COMPOSITE RESECTION, MANDIBULECTOMY & RECONSTRUCTION

1. COMPREHENSIVE PRE-OPERATIVE STAGING & EVALUATION

Before surgery, a thorough clinical-radiological evaluation is performed to establish the exact disease extent and stage

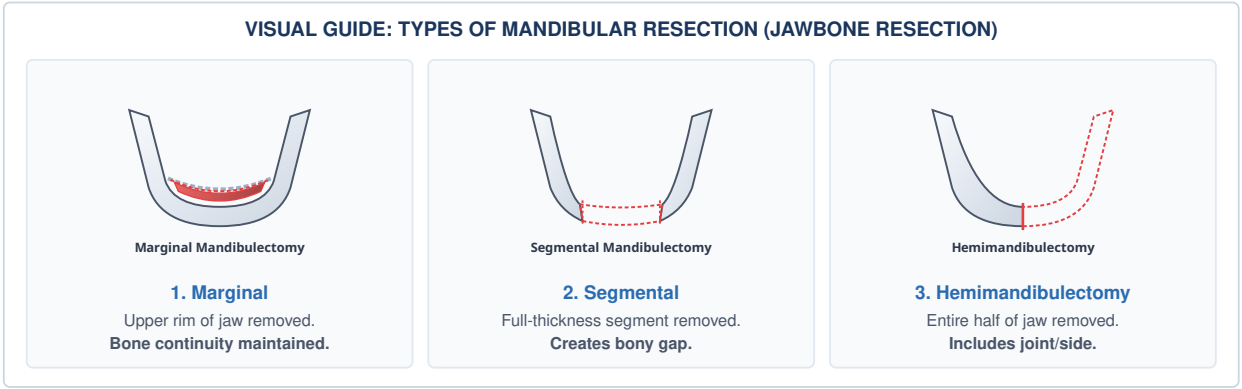
Clinical Examination: Direct physical assessment of tumour size, depth, extension, and neck lymph nodes.
Tissue Biopsy: Histopathological diagnosis from the tumour (a repeat biopsy may be performed if required).
90-Degree Endoscopy: Rigid endoscopic assessment to examine the posterior oral cavity, pharynx, and upper airway.
Radiological Staging: CECT scan, MRI, or PET-CT scan to determine tumour extent, bone involvement, and neck node status.
Neck Node Biopsy (FNAC / USG guided): Ultrasound-guided FNAC or separate biopsy of neck nodes to evaluate nodal metastasis.

2. SURGICAL TREATMENT OVERVIEW & RESECTION MARGINS

Primary Mode of Treatment: Surgery is the primary, definitive curative treatment. Depending on final pathology, adjuvant post- operative Radiotherapy (RT) or Chemo-Radiotherapy (CTRT) may be necessary.
Composite Resection & Safety Margins: The surgery involves excision of the primary tumour along with an essential safety zone of at **least 1 cm excess margin** of normal tissue surrounding all visible tumor and palpable induration to minimise local recurrence risk.

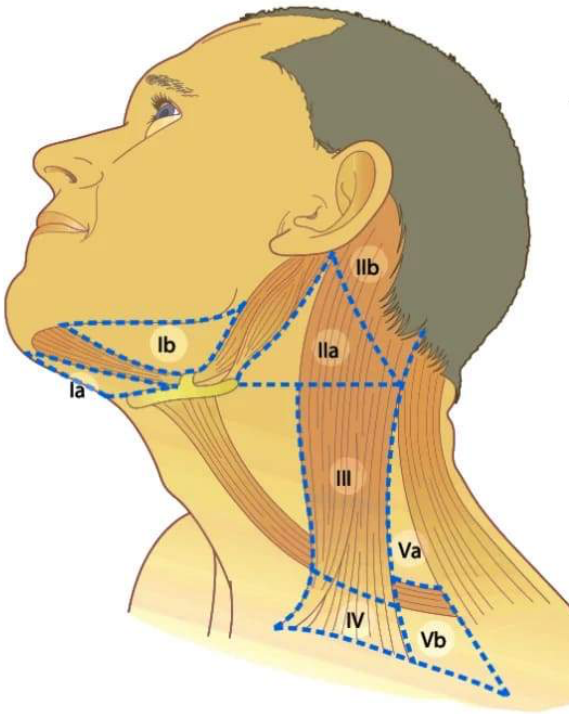
3. MANDIBULECTOMY

When the tumour is close to or involves the jawbone (mandible), bone resection is required in one of three ways:



WHAT IS NECK DISSECTION?

It is the surgical removal of regional lymph nodes and surrounding connective tissue from specified neck levels (Levels I–V) through which oral cancer spreads.



Levels of lymph nodes

Why is Neck Dissection needed even if the neck is negative (N0)? Oral cancers frequently harbour microscopic / occult lymph node metastases that are too small to be felt during physical examination or detected on CT, MRI, or PET scans. Elective neck dissection removes thee microscopic disease seeds, provides accurate pathological staging, prevents future neck recurrence, and improves overall survival.

5. RECONSTRUCTIVE SURGERY OPTIONS

Resection of the primary tumour and jawbone leaves a structural and functional defect that requires complex reconstruction by the
Primary Surgical Oncologist or a Plastic & Reconstructive Surgeon:

1. Local / Regional Pedicled Flap: Transfer of neighboring tissue with intact natural blood supply (e.g., Pectoralis Major Myocutaneous - PMMC flap).

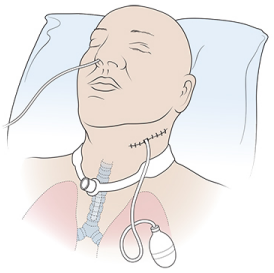
2. Free Microvascular Flap: Advanced transfer of tissue/bone (e.g., Fibula bone flap from leg, Radial Forearm flap) with reattachment of tiny blood vessels under a operating microscope.

6. EXPECTED COMMON POST-OPERATIVE COMPLAINTS

Following composite resection, patients routinely experience the following symptoms during recovery:

1. Pain, swelling, and facial tightness around the jaw, neck, and donor site
2. Difficulty swallowing (dysphagia) requiring gradual feeding rehabilitation
3. Speech alterations or slurring (dysarthria)

7. WHAT ALL CAN YOU RARELY EXPECT IMMEDIATELY AFTER SURGERY



1. Presence of surgical neck drains to collect wound fluid
2. Presence of a tracheostomy tube (temporary breathing tube in the neck)
3. Presence of a Nasogastric (Ryle's) feeding tube for nutrition
4. Facial asymmetry, altered jaw bite alignment, and cosmetic changes
5. Shoulder stiffness or reduced arm elevation from neck dissection
6. Numbness/altered sensation along the lower lip, chin, neck, or donor leg/arm

8. COMPLICATIONS WHICH ARE RARE AND LESS FREQUENT BUT CAN OCCUR IN <1% CASES

1. Wound infection, Haematoma formation, or delayed healing (Especially if post irradiation)
2. Chyle Leak: Leakage of milky lymphatic fluid from damaged thoracic duct channels in lower neck.
3. Lymphorrhoea: Persistent serous clear lymphatic discharge from neck surgical drains.
4. Flap vascular compromise, partial tissue necrosis, or microvascular free flap failure requiring re-exploration.
5. Oro-cutaneous fistula (abnormal fluid passage between oral cavity and neck skin)
6. Nerve injuries (e.g., marginal mandibular nerve affecting lower lip smile, spinal accessory nerve causing shoulder droop).
7. Systemic risks: Chest infection, deep vein thrombosis (DVT), cardiac events, or anaesthetic risks.