**RADIOLOGY REPORT**

**Created Date:** 26/03/2020

**Study Done:**

**MRI HEAD AND NECK WITH CONTRAST**

**Clinical information: Case of carcinoma tongue**.

A T2W heterointense enhancing lesion noted in the ventral aspect of tongue on the left lateral border measuring

approximately 4.8 x 2.9 x 2.8 cm involving the intrinsic muscles of tongue, genioglossus, and geniohyoid The

lesion is seen crossing the midline. It is seen extending into the sublingual space and floor of mouth inferiorly

and gingivobuccal sulcus laterally. It is closely abutting the left neurovascular bundle. Contralateral

neurovascular bundle appears intact.

Few subcentimetric submental (largest measuring 6 x 3 mm), left submandibular ( 7 x 5 mm) and bilateral level

II nodes seen. Enlarged enhancing left level II node measuring 1.4 x 1.2 cm noted.

Naso and oropharynx appear normal.

Supra glottis, glottis and subglottis appear normal.

Carotid and jugular vessels appear normal.

Both parotid and submandibular salivary glands appear normal.

**Impression:**

• **Growth noted in the ventral aspect of tongue at the left lateral border crossing midline and**

**inferiorly extending into the sublingual space with suspicious ipsilateral level II cervical**

**lymph nodes as described.**

**SURGICAL PATHOLOGY REPORT**

**Date of sample collection :** 27/03/2020

**Received on :** 27/03/2020

**Reported Date :** 30/03/2020

**Clinical Impression :**

H/o ulcer over left lateral border of tongue

**Gross Description :**

Received in formalin is a specimen consists of single mucosa cover tissue bit measuring 1x0.5x0.5cm. Entire

specimen submitted in one cassettes.

**Microscopic Description :**

Section show a stratified squamous lined tissue bit with on underlying infiltrating neoplasm composed of cells

arranged as nests, trabeculae and cords.Individual cells are oval to polygonal in shape having moderate amount

of cytoplasm with round to oval vesicular nuclei with prominent nucleoli exhibiting moderate

pleomorphism.Individual cell keratinisation is noted. Mitosis is noted .Mild peritumoral lymphoid infiltrate is

seen. The lesion is seen to infiltrate into the underlying muscle.

**Impression :**

Ulcer over left lateral border of tongue :Moderately differentiated squamous cell carcinoma.

**SURGICAL PATHOLOGY REPORT**

**Date of sample collection :** 13/04/2020

**Received on :** 13/04/2020

**Reported Date :** 20/04/2020

**Clinical Impression :**

Ca tongue carcinoma (Left)

**Gross Description :**

Received in fresh is a specimen labelled as " Left base of tongue margin" consists of mucosa covered tissue

measuring 0.7x0.3x0.2cm.

Section-1

Frozen read as " Shows only muscle"

Subsequently received in formalin are 13 specimens.

The Ist specimen labelled as " Total glossectomy specimen" tagged with double anterior single left lateral

consists of tongue with left lateral floor of mouth mucosa , part of hyoid bone, and surrounding soft tissue.

Specimen whole measuring 8.5 (AP) x 8 (SI) x 4.5 (ML) cm. The lesion is 1.5 cm from the anterior floor of

mounth mucosal soft tissue. ? The lesion is seen to infiltrate into the muscle. On the left lateral ventral aspect of

tongue,an ulcerative lesion with surrounding leuokoplakic patch seen measuring 5.2 (AP )x 4.5 (SI) x 2.8 (ML)

cm.The lesion is extending within the tongue and crossing the midline and is grey white and firm in consistency.

