

¹Radiation Oncology, King George's Medical University, Lucknow, India, ²Pathology, King George's Medical University, Lucknow, India, ³Surgical Oncology, King George's Medical University, Lucknow, India

INTRODUCTION

- Lip and oral cavity carcinomas are the second most common of cancers in India and seventh most common in the world.¹
- In Oral Squamous Cell Carcinomas (OSCC), surgery is the mainstay of treatment with or without adjuvant Radiotherapy or Chemo-Radiotherapy, depending on relevant indications.
- Unresectable disease is often treated with Radiotherapy or Chemotherapy or both depending on patient factors and tumour factors.
- The 5 year relative survival for Stage 4 OSCC is 31.9% after treatment.
- In developing countries, most Oral Squamous Cell Cancers (OSCC) present as locally advanced disease often deemed unresectable or borderline resectable.
- In such cases trial of Induction Chemotherapy (ICT) can improve the resectability and probability of margin-free resections. However previous studies report conflicting data regarding its usefulness.^{2,3}
- Taxanes, Platinum and 5-FU (TPF) combination is superior to other chemotherapy regimes and is now the standard ICT. ^{4,5}

METHOD

OBJECTIVE OF THE STUDY:

To analyze the impact of induction chemotherapy on borderline resectable and unresectable OSCC.

Primary endpoint of the study was the achievement of surgical resectability.

Secondary end points were to note toxicities of chemotherapy and acute radiation reactions.

TYPE OF STUDY:

Prospective, Interventional and feasibility study.

SELECTION CRITERIA:

ECOG 0-1 patients with borderline resectable (suspected R1) and unresectable (stage 4B, except those with skull base involvement, internal carotid pterygoid artery encasement and plate involvement) OSCC.

STUDY COURSE :

Patients received 2-3 cycles of ICT (Docetaxel 75mg /m2 on D1, Cisplatin 75 mg/m2 D1, 5-FU 750mg/m2 D1-D5, 3 weekly) with Filgrastim support followed by surgical assessment. Unresectable patients underwent (chemo) radiotherapy or palliation, depending on relevant factors. Adjuvant (chemo)radiotherapy was given post surgery.

914P : Impact Of Induction Chemotherapy In Borderline Resectable And Unresectable Locally Advanced Oral **Squamous Cell Cancers**

D. Kukreja¹, D. Chakrabarti¹, A. Resu¹, M. Verma¹, S. Qayoom², S. Rajan³, N. Akhtar³, R. Gupta¹, M.L. Bhatt¹

BASELINE CHARACTERISTICS:		
PARTICULARS	NUMBER	PERCENTAGE
LOCATION OF PRIMARY		
TONGUE	1	4
BUCCAL MUCOSA	20	80
GINGIVA	4	16
CLINICAL T STAGE		
Т3	1	4
T4A	15	60
T4B	9	36
CLINICAL N STAGE		
N0	3	12
N1	12	48
N2	3	12
N3	7	28
OVERALL STAGE		
ш	1	4
IVA	12	48
IVB	12	48
MASTICATOR SPACE INVOLVEMENT		
YES	9	36
NO	16	64
LOW INFRATEMPORAL FOSSA INVOLVEMENT		
YES	9	36
NO	16	64

RESULTS

Between January and December 2020, 25 patients were recruited. Important baseline characteristics are detailed in table. Median number of chemotherapy cycles given were two.

Acute toxicities: Anaemia (80%, 76% grade1), neutropenia (40% grade1), diarrhoea (52%), vomiting (36%), neuropathy (20%). The incidence of any grade 3-4 toxicity was 4%. 11 out of 25 patients underwent surgery. Pathological details: ypT (T2:T3:T4a 1:1:9), ypN (N0:N1:N2:N3 5:3:2:1), yp overall stage (II:III:IVA:IVB 1:1:8:1), median (IQR) lymph nodes harvested 25 (20-37), margins (close : free 1:10), extranodal extension 12%, LVSI 12%, PNI 16%. All resected patients completed adjuvant radiotherapy. Out of 14 patients deemed non-resectable, one underwent definitive CRT, and the rest were shifted to palliation. CONCLUSION Induction chemotherapy when given in wellselected borderline resectable and unresectable





oral cancers leads to improved surgical resection rates with acceptable toxicities. This can potentially improve long-term locoregional control, which will be determined on adequate follow-up.

DISCLOSURE - I have no conflicts of interest to declare.

REFERENCES

1.Machiels JP, Leemans CR, Golusinski W, Grau C, Licitra L, Gregoire V. Squamous cell carcinoma of the oral cavity, larynx, oropharynx and hypopharynx: EHNS-ESMO-ESTRO Clinical Practice Guidelines for diagnosis, treatment and follow-up. Annals of Oncology. 2020 Nov 1;31(11):1462-75.

2.Haddad R, O'Neill A, Rabinowits G, Tishler R, Khuri F, Adkins D, Clark J, Sarlis N, Lorch J, Beitler JJ, Limaye S. Induction chemotherapy followed by concurrent chemoradiotherapy (sequential chemoradiotherapy) versus concurrent chemoradiotherapy alone in locally advanced head and neck cancer (PARADIGM): a randomised phase 3 trial. The lancet oncology. 2013 Mar 1;14(3):257-64.

3.Cohen EE, Karrison T, Kocherginsky M, Huang CH, Agulnik M, Mittal BB, Yunus F, Samant S, Brockstein B, Raez LE, Mehra R. DeCIDE: A phase III randomized trial of docetaxel (D), cisplatin (P), 5-fluorouracil (F)(TPF) induction chemotherapy (IC) in patients with N2/N3 locally advanced squamous cell carcinoma of the head and neck (SCCHN)

4. Vermorken JB, Remenar E, Van Herpen C, Gorlia T, Mesia R, Degardin M, Stewart JS, Jelic S, Betka J, Preiss JH, Van Den Weyngaert D. Cisplatin, fluorouracil, and docetaxel in unresectable head and neck cancer. New England Journal of Medicine. 2007 Oct 25;357(17):1695-704.

5.Posner MR, Hershock DM, Blajman CR, Mickiewicz E, Winquist E, Gorbounova V, Tjulandin S, Shin DM, Cullen K, Ervin TJ, Murphy BA. Cisplatin and fluorouracil alone or with docetaxel in head and neck cancer. New England Journal of Medicine. 2007 Oct 25;357(17):1705-15.