Treatment Methods for Oral Cancer by Grade

Grade 1 (Low Grade) Oral Cancer

Description: Cancer cells look like normal mouth cells; well differentiated.

Treatment Methods:

Surgery:

1. Wide Local Excision: Removing the tumor along with some normal tissue around it to ensure no cancer cells remain.
2. Mohs Micrographic Surgery: Layer-by-layer removal of the cancer, examining each layer under a microscope until no abnormal cells remain.

Radiation Therapy:

1. Often used post-surgery to eliminate any remaining cancer cells.
2. External Beam Radiation: Focused beams of radiation are directed at the cancer from outside the body.

Cryotherapy:

1. Freezing cancer cells with liquid nitrogen, used for very small and early-stage cancers.

Laser Surgery:

1. Using a laser to remove or destroy cancerous tissue.

Grade 2 (Intermediate Grade) Oral Cancer

Description: Cancer cells look slightly different from normal mouth cells; moderately differentiated.

Treatment Methods:

Surgery:

1. Similar to Grade 1, but the surgery might be more extensive depending on the size and spread of the tumor

Radiation Therapy:

1. May be used alone or in combination with surgery.
2. Brachytherapy: Radiation is placed inside the body near the cancer cells.

Chemotherapy:

1. Often used in combination with radiation therapy (chemoradiation) to enhance the effects of radiation.
2. Drugs like Cisplatin, Carboplatin, and 5-fluorouracil (5-FU) are commonly used.

Targeted Therapy:

1. Drugs that specifically target cancer cell mechanisms, like Cetuximab, which targets the epidermal growth factor receptor (EGFR).

Immunotherapy:

1. For some patients, drugs like Pembrolizumab (Keytruda) or Nivolumab (Opdivo) that help the immune system recognize and attack cancer cells might be used.

Grade 3 (High Grade) Oral Cancer

Description: Cancer cells look very abnormal and not much like normal mouth cells; poorly differentiated.

Treatment Methods:

Surgery:

1. More extensive surgery may be needed, potentially including removal of parts of the jawbone or tongue, and lymph node dissection if the cancer has spread.

Radiation Therapy:

1. Often combined with chemotherapy (chemoradiation) for more effective treatment.

Chemotherapy:
1. More aggressive regimens may be used compared to lower grades.
2. Combination therapies (using more than one drug) are common.
Targeted Therapy:
1. Cetuximab may be used in combination with radiation or chemotherapy for advanced cancers.
Immunotherapy:
1. Can be particularly beneficial for high-grade cancers, especially if they do not respond well to other treatments.
Palliative Care:
1. Focused on relieving symptoms and improving quality of life.
2. May involve pain management, nutritional support, and psychological support.
Clinical Trials:
1. Patients may be offered participation in clinical trials testing new therapies, including novel drugs, combinations, or techniques.
Grade Gx (Grade Cannot Be Assessed)
Description: The grade cannot be assessed.
Treatment Methods:
 Treatment is based on other factors like the stage of cancer, patient's overall health, and specific characteristics of the tumor.
 A combination of the above-mentioned treatments (surgery, radiation, chemotherapy, targeted therapy, immunotherapy) may be used depending on the comprehensive assessment by the medical team.
Multidisciplinary Approach
 Regardless of the grade, treatment for oral cancer typically involves a multidisciplinary team approach including surgeons, oncologists, radiologists, pathologists, and supportive care specialists to provide the most effective and comprehensive care.
 Regular follow-ups and monitoring are crucial to manage any recurrence or side effects from the treatment.

Treatment Methods for Oral Cancer by Stage

Stage 0 (Carcinoma in Situ, CIS)
Description: Very early stage. Cancer cells are contained within the lining of the mouth and have not spread.
Treatment Methods:
Surgery:
1. Wide Local Excision: Removing the abnormal area along with some normal tissue to ensure no cancer cells remain.
2. Electrosurgery: Using an electric current to remove the cancer cells.
Cryotherapy:
1. Freezing the abnormal cells with liquid nitrogen.
Laser Therapy:
1. Using a laser to remove or destroy the abnormal cells.
Photodynamic Therapy (PDT):
1. Using a combination of a drug and a specific type of light to kill cancer cells.
Stage 1
Description: Cancer is 2cm or smaller and 5mm deep or less. It has not spread to nearby tissues, lymph nodes, or other organs.
Treatment Methods:
Surgery:
1. Wide Local Excision: Removing the tumor with some normal tissue.
2. Mohs Micrographic Surgery: Layer-by-layer removal of cancer until no

abnormal cells remain.

Radiation Therapy:

1. Often used post-surgery to eliminate any remaining cancer cells.
2. External Beam Radiation: Focused beams of radiation directed at the cancer from outside the body.

Cryotherapy:

1. Freezing cancer cells with liquid nitrogen, used for very small and early-stage cancers.

Laser Surgery:

1. Using a laser to remove or destroy cancerous tissue.

Stage 2

Description: Cancer is 2cm or smaller but deeper than 5mm, or it is larger than 2cm but no larger than 4cm, and it is 10mm deep or less. It has not spread to nearby lymph nodes or other organs.

Treatment Methods:

Surgery:

1. Similar to Stage 1, but the surgery might be more extensive depending on the size and spread of the tumor.

Radiation Therapy:

1. May be used alone or in combination with surgery.
2. Brachytherapy: Radiation is placed inside the body near the cancer cells.

Chemotherapy:

1. Often used in combination with radiation therapy (chemoradiation) to enhance the effects of radiation.
2. Drugs like Cisplatin, Carboplatin, and 5-fluorouracil (5-FU) are commonly used.

Targeted Therapy:

1. Drugs that specifically target cancer cell mechanisms, like Cetuximab, which targets the epidermal growth factor receptor (EGFR).

Immunotherapy:

1. For some patients, drugs like Pembrolizumab (Keytruda) or Nivolumab (Opdivo) that help the immune system recognize and attack cancer cells might be used.

Stage 3

Description: Cancer is larger than 2cm but no larger than 4cm and deeper than 10mm, or it has spread to one lymph node on the same side of the neck as the cancer, but the lymph node is no more than 3cm across.

Treatment Methods:

Surgery:

1. More extensive surgery may be needed, potentially including removal of parts of the jawbone or tongue, and lymph node dissection if the cancer has spread.

Radiation Therapy:

1. Often combined with chemotherapy (chemoradiation) for more effective treatment.

Chemotherapy:

1. More aggressive regimens may be used compared to lower stages.
2. Combination therapies (using more than one drug) are common.

Targeted Therapy:

1. Cetuximab may be used in combination with radiation or chemotherapy for advanced cancers.

Immunotherapy:

1. Can be particularly beneficial for high-grade cancers, especially if they do not respond well to other treatments.

Palliative Care:

1. Focused on relieving symptoms and improving quality of life.
2. May involve pain management, nutritional support, and psychological support.

Clinical Trials:

1. Patients may be offered participation in clinical trials testing new therapies, including novel drugs, combinations, or techniques.