Comprehensive guidelines for the examination of oral cancer resection specimens: CAP versus RCPath protocol

INTRODUCTION - Given the complexity and critical nature of oral cavity resections, documentation and well-structured reports are paramount. CAP and RCPath are the two most commonly used standardised guidelines for reporting oral cavity resections and serve as an essential tool for conveying crucial information among multidisciplinary teams, guiding postoperative care, and facilitating long-term patient management.

COLLEGE OF AMERICAN PATHOLOGISTS, JUNE 2023



EXCLUSION

Carcinomas of dry

Sarcoma

Chiou et al. (2010), surgically treated

buccal mucosa cancer has a

significant probability of locoregional

recurrence when the surgical margin

Kurita H et al, 2010, survival is

negatively impacted solely by severe

> National Comprehensive Cancer

> Brinkman et al. (2022), the RCPath

definition is less predictive of survival

outcomes in OCSCC than the

involved main specimen margins as

defined by the CAP guidelines.

Network criteria 2018, clear is defined

as having a final pathological

is <3 mm but not 5 mm.

dysplasia at the margin.

measurement of 5 mm.

Lymphoma

vermillion lip

INCLUSION

Carcinoma

Melanoma

DISCUSSION-

Mucosal

- - lymphovascular invasion (LVI), margin status, regional lymph nodes, pTNM **Tumour Size**

Greatest dimension in (cm)----in cm

-- Cannot be determined----explain

Right

Midline

Left

+ Additional dimension in (cm)----×----cm

Tumour Laterality (select all that apply)

high grade dysplasia at the resected margin

-Core, Conditional, Optional

- CORE Tumour focality, site, size, laterality, histology, DOI, PNI,
- Core Elements

Dataset

CORE – Neoadjuvant chemotherapy(NACT), tumour site, laterality, size, histology, DOI, PNI, LVI, margin status, pattern of invasion, bone invasion, regional lymph nodes, pTNM

-Core, Non-Core

- **Tumour Dimensions (core) Tumour Dimension**
 - Maximum tumour dimension (largest tumour)mm Cannot be assessed
 - **Oral cavity** Lateral border of tongue. Left Right. Laterality not specified Ventral surface of tongue, NOS Left Right Midline Laterality not specified Dorsal surface of tongue, NOS Left Right Midline Laterality not

Anterior 2- thirds of tongue, NOS Left Right Midline Laterality not

specified

Not specified Positive Mucosal Involved margin is the presence of invasive cancer or

The total number of lymph nodes examined must be reported, but only if nodes are present in the specimen

Regional Lymph Nodes

Extranodal Extension

Margins

Tumour Laterality

Presence of invasive cancer within 1 mm of the margin is considered to constitute a positive margin

Separate dataset for assessing lymph nodes

WORST PATTERN OF INVASION IN OSCC

Perineural invasion (PNI) is associated with poor local disease control and regional control, also with metastasis to regional lymph nodes

Depth of invasion (DOI) is measured from the

- basement membrane of adjacent normal to the deepest point of invasion of the tumour.
 - DOI

clinicians. Also, in our institutional experience we prefer CAP guidelines as it is easy to use and has more reproducibility.

TYPE 1



TYPE 2







(LHR)

1, 2, 3 None,

TOTAL

PNI

RISK Low, intermediate, high

REFERENCES:- http://www.cap.org/cancerprotocols

- http://www.rcpath.org/
- Chiou WY et al, Buccal mucosa carcinoma: surgical margin less than 3 mm, not 5 mm, predicts locoregional recurrence. Radiat Oncol. 2010 Sep 15;5:79.
- Kurita H, Nakanishi Y, Nishizawa R, et al. Impact of different surgical mar- gin conditions on local recurrence of oral squamous cell carcinoma. Oral Oncol 2010;46:814–817.

CONCLUSION - Information pertaining to resection needs to have more objective goals so that information present in report is understood universally by all

- > Brinkman D et al. Comparison of royal college of pathologists and college of american pathologists definition for positive margins in oral cavity squamous cell carcinoma. Oral Oncol. 2022 Apr;127:105797.

carcinoma of oral cavity

INCLUSION

Invasive

Sarcoma lymphoma

EXCLUSION

0, +1, +3

0,+1,+3

Brandwein Gensler Risk Model

Variable Score Type WPOI. 1, 2, 3, 4, 5 0,0,0,+1,+3

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Pathology the science behind the cure

In mm

Lymphocytic host response

small, large nerves

0, 1/2, =>/3

Use of Brandwein Gensler is not recommended in either of the two protocols but the risk assessment and the treatment protocol is based on Brandwein Gensler risk assessment scale.

National Comprehensive Cancer Network. Head and neck cancers. Version 2.2018.