Margins-

1 cm from the lateral floor of mouth mucosal and soft tissue margin, 2.5 cm from medial floor of mouth

mucosal and soft tissue margin

0.6 cm from the inferior soft tissue margin

0.7 cm from the medial soft tissue margin

0.6 cm from the posterioinferior soft tissue margin

0.5 cm from base of tongue(posterior) mucosal margin

Tumor in 0.2 cm from hyoid bone and 0.5 cm from inferior soft tissue margin

Representative sections are submitted as follows

A1-A2- left lateral soft tissue margin radial (tumor crossing mid line)

A3-A4- lateral floor of mouth mucosal and soft tissue margin (radial)

A5- Antero inferior soft tissue margin muscle ( shaved )

A6- Anterior floor of mouth mucosal and soft tissue margin (shaved)

A7- medial floor of mouth mucosal and soft tissue margin (radial)

A8- A9- Posterior base of tongue, mucosal and soft tissue margin (radial)

A10- Inferolateral soft tissue margin (shaved)

A11 - A12- Tumor with muscle of tongue

A13 - A14- Tumor with mucosal ulcer with leukoplakic patch

A15-A16-tumor with normal mucosa

A17-A18 - Tumour with hyoid bone and inferior soft tissue margin

Specimen II labelled as "Left lateral mucosal margin gingiva" consists of mucosal tissue bits measuring 1 x 0.3 x

0.2 cm. Entire specimen submitted in cassette B

Specimen III labelled as " Final hyoid margin" consists of 2 grey brown tissue bits, one measuring 0.7 cm in

greatest dimension and other measuring 0.5 cm in greatest dimension. Entire specimen submitted in cassette C

Specimen IV labelled as "Left level IV" consists of nodular fibrofatty tissue measuring 3.5 x 2 x 1 cm. 15 lymph

nodes identified largest measuring 1 cm in greatest dimension and smallest measuring 0.3 cm in greatest

dimension. Representative sections are submitted as follows

D1 - 4 lymph nodes

D2 - 5 lymph nodes

D3 - 5 lymph nodes

D4 - Fibrofatty tissue + 1 lymph node

Specimen V labelled as " Right level IV" consists of nodular fibrofatty tissue measuring 3 x 2 x 0.7 cm. 8 lymph

nodes identified, largest measuring 0.9 cm in greatest dimension and smallest measuring 0.4 cm in greatest

dimension. Entire specimen submitted as follows

E1 - 4 lymph nodes

E2 - 4 lymph nodes

E3 - Fibrofatty tissue

Specimen VI labelled as "Right level III" consists of nodular tissue bit measuring 3 x 1.8 x 0.7 cm. 3 lymph

nodes identified. Entire specimen submitted in F1-F2

F1 - 2 lymph nodes

F2 - Fibrofatty tissue

Specimen VII labelled as "Left level III" consists of nodular fibrofatty tissue measuring 2 x 1.3 x 1 cm. 3lymph

nodes identified, largest measuring 2.5x0.5x0.5cm and smallest measuring 0.5 cm in greatest dimension. Entire

specimen submitted as follows

G1-1 lymph node bisected

G2-1 lymph node + Fibrofatty tissue

Specimen VIII labelled as "Left level III B" consists of nodular fibrofatty tissue measuring 2x1.5x1cm. 6

Lymphnodes identified, largest measuring 1 cm in greatest dimension and smallest measuring 0.5 cm in greatest

dimension. Entire specimen submitted as follows

H1 - 6 lymph nodes

H2 - Fibrofatty tissue

Specimen IX labelled as " Left level IIA" consists of nodular fibrofatty tissue measuring 4x2.8x1.8cm. 15

Lymph nodes identified, largest measuring 1.8x1.5x0.8 cm, smallest measuring 0.5 cm in greatest dimension.

Entire specimen submitted as follows

J1 - J2 - lymph node bisected

J3 - 3 lymph node bisected

J4 - 5 lymph node

J5 - Fibrofatty tissue

Specimen X labelled as "Right level II A + B" consists of nodular fibrofatty tissue measuring 3.2 x 3 x 1.5 cm. 7

Lymph nodes identified largest measuring 1.9 x 1 x 0.5 cm, smallest measuring 0.5 cm in greatest dimension.

