

Lip and Oral Cavity Carcinoma

I. GROSS DESCRIPTION

Specimen

- fine needle aspirate/diagnostic or (wedge) excision biopsy/resection, e.g. glossectomy/neck dissection.
- size (cm) and weight (g).
- pathological lesions present either as a lump, ulcer, red or white mucosal patch and require biopsy to determine their nature.
- preoperative investigation of a mass will include plain X-ray, MRI and CT scan to assess local spread, bone destruction and/or cervical nodal metastases. Local wedge excision (\pm shave excision of adjacent mucosa) is used for small tumours of the lip and tip/lateral border of tongue, hemiglossectomy for deeply infiltrative cancers and (sub)total glossectomy for large tumours crossing the midline or involving the posterior one-third. Sublingual gland is submitted with anterior floor of mouth lesions and superficial gingival tumours require mucosal excision only. Periosteum acts as a barrier to bone spread but where it is demonstrated radiologically rim or hemimandibulectomy may be required. Previous irradiation can disrupt the periosteum increasing bone spread. Adequate demonstration will require decalcification with the overlying soft tissues in place. Where there is proven or likely nodal metastases an en bloc neck dissection is performed.

Tumour

Site

- lip: external upper.
external lower.
commissures.

When the skin is involved if >50% of the tumour is within the vermillion border the tumour is designated as lip in origin.

- oral cavity:
buccal mucosa—lips/cheek/retromolar areas/bucco-alveolar sulci.
upper alveolus and gingiva (upper gum).
lower alveolus and gingiva (lower gum).

hard palate.

tongue—dorsal surface and lateral borders (anterior two-thirds); inferior (ventral) surface.

floor of mouth.

The commonest sites are, in order of decreasing frequency, lip (90% lower), lateral borders of tongue (35%), anterior floor of mouth (20%) and the soft palate complex (soft palate, anterior pillar of fauces and retromolar areas).

Multifocal lesions are not uncommon (10%), both synchronous and metachronous.

Size

— length × width × depth (cm) or maximum dimension (cm).

Appearance

— verrucous/warty/nodular/sessile/plaque/ulcerated.

Edge

— circumscribed/irregular.

2. HISTOLOGICAL TYPE

Squamous cell carcinoma

— 90% of cases.

— keratinizing/non-keratinizing.

variants:

- verrucous: elderly, tobacco usage, broad based exophytic and “church spire” hyperkeratosis with a pushing deep margin of cytologically bland bulbous processes. Locally invasive (75% 5-year survival) but may become aggressive after radiotherapy.
- papillary: >70% exophytic or papillary malignant epithelial fronds with focal invasion at the base (70% 5-year survival).
- spindle cell: polypoid and pleomorphic, cytokeratin (AE1/AE3—70%) positive, distinguish from sarcoma. A more obvious in-situ or invasive squamous component may be seen and nodal metastases can show a spectrum of epithelial and spindle cell changes. Prognosis (80% 5-year survival) relates to the depth of invasion.
- basaloid: poor prognosis, nests of palisaded basaloid cells with central comedonecrosis, hyalinised stroma.
- adenoid squamous: usual prognosis, acantholytic (pseudoglandular) pattern.
- adenosquamous: poor prognosis, mixed differentiation squamous carcinoma and adenocarcinoma (either obvious glands or solid with mucin positive cells).

Salivary gland tumours

- there is a higher frequency in the oral cavity (particularly palate) of carcinoma of minor salivary gland origin, e.g. polymorphous low-