Oral Cavity carcinoma
Oral Cavity carcinoma

- Work-up procedure
- TNM staging
- Primary treatment
- Follow-up
- Treatment of recurrent and/or metastatic disease
- Appendix: surgical techniques
- References
<table>
<thead>
<tr>
<th>Standard clinical evaluation</th>
<th>Evidence</th>
<th>Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete history of the disease</td>
<td>Type C</td>
<td>Std.</td>
</tr>
<tr>
<td>Alcohol and tobacco consumption</td>
<td>Type C</td>
<td>Std.</td>
</tr>
<tr>
<td>Weight and weight loss</td>
<td>Type C</td>
<td>Std.</td>
</tr>
<tr>
<td>Performance status (Karnofsky or WHO scale)</td>
<td>Type C</td>
<td>Std.</td>
</tr>
<tr>
<td>Neck examination</td>
<td>Type C</td>
<td>Std.</td>
</tr>
<tr>
<td>Evaluation of cranial nerves V2 , V3, VII, XII</td>
<td>Type C</td>
<td>Std.</td>
</tr>
<tr>
<td>Drawing of all lesions on a common template</td>
<td>Type C</td>
<td>Std.</td>
</tr>
<tr>
<td>Biopsy under local anesthesia</td>
<td>Type C</td>
<td>Std.</td>
</tr>
</tbody>
</table>
Advanced clinical evaluation

<table>
<thead>
<tr>
<th>Evidence</th>
<th>Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type C</td>
<td>Std.</td>
</tr>
<tr>
<td>Type C</td>
<td>Std.</td>
</tr>
<tr>
<td>Type C</td>
<td>Std.</td>
</tr>
<tr>
<td>Type C</td>
<td>Individ</td>
</tr>
</tbody>
</table>

- Dental examination by oral surgeon
- Panendoscopy under general anesthesia
- Prosthetic rehabilitation (if maxillectomy)
- Nutritional assessment
- PEG
<table>
<thead>
<tr>
<th>Laboratory tests</th>
<th>Evidence</th>
<th>Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Hemogram, ionogram, coagulation tests, liver enzymes, Kidney function</td>
<td>Type C</td>
<td>Std.</td>
</tr>
<tr>
<td>• Thyroid function: TSH (if radiotherapy scheduled)</td>
<td>Type C</td>
<td>Std.</td>
</tr>
</tbody>
</table>
Local imaging and metastatic work-up

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Evidence</th>
<th>Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orthopantomogram (+dental X-rays if needed)</td>
<td>Type C</td>
<td>Std.</td>
</tr>
<tr>
<td>MRI ± CT scan(^1) (oral cavity and neck)</td>
<td>Type C</td>
<td>Std.</td>
</tr>
<tr>
<td>Chest X-ray and thoracic spiral CT</td>
<td>Type C</td>
<td>Std.</td>
</tr>
<tr>
<td>Esogastroscopy</td>
<td>Type C</td>
<td>Ind.</td>
</tr>
<tr>
<td>Additional examination based on previous findings</td>
<td>Type C</td>
<td>Std.</td>
</tr>
<tr>
<td>PET scan</td>
<td>Type 3</td>
<td>Invest.</td>
</tr>
</tbody>
</table>

\(^1\) See guidelines for loco-regional imaging
<table>
<thead>
<tr>
<th>Staging</th>
<th>Evidence</th>
<th>Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>• TNM classification (5th ed., 1997)</td>
<td>Type C</td>
<td>Std.</td>
</tr>
<tr>
<td>• WHO International Classification of Diseases for Oncology (ICD-O 9 or ICD-O 10)</td>
<td>Type C</td>
<td>Std.</td>
</tr>
</tbody>
</table>
TNM/AJCC 1997 Staging

- Tis: Carcinoma in situ
- T1: Tumor 2 cm or less in greatest dimension
- T2: Tumor > 2 cm but ≤ 4 cm in greatest dimension
- T3: Tumor > 4 cm in greatest dimension
- T4 (lip) Tumor invades adjacent structures (through cortical bone, inferior alveolar nerve, floor of mouth, skin of face)
- T4 (oral cavity) Tumor invades adjacent structures (through cortical bone, into deep muscle of tongue, maxillary sinus, skin.)
  (Superficial erosion alone of bone/tooth socket by gingival primary is not sufficient to classify as T4)
TNM/AJCC 1997 Staging