Entire specimen submitted as follows

K1 - Largest lymph node

K2 - 1 lymph node bisected 1.5 cm in greatest dimension.

K3 - 2lymph node

K4 -3 lymph node

K5 - Fibrofatty tissue

Specimen XI labelled as " Left level IB" consists of nodular tissue bits measuring 4.5x3x1cm. 5 Lymph nodes

identified largest measuring 1cm greatest dimension. Smallest measuring 0.5cm in greatest dimension. ? Salivary

gland identified measuring 3.5 x 3.2 x 1 cm.Cut surface of salivary gland appears unremarkable. Representative

sections submitted as follows

L1- 2 lymph nodes

L2- 3 lymph nodes

L3 - salivary gland

Specimen XII labelled as " Right level I B" consists of 5 nodular fibrofatty tissue measuring 4 x 4.2 x 1.1 cm. 5

Lymph nodes identified largest measuring 1cm greatest dimension. Smallest measuring 0.5cm in greatest

dimension. Salivary gland identified measuring 3.8 x 3.6 x 1 cm. A duct vessel identified coming out of left

measuring 1 cm length. Cut surface of salivary gland appears unremarkable.

Representative section submitted as follows

M1 - 3 lymph nodes

M2 - 2 lymph nodes

M3 - Duct with resection margin

M4 - Salivary gland tissue

Specimen XIII labelled as "Level 1 A" consists of 5 nodular fibrofatty tissue measuring 3x1.8x0.7cm. 3 Lymph

nodes identified, largest measuring 0.8 cm greatest dimension, smallest measuring 0.3 cm in greatest dimension.

Entire specimen submitted in N1-N2.

N1 - 3 lymph nodes

N2 - Fibrofatty tissue

**Microscopic Description :**

Frozen section

Left base of tongue margin - Frozen permanent confirms frozen section

A] Total Glossectomy:

Sections shows an infiltrating neoplasm arising from the overlying dysplastic squamous epithelium composed of

neoplastic squamous cells arranged in large lobules, nests, occasional cords, trabeculae and focally single cells.

Individual cells have moderate eosinophilic cytoplasm, round to oval vesicular nucleus and prominent nucleoli.

Mild peritumoral lymphocytic infiltrate seen with marked desmoplasia around the tumor. The lesion is seen to

infiltrate into the underlying muscle (A1) and cross the mid line. Over lying epithelium shows ulceration.

Numerous keratin pearls seen. Hyoid bone is free .

No LVE noted

PNI seen (A2,A4)

LHR - Patchy

WPOI - Pattern 5

DOI - 3 cm

Margins - All mucosal and soft tissue margins are free of tumour

Closest margins: base of tongue mucosal and inferior soft tissue margin(0.5cms each)

B] Left lateral mucosal margin - Gingiva: Free of tumor

C] Final Hyoid margin- Free of tumor .shows muscle tissue only.

D] Left level IV - 2/15 Lymph nodes show metastasis, largest deposit 0.5 cm. No extranodal extension

E] Right level IV - 8 reactive nodes, free of tumor

F] Right level III -3 reactive nodes - free of tumor

G] Left level III - 1/3 lymph node show metastasis, largest deposit 1 cm, extranodal extension seen

H] Left level II B - 0/6 reactive lymph node, free of tumor

J] Left level II A - 3/15 lymph nodes, show metastasis, largest deposit - 1.5cm

K] Right level II A + B - 1/11 - Lymph nodes show mets, largest deposit - 1.5 cm, extranodal extension absent

L] Left level I B - 1/4 nodes show metastasis measuring 0.5 cm, extranodal extension absent, salivary gland free

of tumor

M] Right level I B -5 reactive nodes, free of tumor, salivary gland free of tumor.

