Today's Topic

PRINCIPAL OF MANAGEMENT OF HEAD-NECK CANCER

HEAD-NECK CANCER

- Head and neck cancer refers to a group of biologically similar cancers originating from the
- Upper aerodigestive tract
- Lip, oral cavity,
- Nasal cavity,
- Paranasal sinuses,
- Pharynx and larynx.

HEAD-NECK CANCER

- Most head and neck cancers are squamous cell carcinomas originating from the mucosal lining .

- Head and neck cancers often spread to the lymph nodes of the neck and may be the first manifestation of the disease at the time of diagnosis.

HEAD-NECK CANCER

Head and neck cancer is strongly associated with certain environmental and lifestyle risk factors including

- Tobacco smoking,
- Alcohol consumption,
- UV light
- Occupational exposures
- Certain strains of viruses

Head and neck cancer is highly curable if detected early.

Classification

Squamous cell carcinomas (HNSCC's)

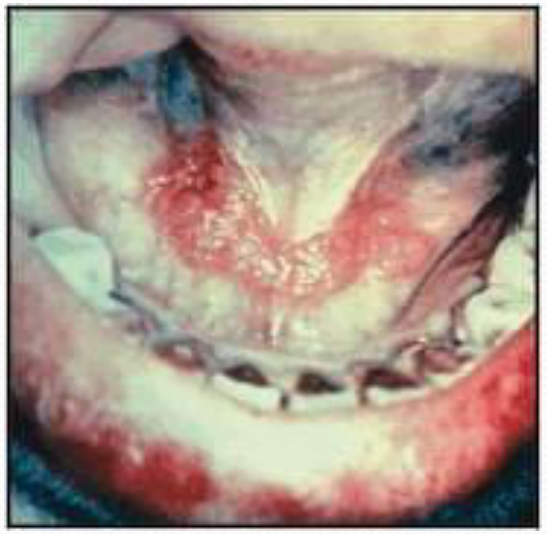
- Vast majority of head and neck cancers.
- The most common form of larynx cancer, (about 90%).
- Most likely it appears in males over 40 years of age.

Adenocarcinoma

- A cancer of the columnar epithelium typical of the lower oesophagus.
- Adenocarcinoma is thought of as a product of Barrett's oesophagus.

Oral Cancer

- Squamous cell cancers are common in the oral cavity including the inner lip, tongue, floor of mouth, gingivae, and hard palate .
- Cancers of the oral cavity are strongly associated with tobacco use and heavy alcohol use.



Nasopharynx

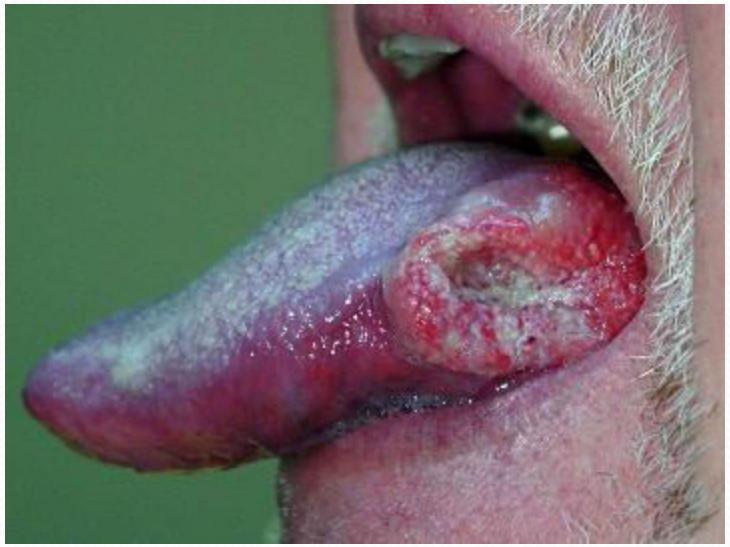
Nasopharyngeal cancer arises in

- **Nasopharynx (fossa of rossenmullar)**
- **The region in which the nasal cavities**
- **The Eustachian tubes**

Oropharyngeal squamous cell carcinomas

Oropharyngeal squamous cell carcinomas (OSCC) arises in the

- Oropharynx,
- Soft palate,
- Base of the tongue,
- The tonsils.



