Journal of Oral Medicine

Open access Commentary

Advances in Oral Cancer Treatment: A Comprehensive Overview

Grace Mendes*

Department of Surgical Oncology, University of Sao Paulo, Brazil

INTRODUCTION

Oral cancer, encompassing malignancies of the lips, tongue, cheeks, and other oral cavity regions, presents unique challenges in diagnosis and treatment. As the understanding of this disease evolves, so do the treatment modalities available to combat it. This article explores the latest advancements in oral cancer treatment, emphasizing surgical techniques, radiation therapy, chemotherapy, immunotherapy, and targeted therapies. Surgery remains a cornerstone of oral cancer treatment, particularly for early-stage tumors. Advances in surgical techniques, including minimally invasive procedures, have improved patient outcomes. Trans-Oral Robotic Surgery (TORS) is one such innovation, allowing for precise tumor removal with reduced trauma to surrounding tissues. This approach enhances recovery times and minimizes complications, leading to better functional outcomes regarding speech and swallowing. In cases where the cancer is more advanced, reconstructive surgery may be necessary. Techniques such as free flap reconstruction enable surgeons to repair defects created during tumor removal, using tissue from other body parts to restore form and function. This dual approach tumor excision followed by reconstruction addresses not only the cancer but also the aesthetic and functional aspects of the oral cavity. Radiation therapy is frequently used in conjunction with surgery, especially in cases where there is a high risk of local recurrence.

DESCRIPTION

Advances in radiation techniques, such as Intensity-Modulated Radiation Therapy (IMRT), allow for highly targeted radiation delivery. This precision minimizes damage to surrounding healthy tissues, reducing side effects like dry mouth, difficulty swallowing, and changes in taste. Additionally, Stereotactic Body Radiation Therapy (SBRT) is emerging as a promising option for localized tumors. This technique delivers high doses of radiation in fewer sessions, making treatment more convenient and less burdensome for patients. Chemotherapy plays a significant role in treating oral cancer, particularly for advanced stages or when surgery is not feasible. Traditional chemotherapy involves the use of cytotoxic drugs that target rapidly dividing cancer cells. However, the field is evolving toward more personalized approaches. Neoadjuvant chemotherapy, administered before surgery, is gaining traction as it can shrink tumors and improve surgical outcomes. Concurrent chemotherapy and radiation therapy are also being explored, as they can enhance the effectiveness of radiation treatment. Immunotherapy represents one of the most exciting advancements in cancer treatment. This approach harnesses the body's immune system to identify and attack cancer cells. Immune checkpoint inhibitors, such as pembrolizumab and nivolumab, have shown promise in treating advanced Oral Squamous Cell Carcinoma (OSCC), particularly in patients with HPV-positive tumors.

CONCLUSION

The landscape of oral cancer treatment is rapidly evolving, with numerous advancements that enhance patient outcomes and quality of life. From innovative surgical techniques and precise radiation therapies to groundbreaking immunotherapy and targeted treatments, the future of oral cancer care holds great promise. Ongoing research and clinical trials are crucial in further refining these approaches and developing new strategies for prevention, diagnosis, and treatment. As awareness and understanding of oral cancer grow, so too does the potential for improved outcomes and hope for those affected by this challenging disease.

ACKNOWLEDGEMENT

None.

CONFLICT OF INTEREST

The author's declared that they have no conflict of interest.

Received:	02-October-2024	**Manuscript No:**	IPOM-24-22006
Editor assigned:	04-October-2024	**PreQC No:**	IPOM-24-22006 (PQ)
Reviewed:	18-October-2024	**QC No:**	IPOM-24-22006
Revised:	23-October-2024	**Manuscript No:**	IPOM-24-22006 (R)
Published:	30-October-2024	**DOI:**	10.36648/ipom-8.5.49

Corresponding author Grace Mendes, Department of Surgical Oncology, University of Sao Paulo, Brazil, Email: gmendes@usp.br

Citation Mendes G (2024) Advances in Oral Cancer Treatment: A Comprehensive Overview. J Ora Med. 8:49.