N] Level IA- 3 reactive nodes , free of tumor

**Impression :**

Total Glossectomy + B/L ND + STF:

- Moderately differentiated Squamous cell carcinoma, Left lateral border of tongue

-Tumor size- 5.2 x 4.5 x 2.8 cm

-DOI-3cm

-PNI seen in small nerves

-NO LVE

-LHR pattern - 2 (1+)

-WPOI pattern - 5 (3+)

-Risk group - High

-All mucosal and soft tissue margins are free of tumor

-Salivary gland tissue free of tumor

pT4N2cMx

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| **Date of Admission :**12/04/2020 | **Date of Procedure :**13/04/2020 |

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| **Date of Discharge :**23/04/2020 |

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| **Discharging Status :**FOLLOW UP DISCHARGE SUMMARY |

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| **DIAGNOSIS :** |
| Carcinoma tongue. |

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| **PROCEDURE DONE :** |
| WLE(Pull-Through technique Total Glossectomy) + B/L SND(I-IV) + ALT Flap + T'stomy + PEG Tube insertion under GA on 13-04-2020 Re-exploration of neck wound under GA done on 13.04.2020 |

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| **HISTORY :** |
| 51 year old gentleman, ulcer over the left lateral border of tongue since 5 months painful + no other complaints no neck swelling |

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| **MEDICINE ON ADMISSION :** |
| Tab. Amlong 5mg OD |

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| **PAST HISTORY :** |
| Systemic HTN since 6 years on Tab Amlong 5 mg OD No h/o DM/ DLP/ Asthma/ TB/ Seizures/ CAD / CVA / Thyroid Dysfunction |

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| **PERSONAL HISTORY :** |
| No recent h/o fever and cough Bowel and bladder normal Good effort tolerance No Habituation to alcohol or smoking. |

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| **CLINICAL EXAMINATION :** |
| o/e: KPS 90 mouth opening adequate UPG over the left lateral border of tongue 4x3cm, FOM TLS free, BOT free, induration crossing midline. Neck: no palpable nodes |

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| Biopsy: Ulcer over left lateral border of tongue :Moderately differentiated squamous cell carcinoma. MRI: A T2W heterointense enhancing lesion noted in the ventral aspect of tongue on the left lateral border measuring approximately 4.8 x 2.9 x 2.8 cm involving the intrinsic muscles of tongue, genioglossus, and geniohyoid The lesion is seen crossing the midline. It is seen extending into the sublingual space and floor of mouth inferiorly and gingivobuccal sulcus laterally. It is closely abutting the left neurovascular bundle. Contralateral neurovascular bundle appears intact. Few subcentimetric submental (largest measuring 6 x 3 mm), left submandibular ( 7 x 5 mm) and bilateral level II nodes seen. Enlarged enhancing left level II node measuring 1.4 x 1.2 cm noted. |

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| **COURSE IN THE HOSPITAL AND DISCUSSION :** |
| The patient was admitted with above mentioned complaints. He underwent WLE(Pull-Through technique Total Glossectomy) + B/L SND(I-IV) + ALT Flap + T'stomy + PEG Tube insertion under GA on 13-04-2020. His intra operative period was uneventful. Immediately post op he developed bleeding from the neck wound. He was taken for re-exploration under GA on 13.04.2020. His post operative period was then uneventful. His drains were removed on POD 2/3. He was decannulated on POD 4. His clips and sutures were removed by POD 10. He is now being discharged in a stable and afebrile condition with the following advice with PEG tube in situ. At the time of discharge : stable, afebrile, clips and sutures insitu |

