

# Head and Neck & Thyroid Cancer

NM Goodger  
Consultant Oral and Maxillofacial  
Surgeon

## Risk Factors

- Cigarette smoking
- Skoal bandits
- Alcohol
- Betel nut
- Reverse cigar smoking
- Epstein Barr Virus
- Human Papilloma Virus?

## Sites

- Skin
- Mouth – lip, gum, floor of mouth, tongue, maxilla, palate, jaw
- Nose – nasal passages, paranasal sinuses, post nasal space
- Pharynx – tonsil, epiglottis, valleculae, piriform fossae
- Larynx
- Salivary glands
- Thyroid

## Types of Cancer

- Squamous cell carcinoma
- Adenocarcinoma
- Adenoid cystic carcinoma
- Mucoepidermoid carcinoma
- Sarcomas
  
- Thyroid – papillary, follicular, medullary, anaplastic

## Pathogenesis of Cancer

- Cancer is a genetic disease
- Acquisition and expression of specific functions
- Loss of cohesion
- Secretion of enzymes eg metalloproteinases
- Acquisition of motility
- Spread to distant organs
- Resistance to chemotherapy agents

## Lymphatics

- Drain the nasal, oral and pharyngeal tissues
- Superficial and deep lymphatics
- Levels 1 -5
- Squamous cell carcinoma spreads by lymphatic permeation
- Sarcomas spread through blood stream

## Presentation

- Ulcer
- Mass
- Hoarseness
- Epistaxis
- Facial swelling
- Dysphagia
- Otalgia

## Diagnosis

- History
- Examination
- FNA
- Biopsy
- Endoscopy
- CT scans
- MRI scans
- PET scans