- **N0**: no regional node metastasis
- **Nx**: regional nodes cannot be assessed
- **N1**: single ipsilateral node, $\leq 3$ cm
- **N2a**: single ipsilateral node, $> 3$ cm and $\leq 6$ cm
- **N2b**: multiple ipsilateral nodes, $\leq 6$ cm
- **N2c**: controlateral or bilateral nodes, $\leq 6$ cm
- **N3**: node $> 6$ cm
TNM/AJCC 1997 Staging

- **Mx**: Distant metastasis cannot be assessed
- **M0**: No distant metastasis
- **M1**: Distant metastasis
Oral Cavity carcinoma

- Work-up procedure
- TNM staging
- Primary treatment
- Follow-up
- Treatment of recurrent and/or metastatic disease
- Appendix: surgical techniques
- References
## Treatment of lip carcinoma

<table>
<thead>
<tr>
<th>Evidence</th>
<th>Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type 3</td>
<td>Std.</td>
</tr>
</tbody>
</table>

- **T1-T2 N0:**
  - Surgery T (only)
  - Brachytherapy (T<3cm, no ulceration, no infiltration, dry vermillion)

- **T3-T4 N0:**
  - Surgery T + SOH ND ± post-operative RxTh

- **T1-T4 N1:**
  - Surgery T + SOH or radical modified ND ± post-operative RxTh

- **T1-T4 N2a-N3:**
  - Surgery T + radical modified ND ± post-operative RxTh

---

1. See guidelines for post-operative radiotherapy
2. Radical or extended neck dissection might be required (e.g. N3)
Catholic University of Louvain, St - Luc University Hospital
Head and Neck Oncology Programme

Treatment of buccal mucosa carcinoma

<table>
<thead>
<tr>
<th>Evidence</th>
<th>Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type 3</td>
<td>Std.</td>
</tr>
<tr>
<td>Type 3</td>
<td>Std.</td>
</tr>
<tr>
<td>Type 3</td>
<td>Std.</td>
</tr>
<tr>
<td>Type 3</td>
<td>Std.</td>
</tr>
</tbody>
</table>

- **T1N0:**
  - Surgery T (only)
  - Brachytherapy

- **T2N0:**
  - Surgery + SOH ND
  - Brachytherapy (T< 3 cm, no oral commissure extension) + SOH ND

- **T1-T4 N1-N3:**
  - Surgery + SOH or radical modified ND
  - ± post-operative RxTh²

¹Radical or extended neck dissection might be required (e.g. N3)
²See guidelines for post-operative radiotherapy
### Treatment of oral sulcus carcinoma

<table>
<thead>
<tr>
<th>Evidence</th>
<th>Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type 3</td>
<td>Std.</td>
</tr>
</tbody>
</table>

- **T1N0-N1:**
  - Surgery T + SOH or radical modified ND<sup>1</sup>
  - Type 3 Std.

- **T1 N2-N3:**
  - Surgery T + radical modified ND<sup>1,2</sup> ± post-operative RxTh<sup>3</sup>
  - Type 3 Std.

- **T2-T4 N0-N1:**
  - Surgery T + alveolar resection + reconstruction + SOH ND<sup>2</sup> ± post-operative RxTh<sup>3</sup>
  - Type 3 Std.

- **T2-T4 N2-N3:**
  - Surgery T + alveolar resection + reconstruction + radical modified ND<sup>1,2</sup> ± post-operative RxTh<sup>3</sup>
  - Type 3 Std.