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| **OPERATIVE FINDINGS :** |
| Diagnosis: Carcinoma Left Tongue cT4aN2cM0 Surgery: WLE(Pull-Through technique Total Glossectomy) + B/L SND(I-IV) + ALT Flap + T'stomy under GA on 13-04-2020 Findings: Hard 2x1cm lymph node at Left level-II AND III 5X4X3CM Indurated growth involving the left lateral border of the tongue, BOT AND Left side floor of mouth. Lesion crossing the midline. Alveolus and tip is free. Procedure: WLE(Pull-Trough technique Total Glossectomy): Nasotracheal intubation done with sterile and aseptic precautions. Patient postioned, cleaned and drapped. Visor Skin crease incision made. Subplatysmal flaps elevated superiorly till angle of mandible, inferiorly till clavicle. After B/l level-I clearance, Peri-osteal incision was made infero-Medial border of the mandible on both sides. Intra-Orally mucosal cuts made with adequate margins. Tongue was pulled into the neck, inspected and palpated for deeper cuts. Taking adequate margins Total glossectomy (with Left side part of the Hyoid) was done and sent for hpe. Hemostasis acheived. Defect was repaired with ALT Flap. B/L Selective neck dissection: Ipsilateral and contralateral anterior belly of digastric muscle defined. Fibrofatty tissue from the level-Ia taken and sent for hpe. Left Facial artery and common facial vein identified and ligated stump preserved for Free flap vessels end-to-end anastomosis. Left Significant 1x1cm peri-facial lymph nodes and level-Ib fibrofatty tissue along with submandibular gland removed in toto and sent for hpe. Left Sternomastoid retracted laterally ijv, carotids and spinal accessory nerves preserved. Left Level-IIa, IIB, III and IV lymphnodes and fibrofatty tissue removed and sent for hpe seperately. Same steps done on right side SND Hemostasis acheived. Valsalva given to check bleeding - no active bleeding seen. 14# romovac drain secured. Wound closed in layers. Tracheostomy done and shifted to 41 icu for immediate post op care. left ALT free flpa under GA Design Markings done. Skin perforator identified with the hand held doppler and skin paddle approc 10 x6cm elliptical shaped marked around it. Part painted and draped. Medial incision given along the marked skin paddle and extended distally as well as proximally. Rectus femoris muscle identified as a bipennate muscle. The dissection continued in subfacial plane from medial to lateral till the intermuscular septum between rectus femoris and vastus lateralis. A musculocutaneous perforator identified. Dissection proceeded along the i.m.septum to identify the pedicle, descending branch of lateral circumflex femoral artery and the intermuscular perforator entering the muscle. The perforator dissected along with a cuff of muscle around it. The pedicle dissected till the main vessel, clipping and dividing all the branches. Posterior cut given and the flap delivered by dividing the pedicle. Donor site closed primarily after achieving haemostasis and placing the drain. donor site closed primarily . Inset: flap inset done starting inderiorly on left side vallecula to mucosa anterior to epiglootis to flooe of mouth mucosa on right side and interdental on left side a Microanatamosis : anastomosis done to facial artery and vein. layers Diagnosis: Bleeding with Neck hematoma Surgery: RE-EXPLORATION under ga on 13.04.2020 Procedure: PPD Neck sutures opened. Bleeder found - Left facial artery clips was slipped due to High BP. Vessel was ligated. Wash given. Neck wound was closed in layers. |

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| **ADVICE ON DISCHARGE :** |
| Oral Care Wound Care PEG Tube care |

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| **WHEN TO OBTAIN URGENT CARE:** |
| In case of fever/bleeding/infection/breathlessness |

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| **DIET RECOMMENDATIONS :** |
| PEG Feeds @ 100cc/hr, HPD oral sips of water |

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| **PHYSICAL ACTIVITY :** |
| As tolerated |

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| **DISCHARGE MEDICATION :** |
| \*All current medication have been reviewed and reconciled into the medication list. Tab. Pan 40mg 1-0-0 x 3 days Tab. PCM 650mg 1-1-1 x 3 days Syp Dexorange 10ml 1-0-0 x 15 days To continue: Tab. Amlo 5mg OD |

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| **HEAD AND NECK - TUMOUR BOARD** |