## EUA and biopsy



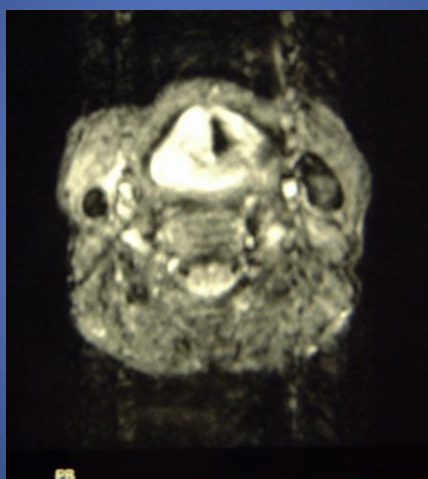
## X rays



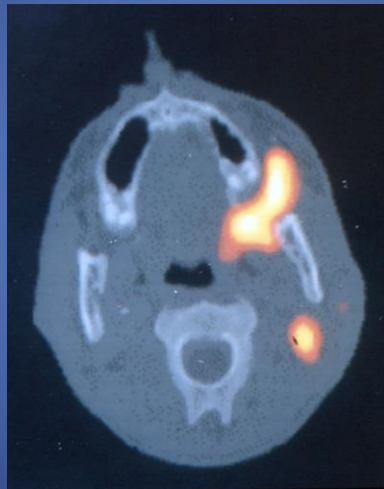
## CT Scan



## MRI Scan



## PET/CT Scans



## Staging

- T = size
- N = nodal status
- M = metastasis
  
- MDT reviews evidence to decide staging and best option treatment
  
- Performance status

## Nasal Cancer



## Lip Cancer





## Nasopharyngeal Cancer



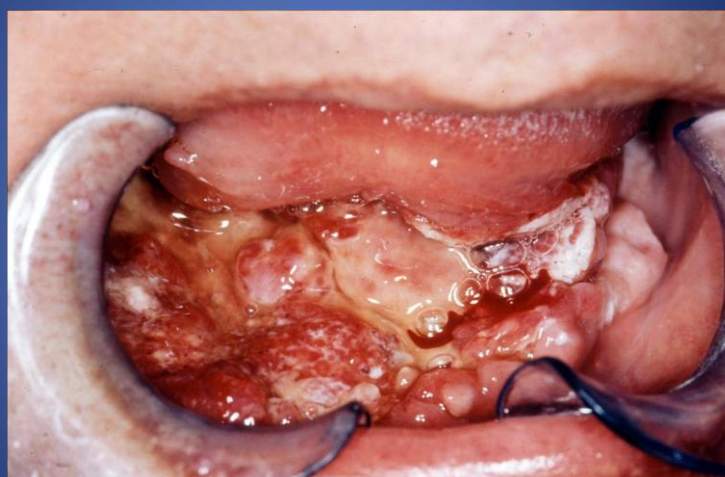
## Retromolar Trigone



## Tongue



## Floor of Mouth



## Neck Lump



## Parotid tumour



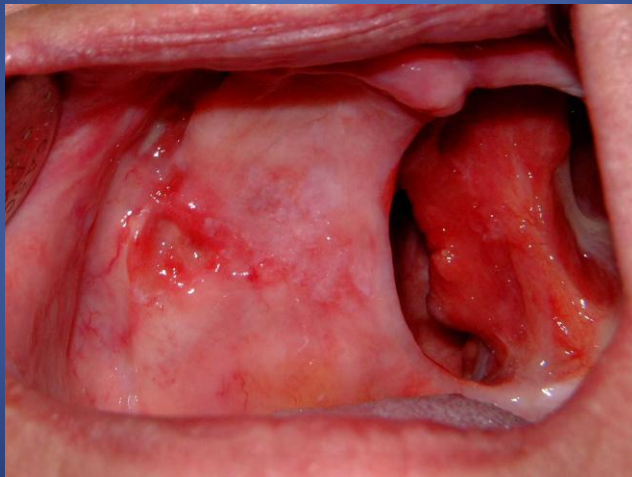
## Treatment

- Surgery – primary site / management of neck
- Radiotherapy
- Chemoradiotherapy
- Palliation
- Chemotherapy
- Biological agents – Cetuximab
- Radioiodine

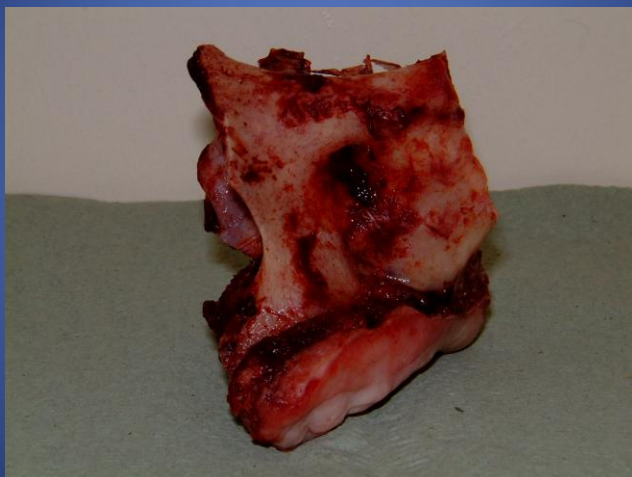
## Simple Resection



## Maxillectomy Cavity



## Specimen



## Reconstruction

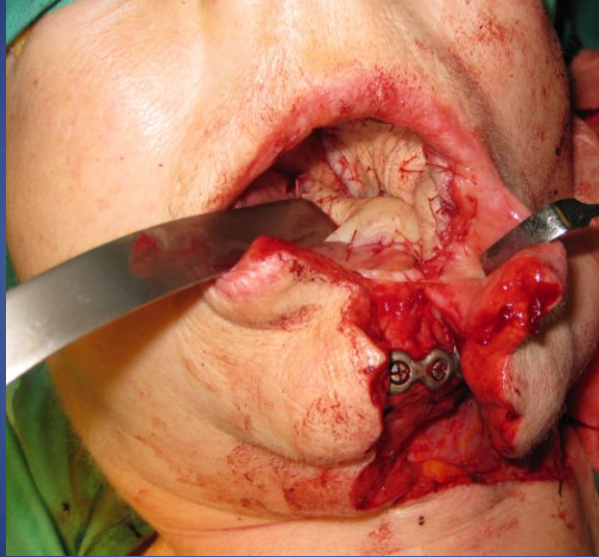
- The principal is to replace tissue with like tissue ie replace skin with skin and bone with bone
- Old style pedicle flaps eg pectoralis major
- New style free tissue transfer eg radial forearm flap, fibula flap, deep circumflex iliac artery flap

## Pectoralis Major and Latissimus Dorsi



# Radial Forearm Flap





## Radiotherapy

- Curative (teletherapy / Brachytherapy)
  - Dose
  - Side effects acute & chronic
- Palliative
- Intensity modulated Radiotherapy



## Chemotherapy

- Curative
- Palliative
- Mechanism of action
- Agents
- Chemoradiotherapy

## Nuclear Medicine

- Radio iodine
- Mechanism of action
- Mechanism of administration

## Life after cancer

- Scars
- Function
- Difficulty with eating
- Difficulty with swallowing