---

<sup>1</sup>Bilateral neck dissection for midline tumors

<sup>2</sup>Radical or extended neck dissection might be required (e.g. N3)

<sup>3</sup>See guidelines for post-operative radiotherapy
<table>
<thead>
<tr>
<th>Treatment of upper alveolar rim carcinoma</th>
<th>Evidence</th>
<th>Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>T1-T4 N0: Surgery T (only)</td>
<td>Type 3</td>
<td>Std.</td>
</tr>
<tr>
<td>T1-T4 N1: Surgery T + SOH ND ± post-operative RxTh&lt;sup&gt;1&lt;/sup&gt;</td>
<td>Type 3</td>
<td>Std.</td>
</tr>
<tr>
<td>T1-T4 N2-N3: Surgery T + radical modified ND&lt;sup&gt;2&lt;/sup&gt; ± post-operative RxTh&lt;sup&gt;1&lt;/sup&gt;</td>
<td>Type 3</td>
<td>Std.</td>
</tr>
</tbody>
</table>

<sup>1</sup>See guidelines for post-operative radiotherapy

<sup>2</sup>Radical or extended neck dissection might be required (e.g. N3)
Catholic University of Louvain, St - Luc University Hospital Head and Neck Oncology Programme

<table>
<thead>
<tr>
<th>Treatment of lower alveolar rim and retromolar trigone carcinoma</th>
<th>Evidence</th>
<th>Option</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>T1 N0-N1:</strong> Surgery T + SOH ND(^1) ± post-operative RxTh(^2)</td>
<td>Type 3</td>
<td>Std.</td>
</tr>
<tr>
<td><strong>T1 N2-N3:</strong> Surgery T + radical modified ND(^1,3) ± post-operative RxTh(^2)</td>
<td>Type 3</td>
<td>Std.</td>
</tr>
<tr>
<td><strong>T2-T4 N0-N1:</strong> Surgery T + reconstruction + SOH ND(^1) ± post-operative RxTh(^2)</td>
<td>Type 3</td>
<td>Std.</td>
</tr>
<tr>
<td><strong>T2-T4 N2-N3:</strong> Surgery T + reconstruction + radical modified ND(^1,3) ± post-operative RxTh(^2)</td>
<td>Type 3</td>
<td>Std.</td>
</tr>
</tbody>
</table>

\(^1\) Bilateral neck dissection for midline tumors
\(^2\) See guidelines for post-operative radiotherapy
\(^3\) Radical or extended neck dissection might be required (e.g. N3)
<table>
<thead>
<tr>
<th>Treatment of hard palate carcinoma</th>
<th>Evidence</th>
<th>Option</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>T1-T3 N0:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surgery T ± reconstruction ± post-operative RxTh¹</td>
<td>Type 3</td>
<td>Std.</td>
</tr>
<tr>
<td><strong>T1-T3 N1:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surgery T ± reconstruction + bilateral SOH ND ± post-operative RxTh¹</td>
<td>Type 3</td>
<td>Std.</td>
</tr>
<tr>
<td><strong>T4 N0-N1:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surgery T + reconstruction + bilateral SOH ND + post-operative RxTh¹</td>
<td>Type 3</td>
<td>Std.</td>
</tr>
<tr>
<td><strong>T1-T4 N2-N3:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surgery T ± reconstruction + bilateral radical modified ND² ± post-operative RxTh¹</td>
<td>Type 3</td>
<td>Std.</td>
</tr>
</tbody>
</table>

¹ See guidelines for post-operative radiotherapy
² Radical or extended neck dissection might be required (e.g. N3)
### Treatment of mobile tongue (dorsum, apex, ventral side) carcinoma

<table>
<thead>
<tr>
<th>Evidence</th>
<th>Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type 3</td>
<td>Std.</td>
</tr>
</tbody>
</table>

#### T1 N0-N1:
- Surgery T + bilateral levels I-IV ND + post-operative RxTh
- Brachytherapy + bilateral SOH ND
- RxTh (T+levels I-III) + brachytherapy T

#### T2 N0-N1:
- Surgery T ± reconstruction + bilateral levels I-IV ND ± post-operative RxTh

#### T1-T2 N2-N3:
- Surgery T ± reconstruction + bilateral radical modified ND + post-operative RxTh
- "Locally advanced" RxTh protocols (T+N) ± ND

#### T3-T4 N0-N3:
- "Locally advanced" RxTh protocols (T+N)³ ± ND
- Surgery T + reconstruction + bilateral ND + post-operative RxTh

