, swallowing, and breathing. Thus, treatment is often multidisciplinary. Head and neck surgery, radiation oncology, medical oncology, speech and swallowing therapy, psychiatry, internal medicine, radiology, gastroenterology, nuclear medicine, and nutrition specialists may all be involved in the care of the head and neck cancer patient.

During the course of treatment, nutritional support is often required to maintain weight and nutritional status. Maintenance of weight and nutritional status is crucial so that the patient has the best chance of tolerating and recovering from treatment. Often a nasogastric tube (a tube that passes through the nose to the stomach) or a gastrostomy tube (a tube that is placed through the abdominal wall directly into the stomach) will be required at some phase in the treatment.

In addition to expert medical care, family and social support play a vital role in the treatment process. Those patients with supportive family and friends generally have better outcomes than those who do not. Supportive family members and friends should be educated about the treatment process, the expected side effects, and potential complications so that they will be best equipped to help the patient. Support groups for head and neck cancer patients exist and many patients find them beneficial. Often common experiences are discussed and tips for handling routine problems are shared.

My staff and I are committed to providing you with the best care available. I am always willing to discuss these complex issues with you and your family members in person or by phone. It is my greatest hope that this fundamental information has given you an overview of the evaluation, diagnosis and treatment of head and neck cancer so that you can participate in formulating an individualized, effective treatment plan.