Hypopharynx

- The hypopharynx includes the pyriform sinuses, the posterior pharyngeal wall, and the post cricoid area.
- Tumors of the hypopharynx frequently have an advanced stage at diagnosis and have the most adverse prognoses of pharyngeal tumors.
- Tend to metastasize early due to the extensive lymphatic network around the larynx.

Laryngeal cancer

Laryngeal cancer arise from

- Supraglottic
- Glottic
- Subglottic region.

Laryngeal cancer is strongly associated with tobacco smoking.

Presenting symptoms of Head neck Cancer

- Mass in the neck
- Neck pain
- Bleeding from the mouth
- Bad breath
- Sore tongue
- Painless ulcer or sores in the mouth that do not heal.
- White, red or dark patches in the mouth that will not go away.
- Ear ache
- Unusual bleeding or numbness in the mouth.

Presenting symptoms of Head neck Cancer

- Lump in the lip, mouth or gums
- Enlarged lymph glands in the neck
- Slurring of speech (if the cancer is affecting the tongue)
- Hoarse voice persists for more than six weeks
- Sore throat persists for more than six weeks
- Difficulty in swallowing food
- weight loss

Causes of Head Neck Cancer

- Alcohol and tobacco use are the most common risk factors for head and neck cancer.
- Cigar smoking is an important risk factor for oral cancers .
- Other potential environmental carcinogens includes occupational exposures such as nickel refining, exposure to textile fibers, and woodworking.

Causes of Head Neck Cancer

Dietary factors

- Excessive consumption of processed meats and red meat -increased rates of cancer of the head and neck.
- Consumption of raw and cooked vegetables seemed to be protective.

Betel-nut

- Betel-nut chewing is associated with an increased risk of squamous cell cancer of the head and neck.

Causes of Head Neck Cancer

- Human papillomavirus(HPV) particularly HPV16, is a causal factor for some head and neck squamous cell carcinoma.

- Epstein-Barr virus (EBV) infection is associated with nasopharyngeal cancer.

Diagnosis of Head Neck Cancer

- Usually presents to the physician complaining with one or more of the above symptoms.
- Through clinical examinations.
- Fine needle biopsy/ excisional biopsy of the lesion.
- Direct Laryngoscopy / endoscopic examination.

Prevention of head neck cancer

- Avoidance of recognized risk factors is the single most effective form of prevention.
- Regular dental examinations may identify pre-cancerous lesions in the oral cavity.
- When diagnosed early, oral, head and neck cancers can be treated more easily and the chances of survival increase tremendously.

Management of head neck cancer

General considerations

- Surgical resection and radiation therapy are the mainstays of treatment for most head and neck cancers.
- For small primary cancers without regional metastases (stage I or II), wide surgical excision alone or curative radiation therapy alone is used.
- More extensive primary tumors or those with regional metastases (stage III or IV), planned combinations of pre or postoperative radiation and complete surgical excision are generally used.

Treatment Options

- Surgery
- Radiotherapy
- Chemotherapy
- Combined therapy

Prognosis of head neck cancer

- Early stage head and neck cancers (especially laryngeal and oral cavity) have high cure rates.
- Up to 50% of head and neck cancer patients present with advanced disease.
- Squamous cell cancers of the head and neck are staged according to the TNM classification system.
- 5 years survival rate is about 5-10%

Side effects of radiotherapy

- Eating problems
- Pain associated with lesions
- Mucositis
- Nephrotoxicity and ototoxicity
- Xerostomia
- Gastroesophageal reflux
- Radiation induced osteonecrosis of the jaw


Thank
You!