---

1. See guidelines for post-operative radiotherapy
2. Radical or extended neck dissection might be required (e.g. N3)
3. See guidelines for organ preservation protocols
4. See guidelines for post-radiotherapy ND (slide 27)
Catholic University of Louvain, St - Luc University Hospital
Head and Neck Oncology Programme

<table>
<thead>
<tr>
<th>Treatment of mobile tongue (lateral border) carcinoma</th>
<th>Evidence</th>
<th>Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>● T1 N0:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surgery T + unilateral SOH ND</td>
<td>Type 3</td>
<td>Std.</td>
</tr>
<tr>
<td>Surgery T</td>
<td>Type 3</td>
<td>Std.</td>
</tr>
<tr>
<td>Brachytherapy T</td>
<td>Type 3</td>
<td>Std.</td>
</tr>
<tr>
<td>● T1 N1:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surgery T + unilateral levels I-IV ND ± post-operative RxTh</td>
<td>Type 3</td>
<td>Std.</td>
</tr>
<tr>
<td>Brachytherapy + unilateral levels I-IV ND or RxTh</td>
<td>Type 3</td>
<td>Std.</td>
</tr>
<tr>
<td>● T2 N0-N1:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surgery T ± reconstruction + unilateral levels I-IV ND ± post-operative RxTh</td>
<td>Type 3</td>
<td>Std.</td>
</tr>
<tr>
<td>● T1-T2 N2-N3:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surgery T ± reconstruction + unilateral radical modified ND + Post-operative RxTh</td>
<td>Type 3</td>
<td>Std.</td>
</tr>
<tr>
<td>“Locally advanced” RxTh protocols (T+N)^3 ± ND</td>
<td>Type 3</td>
<td>Std.</td>
</tr>
<tr>
<td>● T3-T4 N0-N3:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>“Locally advanced” RxTh protocols (T+N)^3 ± ND</td>
<td>Type 3</td>
<td>Std.</td>
</tr>
<tr>
<td>Surgery T + reconstruction + unilateral ND^2 + post-operative RxTh</td>
<td>Type 3</td>
<td>Std.</td>
</tr>
</tbody>
</table>

1 See guidelines for post-operative radiotherapy
2 Radical or extended neck dissection might be required (e.g. N3)
3 See guidelines for organ preservation protocols
4 See guidelines for post-radiotherapy ND (slide 27)
## Treatment of anterior floor of mouth carcinoma

<table>
<thead>
<tr>
<th>Evidence</th>
<th>Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type 3</td>
<td>Std.</td>
</tr>
</tbody>
</table>

- **T1 N0:**
  - Surgery T + bilateral SOH ND
  - Brachytherapy + bilateral SOH ND

- **T2 N0:**
  - Surgery T ± reconstruction + bilateral SOH ND ± post-operative RxTh<sup>1</sup>

- **T1-T2 N1:**
  - Surgery T ± reconstruction + bilateral SOH or radical modified ND ± post-operative RxTh<sup>1</sup>

- **T1-T2 N2-N3:**
  - Surgery T ± reconstruction + bilateral radical modified ND<sup>2</sup> ± post-operative RxTh<sup>1</sup>
  - “Locally advanced” RxTh protocols (T+N)<sup>3</sup> ± ND<sup>4</sup>

---

<sup>1</sup> See guidelines for post-operative radiotherapy  
<sup>2</sup> Radical or extended neck dissection might be required (e.g. N3)  
<sup>3</sup> See guidelines for organ preservation protocols  
<sup>4</sup> See guidelines for post-radiotherapy ND (slide 27)
### Treatment of anterior floor of mouth carcinoma

<table>
<thead>
<tr>
<th>Evidence</th>
<th>Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type 3</td>
<td>Std.</td>
</tr>
<tr>
<td>Type 3</td>
<td>Std.</td>
</tr>
<tr>
<td>Type 3</td>
<td>Std.</td>
</tr>
</tbody>
</table>

- **T3-T4 (no bone invasion), N0-N3:**
  - “Locally advanced” RxTh protocols (T+N)³ ± ND⁴
  - Surgery T ± reconstruction + bilateral radical modified ND² ± post-operative RxTh¹

- **T4 (bone invasion), N0-N3:**
  - Surgery T ± reconstruction + bilateral radical modified ND⁵ ± post-operative RxTh¹

---

¹ See guidelines for post-operative radiotherapy
² Radical or extended neck dissection might be required (e.g. N3)
³ See guidelines for organ preservation protocols
⁴ See guidelines for post-radiotherapy ND (slide 27)
### Treatment of posterior floor of mouth carcinoma

<table>
<thead>
<tr>
<th>Evidence</th>
<th>Option</th>
</tr>
</thead>
</table>

- **T1 N0:**
  - Surgery T + unilateral SOH ND<sup>1</sup>
  - Type 3  Std.

