

A Common Retrospective Clinical Case Reports in 20 Post-Operative Oral Cancer Patients at Madras Medical Hospital, Tamil Nadu, Zemabawk Cancer and Research Hospital, Mizoram and Trinity Hospital, Mizoram from 2019-2023: A Retrospective Reports

Dr. Christina Lalruatdiki Hangzo

Oral and Maxillofacial Surgeon (OMFS), Department of Oral & Maxillofacial Surgery, Trinity Hospital, Silaimual, Aizawl-Mizoram
Pincode-796001

Abstract: *Objective:* Instead of searching different journals, using other references we had complied all clinical common reports in one single article from 2019-2023 which can be easily access and we hope this article will be another contribution in the field of Oncology. *Method:* patient we observed had undergone complete surgical jaw resection, Wide local excision followed by immediate reconstruction using Pectoralis major muscle flap, Radial forearm flap and Nasolabial flap. Some of the patients who had undergone Jaw resection and Wide local excision with reconstructions had spasms of muscles of mastications, some had tmj problem and some had osteoradionecrosis of jaw bone and using clinical parameters a case report was made with a figure table. *Results:* Most patients who had undergone post-operative radiation therapy had oral mucositis. One Patient who underwent tongue resection lost his life 2 days after post-operation with a reason unknown. One patient reported with a brain malignancies after 7 months of post-op where the exact primary site of origin was unknown and remains unknown whether the lesion reoccur due to the previous oral surgery. *Conclusions:* Cancer still needs more studies as even those without any habits (alcohol, smoking, etc) are getting cancer and seems to be clearly a genetic in some cases.

Keywords: Verrucous carcinoma, squamous cell carcinoma, osteoradionecrosis, mastications, mucocitis, nasolabial, metastasis

1. Introduction

Globally, oral cancer rank sixth among all types of cancer. India has the highest oral cancer rate in the world. Overall the most common site of oral cancer is the tongue and the most common site of oral cancer in Indian population is the alveolobuccal complex. The buccal mucosa had rare metastasis into the lymph node. Patients with head and neck cancer had increased risk for development of second primary malignancies, typically developed in aerodigestive tract (lung, head and neck and esophagus while lung being the most common site). The malignancy of oral cavity has highest relative risk for a second head and neck cancer. 30% of patients with tongue cancer presents with cervical node metastasis.

Squamous cell carcinoma is the most common histological findings in Head and Neck cancer while oral verrucous carcinoma is a rare tumor describe by Ackerman. It is a special form of well differentiated squamous cell carcinoma with specific clinical and histological features. Verrucous hyperplasia has been considered an antecedent stage or early form of verrucous carcinoma and is believed to have the same biological potential. Surgery has been the first choice of treatment from these lesions, and radiotherapy is controversial; however, surgery combined with radiotherapy is the next most preferable treatment and may have benefits, particularly in case of extensive lesions. Recurrence rate is

high in cases in which either irradiation or surgery alone is performed.

2. Materials and methods

A retrospective finding was taken between 2019-2022 at Department of surgical oncology, MMC, Zemabawk cancer and research Hospital, Mizoram and Trinity Hospital, Mizoram from patients who had undergone surgical resection, wide local excision with immediate reconstructions and hemiglossectomy under general anaesthesia. The clinical observation criteria and parameters includes clinical post-operative complications (Muscle spasms, TMJ, Oral mucositis, osteoradionecrosis, Trismus, flap failure, others, etc), post-operative secondary primary tumor, recurrent lesions within 5-10 years and mortality rate using simple metallic scale, palpation, clinical observations and Post-operative MRI.

3. Results

The clinical details of post-operative patients are summarized below

This criteria includes:

- 1) Clinical post-op parameters
- 2) Post-operative secondary tumor
- 3) Recurrent lesions within 5-10years.
- 4) Mortality rate

Volume 13 Issue 1, January 2024

Fully Refereed | Open Access | Double Blind Peer Reviewed Journal

www.ijsr.net

Table 1: Clinical Post-Operative Reports in Oral Cancer Patients from 2019-2023.

NO	Clinical Findings (Muscles spasms, TMJ problems, oral mucositis, osteoradionecrosis, Trismus, flap failure, others) seen in:	Post-operative secondary primary tumor Seen in :	Recurrent lesions within 5-10years seen in:	Mortality seen in:
	Muscles spasms – Five (5)patients TMJ problems-five (5) patients Oral mucositis –5patients Osteoradionecrosis –1 patient Trismus –1 patient Flap failure –None/Nil Others-facial asymmetry (seen in all patients who had undergone flap reconstructions).	One patient after 7 months post-op (Brain) NOTE: This metastasis remains unclear whether if tumor arises from the previous oral cancer surgery or not and needs further studies.	One patient after 9 years post-op in left lower jaw (verrucous carcinoma), who had previous history of oral squamous cell carcinoma in the right lower jaw resected 9 years back in different hospital.	One case (Hemiglossectomy) died 2 days after surgery.

4. Discussions and Conclusion

Out of 20 patients, one patient had no history of tobacco and alcohol intake, no previous history of family cancers and no cigarette intake for which the etiology was believed to be secondary (like secondary smoke), the rest of the patients had clear history of smoking, alcohol intake, tobacco intake and smoking for at least 5 years. All reconstructions using grafts free flaps were successful but mild to severe facial asymmetry were observed in all patients who had undergone flap reconstructions and needs further aesthetic reconstructions.