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|  | **TB Date:**  25/03/2020 | | |
|  | **Tumour Type:** Primary | | |
| |  | | --- | | **Presenting Complaints: Ulcer** | |  | | **Descriptive History and Examination:**  51 year old gentleman, ulcer over the left lateral border of tongue since 5 months painful + no other complaints no neck swelling o/e: KPS 90 mouth opening adequate UPG over the left lateral border of tongue 4x3cm, FOM TLS free, BOT free, induration crossing midline. Neck: no palpable nodes | |  | | | | | |
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| |  | | --- | | **Co-Morbidities: Hypertension** | |  | | **Comments:**  HTN on medications | |  | | | | | |
| **MRI:**  A T2W heterointense enhancing lesion noted in the ventral aspect of tongue on the left lateral border measuring approximately 4.8 x 2.9 x 2.8 cm involving the intrinsic muscles of tongue, genioglossus, and geniohyoid The lesion is seen crossing the midline. It is seen extending into the sublingual space and floor of mouth inferiorly and gingivobuccal sulcus laterally. It is closely abutting the left neurovascular bundle. Contralateral neurovascular bundle appears intact. Few subcentimetric submental (largest measuring 6 x 3 mm), left submandibular ( 7 x 5 mm) and bilateral level II nodes seen. Enlarged enhancing left level II node measuring 1.4 x 1.2 cm noted. | |
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| Descriptive Plan:  Carcinoma tongue cT3N0Mx Imaging awaited 01.04.20: MRI done, CT Chest done HPER: Ulcer over left lateral border of tongue :Moderately differentiated squamous cell carcinoma. HPER: Ulcer over left lateral border of tongue :Moderately differentiated squamous cell carcinoma. Plan: WLE + B/L Neck + STF + PEG | |  |
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**Progress Notes**

**Date : 24/03/2020**

**ProgressNotes :**

51 year old gentleman,

ulcer over the left lateral border of tongue since 5 months

painful +

no other complaints

no neck swelling

HTN on medications

o/e:

KPS 90

mouth opening adequate

UPG over the left lateral border of tongue 4x3cm, FOM TLS free, BOT free, induration crossing midline.

Neck: no palpable nodes

adv: MRI HN with contrast

CT Chest Plain

Biopsy after imaging

PAC, PAC Ix

**Operative Notes- WLE+ND**

**Date : 13/04/2020**

**ProgressNotes :**

Diagnosis:

Carcinoma Left Tongue cT4aN2cM0

Surgery:

WLE(Pull-Through technique Total Glossectomy) + B/L SND(I-IV) + ALT Flap + T'stomy under ga on

13-04-2020

Surgeons:

Dr KK/DB, Dr Yogesh, Dr Nagesh and Dr Tejal

Findings:

Hard 2x1cm lymph node at Left level-II AND III

5X4X3CM Indurated growth involving the left lateral border of the tongue, BOT AND Left side floor of

mouth. Lesion crossing the midline.

Alveolus and tip is free.

Procedure:

WLE(Pull-Trough technique Total Glossectomy):

Nasotracheal intubation done with sterile and aseptic precautions.

Patient postioned, cleaned and drapped.

Visor Skin crease incision made.

Subplatysmal flaps elevated superiorly till angle of mandible, inferiorly till clavicle.

After B/l level-I clearance, Peri-osteal incision was made infero-Medial border of the mandible on both sides.

Intra-Orally mucosal cuts made with adequate margins.

Tongue was pulled into the neck, inspected and palpated for deeper cuts.

Taking adequate margins Total glossectomy (with Left side part of the Hyoid) was done and sent for hpe.

Hemostasis acheived.

Defect was repaired with ALT Flap. B/L Selective neck dissection:

Ipsilateral and contralateral anterior belly of digastric muscle defined.

Fibrofatty tissue from the level-Ia taken and sent for hpe.

Left Facial artery and common facial vein identified and ligated stump preserved for Free flap vessels

end-to-end anastomosis.

