HEAD AND NECK CANCER AND RECONSTRUCTION

Head and Neck Cancer

Cancer of the head and neck, which includes cancers of the upper aero-digestive tract and salivary glands, account for three percent of all newly diagnosed cancers in the United States. An estimated 45,000 new cases are diagnosed each year, making it more common than even thyroid cancer. Although the incidence of head and neck cancer is on the decline in the US, presumably due to decreased tobacco use, the number of newly diagnosed cases of oropharyngeal cancer, chiefly tonsil and base of tongue, in young adults is on the rise. This trend is due to rising prevalence of oropharyngeal exposure to oncogenic human papilloma virus **(HPV 16 & 18)**, as well as other carcinogenic agents in our environment. The potential for HPV vaccination is self-evident, yet its application is not widespread. It is imperative that a thorough oral cavity exam be done on a routine basis, especially in populations at risk. The only silver lining is that **HPV + cancers tend to have a better prognosis.**

The treatment options for head and neck cancer has undergone revolutionary changes:

- **Endoscopic Laser Microsurgery**
- **Focused Radiation Therapy (IMRT, Tomotherapy)**
- **Chemo-Radiation Protocols (Concurrent & Sequential)**
- **Free Flap Reconstruction**

Since the 1990s chemo-radiation or organ preservation protocols have seen more widespread use and application. Yet, the short and long-term morbidity of treatment as well as proper application based on anatomic site was poorly understood. It is clear that in terms of nasopharynx, hypopharynx, oropharynx and larynx tumors chemoradiation has a definite role. The ramifications of combined therapy can be devastating and prolonged, requiring multiple surgeries and therapies to achieve a modicum of improvement. It is therefore imperative that a multidisciplinary approach be taken with all these patients to assess the most appropriate and least morbid therapy.

Not every patient that has **a base of tongue tumor** is going to be best treated by chemo-radiotherapy. Some may be better served by Endoscopic Laser Resection, as in the sequence on the next page, the last picture shows the patient two weeks post-op eating and speaking without difficulty.

The tools in our armamentarium have changed and continue to evolve, so are the solid multi-lateral relationships between the disciplines treating these challenging patients.

Squamous cell cancer is unforgiving; the best treatment is the first attempt.

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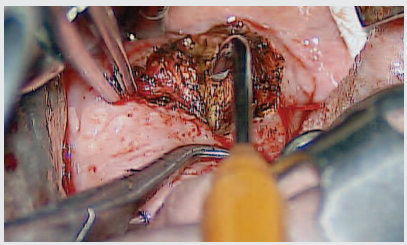
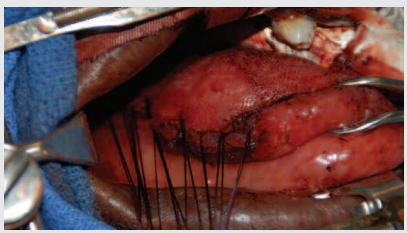
Head and Neck Cancer *(Continued)*

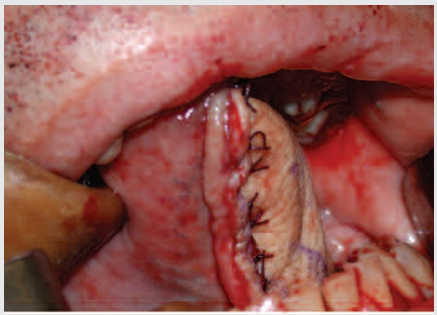




As such, it is vital that all members of the team have experience and be cohesive in treating these patients to assure the outcome is optimal and the patient does not face confusion with multiple contrasting views.

Head and Neck Reconstruction

The ability to reconstruct large defects and still allow for both function and acceptable cosmesis is of vital importance. The era of free flap surgery not only allows for better reconstruction but also a more thorough and generous margins at the time of surgery. A clear understanding of the anatomy and function, as well as longevity of the reconstruction in face of potential post-op chemo-radiation, is crucial by the reconstructive surgeon. When done properly, patients who would otherwise have devastating defects are able to function well and remain independent.



As a whole, treatment of patients with head and neck cancers is extremely complex, as well as being labor and emotionally intensive. Their treatment does not end with chemo-radiotherapy or surgery, and their recovery and incapacity goes on for years and needs to be guided and monitored properly. An experienced, caring, cohesive and comprehensive team is necessary to achieve optimal results. Close monitoring for five years is a minimum.