One patient died two days after hemiglossectomy even though the surgery was successful and the reason for mortality was not due to the cancer but some other unknown issues. The patient who had previous history of squamous type of oral cancer also had recurrent verrucous type of oral carcinoma on the opposite jaw which was negative in the initial biopsy done in another hospital and so, a second biopsy was taken with a deeper section in our hospital as the clinical findings and history of patient points towards a recurrent oral cancer. This same patient had previously done skin grafting 10 years back in another hospital which later developed to oral squamous cell carcinoma. one patient had developed brain metastasis for which the reason was still not clear as to why it had developed. In journal of neurooncology J. Ruzevick (may 2013) reported that just over HNSCC'S that metastasized to the brain were HPV-related but in this patient an HPV test was not taken. The patients who had clinical findings like muscles spasms, Tmj problems, oral mucocitis, osteoradionecrosis, facial asymmetry, trismus were patients who had undergone surgery in the last 5 years.

The causative factor oral cancer research is still growing and needs so many new approaches and the field of research will help us shape the future of cancer etiology and therapy. From Table.1 we concluded that the findings are similar to the reference journals and also, we had grouped together those reports under one article to support the reference journals.

Author's contribution:

Dr. Christina carried out the main case reports studies and drafting the entire article.

Conflict of interest: none

Funding: Self

Acknowledgements:

I thank department HOD(Prof .Gopu) Rajiv Gandhi General Hospital, for allowing me to take part in the department for this case reports, Dr. Lalrintluanga, Trinity Hospital and Dr. B. Zothankima, Zemabawk Cancer Hospital (INDIA) for allowing me to have the research in their Hospitals. I am truly thankful for their openness knowing how cancer is such an important topic.

Data Availability Statements:

The data that supports this study are not openly available due to reasons of sensitivity and are available on request from co-Author. Data are available in controlled access area at <https://msciaizawl.org>, <https://trinityhospital> and <http://www.mmc.tn.gov.in/>

References

- [1] Alper alkan, Emel Bulut and Bora Ozden. (2010)'Oral verrucous carcinoma:a study of 12 cases.' *Eur J Dent* 4(2)pp 202-207
- [2] Vivek Borse, Aditya Narayan konwar and Pronamika Buragohain. (2020)' Oral cancer diagnosis and perspectives in India.' *Scholars portal journals*1(complete)
- [3] DJ Van Daele. (2002)'Head and neck muscle spasm after radiotherapy. ' *Arch Otolaryngol Head Neck Surg* '128(8)pp 956-9
- [4] LL Zhang.(2017)'patient and treatment related risk factors associated with neck muscle spasm in nasopharyngeal carcinoma patients after intensity-modulated radiotherapy.' *BMC Cancer* 17(1) pp788
- [5] RV Lalla. (2008)' management of oral mucositis in patients with oral cancer.' *Dent Clin North Am*52(1)pp 61-77

- [6] Mur Naidu. (2004)' chemotherapy induced and /or radiation induced oral mucositis complicating the cancer treatment. '*Neoplasia*6(5)pp 423-31
- [7] TJ Brown .(2020)' management of cancer therapy associated oral mucositis. '*JCO Oncol Pract.*16(3)pp 103-109
- [8] C.Pulito .(2020)'oral mucositis :the hidden side of cancer therapy . '*J Exp Clin Cancer Res*39(1)pp 210
- [9] Vincent W C wu et al.WC .(2016)' Radiation induced temporomandibular joint disorder in post –RT . '*J Med Radiat Sci* 63(2)pp 124-32
- [10] R Nicot.(2020)' Temporomandibular disorders in head and neck cancers . '*J Stomatol Oral Maxillofac Surg*121(5)pp 563-568
- [11] S.Irani .(2016)' Distant metastasis from oral cancer ;a review and molecular biologic aspects . '*J Int Soc Prev Community Dent* 6(4)pp 265-71
- [12] J Ruzevick .(2013)' Metastatic squamous cell carcinoma to brain :an unrecognized pattern. '*J Neurooncol*112(3)pp 449-54
- [13] Mario Leimert .(2013)'An extremely rare, remote intracerebral metastasis of oral cavity cancer-a case report . '*Case Rep Med*:257046
- [14] RA Schoot .(2017)' facial asymmetry in head and neck rhabdomyosarcoma survivor. '*Pediatr Blood cancer* 64(10)doi:10.1002/pbc.265508.Eapub 2017 April 19.
- [15] Annu Singh et al .(2022)'Osteoradionecrosis of jaw :A mini review . '*Front Oral Health*3;980786
- [16] KR Nadella .(2015) 'Osteoradionecrosis of jaws:clinico therapeutic management .' '*j Maxillofac Oral Surg* 14(4)pp 891-901
- [17] Dong –Ho Guem et al.(2013)'The impact factors on 5-year survival rate in patients operated with oral cancer. '*J Korean Assoc Oral Maxillofac Surg.*38(5)pp 2017-216
- [18] SB Thavarool .(2019)' Improved survival among oral cancer patients :findings from a retrospective. '*World J Surg Oncol* 17(1)pp15