Left Significant 1x1cm peri-facial lymph nodes and level-Ib fibrofatty tissue along with submandibular gland

removed in toto and sent for hpe.

Left Sternomastoid retracted laterally ijv, carotids and spinal accessory nerves preserved.

Left Level-IIa, IIB, III and IV lymphnodes and fibrofatty tissue removed and sent for hpe seperately.

Same steps done on right side SND

Hemostasis acheived.

Valsalva given to check bleeding - no active bleeding seen.

14# romovac drain secured.

Wound closed in layers.

Tracheostomy done and shifted to 41 icu for immediate post op care.

Patient developed Neck hematoma with bleeding

Neck sutures opened.

Bleeder found - Left facial artery clips was slipped due to High BP.

Vessel was ligated.

Wash given.

Neck wound was closed in layers.

**Progress Notes**

**Date : 29/04/2020**

**ProgressNotes :**

Carcinoma tongue.

WLE(Pull-Through technique Total Glossectomy) + B/L SND(I-IV) + ALT Flap + T'stomy + PEG Tube

insertion under GA on 13-04-2020 Re-exploration of neck wound under GA done on 13.04.2020

HPEo/

e- oc/op- looks healthy

sutures +in neck

remaining suture removal today

plan RT

swallowing evaluation

Dental consultation

mouth opening exercise

**Speciality :** RadiationOncology

**D/O Commencement of RT** 18/05/2020 **D/O Completion of RT** 26/06/2020

**FINAL DIAGNOSIS, STAGE AND HISTOLOGY**

Carcinoma Left Lateral Border of Tongue.

S/P WLE(Pull-Through technique Total Glossectomy) + B/L SND(I-IV) + ALT Flap + T'stomy + PEG Tube

insertion under GA on 13-04-2020.

Re-exploration of neck wound under GA done on 13.04.2020.

pT4aN3bM0.

Moderately differentiated Squamous cell carcinoma.

Completed Post Operative Concurrent chemoradiation therapy using IGRT technique.

**CLINICAL HISTORY AND PHYSICAL FINDINGS**

Mr. Shajahan, 51 year old gentleman from Aluva, painter by occupation presented with complaints of ulcer over

the left lateral border of tongue since 5 months. Initially was small in size then later increased. It was associated

with pain. No other complaints.

He was evaluated at local hospital.

Biopsy was done which was suggestive of Squamous Cell Carcinoma.

He came here for further evaluation and management.

MRI done showed enhancing lesion noted in the ventral aspect of tongue on the left lateral border measuring

approximately 4.8 x 2.9 x 2.8 cm involving the intrinsic muscles of tongue, genioglossus, and geniohyoid. The

lesion is seen crossing the midline. It is seen extending into the sublingual space and floor of mouth inferiorly

and gingivobuccal sulcus laterally. It is closely abutting the left neurovascular bundle. Contralateral

neurovascular bundle appears intact. Few subcentimetric submental (largest measuring 6 x 3 mm), left

submandibular ( 7 x 5 mm) and bilateral level II nodes seen. Enlarged enhancing left level II node measuring 1.4

x 1.2 cm noted.

Biopsy: Ulcer over left lateral border of tongue reported as Moderately differentiated squamous cell carcinoma.

He underwent WLE (Pull-Through technique Total Glossectomy) + B/L SND(I-IV) + ALT Flap + T'stomy +

PEG Tube insertion under GA on 13-04-2020 Re-exploration of neck wound under GA done on 13.04.2020.

Post OP HPE:Total Glossectomy + B/L ND + STF reported as Moderately differentiated Squamous cell

carcinoma, Left lateral border of tongue.

Tumor size- 5.2 x 4.5 x 2.8 cm.

DOI-3cm.

PNI seen in small nerves

-NO LVE

-LHR pattern - 2 (1+) -WPOI pattern - 5 (3+).