- **T2 N0:**
  - Surgery T ± reconstruction + unilateral SOH ND ± post-operative RxTh<sup>2</sup>
  - Type 3  Std.

- **T1-T2 N1:**
  - Surgery T ± reconstruction + unilateral SOH or radical modified ND ± post-operative RxTh<sup>2</sup>
  - Type 3  Std.

- **T1-T2 N2-N3:**
  - Surgery T ± reconstruction + unilateral radical modified ND<sup>3</sup> ± post-operative RxTh<sup>2</sup>
  - Type 3  Std.

- **Locally advanced** RxTh protocols (T+N)<sup>4</sup> ± ND<sup>5</sup>
  - Type 3  Std.

---

<sup>1</sup> Bilateral neck dissection for midline tumors

<sup>2</sup> See guidelines for post-operative radiotherapy

<sup>3</sup> Radical or extended neck dissection might be required (e.g. N3)

<sup>4</sup> See guidelines for organ preservation protocols

<sup>5</sup> See guidelines for post-radiotherapy ND (slide 27)
Catholic University of Louvain, St - Luc University Hospital Head and Neck Oncology Programme

<table>
<thead>
<tr>
<th>Treatment of posterior floor of mouth carcinoma</th>
<th>Evidence</th>
<th>Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>● T3-T4 (no bone invasion), N0-N3 :</td>
<td></td>
<td></td>
</tr>
<tr>
<td>“Locally advanced” RxTh protocols (T+N)⁴ ± ND⁵</td>
<td>Type 3</td>
<td>Std.</td>
</tr>
<tr>
<td>Surgery T ± reconstruction + unilateral radical modified ND³ ± post-operative RxTh²</td>
<td>Type 3</td>
<td>Std.</td>
</tr>
<tr>
<td>● T4 (bone invasion), N0-N3 :</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surgery T ± reconstruction + unilateral radical modified ND³ ± post-operative RxTh²</td>
<td>Type 3</td>
<td>Std.</td>
</tr>
</tbody>
</table>

1. Bilateral neck dissection for midline tumors
2. See guidelines for post-operative radiotherapy
3. Radical or extended neck dissection might be required (e.g. N3)
4. See guidelines for organ preservation protocols
5. See guidelines for post-radiotherapy ND (slide 27)
Catholic University of Louvain, St - Luc University Hospital
Head and Neck Oncology Programme

<table>
<thead>
<tr>
<th>Procedures for neck node treatment</th>
<th>Evidence</th>
<th>Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Sentinel node biopsy</td>
<td>Type 3</td>
<td>Invest.</td>
</tr>
<tr>
<td>• Comprehensive neck node dissection/irradiation</td>
<td>Type 3</td>
<td>Std.</td>
</tr>
<tr>
<td>according to the recommendations for each subsites*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*See guidelines for target volumes on slide 27
Primary treatment: RxTh regimen

- **Target volumes**
  - T: CTV = GTV + 1.5-0.5 cm margin depending on anatomical barriers
  - N: see table on node levels according to T site

- **Technique**
  - conformal radiotherapy
  - IMRT radiotherapy

- **Dose / fractionation / treatment time**
  - Early stage:\(^1\)
    - prophylactic dose: 50 Gy,
    - therapeutic dose: 66-70 Gy, 2 Gy daily
  - "moderately advanced"\(^2\) / "locally advanced"\(^3\) stage
    - on protocol: GORTEC 99-02 / IMCL CP02-9815
    - off protocol: moderately accelerated regimen (concomitant boost)
  - post-operative RxTh
    - dose: 60-64 Gy, 2 Gy daily\(^4\)

<table>
<thead>
<tr>
<th>Evidence</th>
<th>Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type 3</td>
<td>Std.</td>
</tr>
<tr>
<td>Type 3</td>
<td>Invest.</td>
</tr>
<tr>
<td>Type C</td>
<td>Std.</td>
</tr>
<tr>
<td>Type C</td>
<td>Std.</td>
</tr>
<tr>
<td>Type 1</td>
<td>Invest.</td>
</tr>
<tr>
<td>Type 2</td>
<td>Std.</td>
</tr>
</tbody>
</table>

\(^1\)T1 N0-N1
\(^2\)T2 N0-N1
\(^3\)any T N2a-N3
\(^4\)See guidelines for post-operative radiotherapy
### Target Volumes: oral cavity

**Level of evidence**: type 3 / option: standard

<table>
<thead>
<tr>
<th>Stage</th>
<th>Ipsilateral neck</th>
<th>Controlateral neck</th>
</tr>
</thead>
<tbody>
<tr>
<td>N0-N1</td>
<td>I-II(^1) - III + IV for ant. tongue tumor or oroph. ext.</td>
<td>I-II(^1) - III + IV for ant. tongue tumor or oroph. ext.</td>
</tr>
<tr>
<td>N2a-N2b</td>
<td>I-II-III-IV-V(^2)</td>
<td>I-II(^1) - III + IV for ant. tongue tumor or oroph. ext.</td>
</tr>
<tr>
<td>N2c</td>
<td>According to N stage on each side of the neck</td>
<td>According to N stage on each side of the neck</td>
</tr>
<tr>
<td>N3</td>
<td>I-II-III-IV-V ± adjacent structures according to clinical and radiological data</td>
<td>I-II(^1) - III + IV for ant. tongue tumor or oroph. ext.</td>
</tr>
</tbody>
</table>

\(^1\) Level IIb could be omitted for N0 patients

\(^2\) Level V could be omitted if only level I-III are involved
Primary treatment: neck dissection following a primary radiotherapy

- Planned ND (SND, RMND, RND or extended ND) 2-3 months after completion of RxTh in patients with a controlled primary site and in case of residual or suspected residual, resectable N disease irrespective of the initial N stage

<table>
<thead>
<tr>
<th>Evidence</th>
<th>Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type 3</td>
<td>Std.</td>
</tr>
</tbody>
</table>
Oral Cavity carcinoma

- Work-up procedure
- TNM staging
- Primary treatment
- **Follow-up**
- Treatment of recurrent and/or metastatic disease
- Appendix: surgical techniques
- References
<table>
<thead>
<tr>
<th>Follow-up</th>
<th>Evidence</th>
<th>Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical examination of head and neck mucosa (including fiberoptic) and neck palpation / performance status / nutritional assessment every 2 months (first 2 years), every 6 months (years 3-5), once a year (&gt; 5 year)</td>
<td>Type C</td>
<td>Std.</td>
</tr>
<tr>
<td>Dental examination and orthopantomogram every 6 months</td>
<td>Type C</td>
<td>Std.</td>
</tr>
<tr>
<td>Chest X-ray every year</td>
<td>Type C</td>
<td>Std.</td>
</tr>
<tr>
<td>Chest spiral CT every year</td>
<td>Type C</td>
<td>Invest.</td>
</tr>
<tr>
<td>Laboratory tests: TSH every year (if Radiotherapy delivered)</td>
<td>Type C</td>
<td>Std.</td>
</tr>
<tr>
<td>Evolution of late toxicity (EORTC/RTOG) scale</td>
<td>Type C</td>
<td>Std.</td>
</tr>
</tbody>
</table>
Oral Cavity carcinoma

• Work-up procedure
• TNM staging
• Primary treatment
• Follow-up
  • Treatment of recurrent and/or metastatic disease
• Appendix: surgical techniques
• References
## Salvage treatment for recurrent disease

<table>
<thead>
<tr>
<th></th>
<th>Evidence</th>
<th>Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lip, mobile tongue, floor of mouth: rT1 N0:</td>
<td>Type 3</td>
<td>Std.</td>
</tr>
<tr>
<td>Brachytherapy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surgery</td>
<td>Type 3</td>
<td>Std.</td>
</tr>
<tr>
<td>Any other T, any other N</td>
<td>Type 3</td>
<td></td>
</tr>
<tr>
<td>Surgery + radical ND ± post-operative RxTh¹ if not previously delivered</td>
<td>Type 3</td>
<td>Std.</td>
</tr>
<tr>
<td>RxTh</td>
<td>Type 3</td>
<td>Indiv.</td>
</tr>
<tr>
<td>Palliative care</td>
<td>Type 3</td>
<td>Indiv.</td>
</tr>
<tr>
<td>Metastasis:</td>
<td>Type 3</td>
<td>Std.</td>
</tr>
<tr>
<td>Chemotherapy + best supportive care</td>
<td>Type 3</td>
<td></td>
</tr>
</tbody>
</table>

¹See guidelines for post-operative radiotherapy
Oral Cavity carcinoma

- Work-up procedure
- TNM staging
- Primary treatment
- Follow-up
- Treatment of recurrent and/or metastatic disease
- **Appendix: surgical techniques**
- References
Appendix: surgical techniques

Labial surgery
- vermilionectomy: mucosal advancement flap
- full thickness resection:
  - < 1/3 lip: primary closure, V-Y or W plasty
  - < 2/3 lip: flaps
- total resection: free flaps (composites)
- mandibulectomy ...
Appendix: surgical techniques

**Mandibulectomy**

- **not if T clinically > 1 cm**
- **interrupting if**
  - T4
  - recurrence
  - previous RT
  - T clinically < 1 cm with evidence of bony extension
  - atrophic mandibular height < 1 cm
- **non interrupting if** T clinically < 1 cm and no evidence of bony extension or only evidence for alveolar bone defect of expansive type (and not of erosive type)
Appendix: surgical techniques

**Mandibular reconstructions**
- clean margins are predictable Type 3
- primary:
  - vascularized bone: 1rst choice Type 3
    - fibula
    - iliac crest
    - scapula
- reconstruction plate + muscular pedicled flap, pectoralis major or latissimus dorsi: 2nd choice
Appendix: surgical techniques

- reconstruction plate : Type 3
  - AO :
    - skin/mucosa perforations 9%
    - plate fracture 4.5%
    - screw loosening 32%
  - THORP
    - always if mandibular height < 10 mm after marginal resection
- secondary
- same techniques
- Vascularized bone after RT
- Osteogenous distraction
Appendix: surgical techniques

Buccal tumor surgery

- local transoral tumorectomy: mucosal advancement flap, evt.
- Stensen's duct transposition
- resection of buccinator muscle: Bichat flap, + skin graft, ...
- full thickness resection:
  - free fasciocutaneous flaps (composites)
  - myocutaneous pedicled flaps, pectoralis major or latissimus dorsi
- maxillectomy or mandibulectomy ...
Appendix: surgical techniques

**Oral sulcus tumor surgery**
- local transoral tumorectomy: primary closure, mucosal advancement flap
- alveolar resection: primary closure, Bichat flap, secondary healing, skin graft...
- maxillectomy or mandibulectomy...
Catholic University of Louvain, St - Luc University Hospital
Head and Neck Oncology Programme

Appendix: surgical techniques

Maxillary reconstructions
  - obturator prosthesis
  - temporalis muscle flaps
  - Bichat flap
  - buccinator flap
  - free flaps
    - fasciocutaneous
    - vascularized bone
Appendix: surgical techniques

Anterior tongue and floor of the mouth reconstructions Type 3

- 1. free fasciocutaneous flaps (sensate)
  - radial
  - brachial ext
  - cubital
- 2. Myocutaneous or musculous pedicled flaps: pectoralis major or latissimus dorsi
- 3. nasolabial flap, per secondary healing, skin graft
Oral Cavity carcinoma

- Work-up procedure
- TNM staging
- Primary treatment
- Follow-up
- Treatment of recurrent and/or metastatic disease
- Appendix: surgical techniques
- References
References

References


References

References

References

References

References

References

References

References