Risk group - High.

All mucosal and soft tissue margins are free of tumor.

Nodes-

Left level IV - 2/15 Lymph nodes show metastasis, largest deposit 0.5 cm. No extranodal extension.

Left level III - 1/3 lymph node show metastasis, largest deposit 1 cm, extranodal extension seen.

Left level II A - 3/15 lymph nodes, show metastasis, largest deposit - 1.5cm.

Right level II A + B - 1/11 - Lymph nodes show mets, largest deposit - 1.5 cm, extranodal extension absent.

Left level I B - 1/4 nodes show metastasis measuring 0.5 cm, extranodal extension absent, salivary gland free of

tumor.

He was pathologically staged as pT4aN3bMx.

Her case was discussed in multidisciplinary tumor board and was planned for Post Operative Concurrent

chemoradiation therapy.

**INVESTIGATIONS :**

**Haemogram:**

**Date: Hb: g/dl PCV: % PLT:**

**ku/ml**

**TC:**

**ku/ml**

**DC: N % L:% E: % ESR:**

**mm/1st hr**

14/04/2020 10.1 28.7 176 11.45 81.7 12.3 0.0 -

15/04/2020 7.0 22.1 183 10.07 70.0 20.3 0.4 -

16/04/2020 8.0 24.0 192 13.88 86.6 10.7 0.0 -

17/04/2020 9.3 29.3 255 15.87 79.6 14.0 0.0 -

20/04/2020 10.4 30.5 360 12.51 69.4 21.1 4.9 -

22/06/2020 11.7 38.0 256 3.67 60.3 21.0 0.4 -

**Liver Function Test:**

**Date: T.**

**Bilirubin:**

**mg/dl**

**D.**

**Bilirubin:**

**mg/dl**

**SGOT:**

**IU/L**

**SGPT:**

**IU/L**

**ALP:**

**IU/L**

**T.**

**Protein:**

**gms/dl**

**S. Alb:**

**g/dl**

**S. Glob:**

**g/dl**

13/04/2020 0.54 0.16 20.3 16.7 65.0 7.9 4.8 3.01

22/06/2020 0.14 0.07 15.7 14.4 83.0 8.2 4.4 3.78

**Renal Function Test and Serum Electrolytes:**

**Date: Urea: mg/dl Creatinine: mg/dl Na+: mEq/L K+: mEq/L**

12/04/2020 - - 139.9 4.3

14/04/2020 13.3 0.67 136.8 4.3

16/04/2020 - - 140.2 4.2

17/04/2020 - - 141.1 3.9

22/06/2020 - 0.87 - -

Date: 22/06/2020

Glucose [R]-Plasma : 118.3 mg/dl RBC-COUNT-Blood : 4.54 M/uL

MCV-Blood : 83.6 fL MCH-Blood : 25.8 pg

MCHC-Blood : 30.9 g/dl RDW-Blood : 13.4 %

MPV-Blood : 6.6 fL MONO -Blood : 17.3 %

BASO-Blood : 1.0 %

Date: 20/04/2020

RBC-COUNT-Blood : 3.57 M/uL MCV-Blood : 85.4 fL

MCH-Blood : 29.1 pg MCHC-Blood : 34.1 g/dl

RDW-Blood : 13.5 % MPV-Blood : 8.6 fL

MONO -Blood : 4.3 % BASO-Blood : 0.3 %

Date: 17/04/2020

RBC-COUNT-Blood : 3.37 M/uL MCV-Blood : 87.0 fL

MCH-Blood : 27.7 pg MCHC-Blood : 31.9 g/dl

RDW-Blood : 13.9 % MPV-Blood : 7.9 fL

MONO -Blood : 6.3 % BASO-Blood : 0.1 %

Date: 16/04/2020

RBC-COUNT-Blood : 2.85 M/uL MCV-Blood : 84.2 fL

MCH-Blood : 28.1 pg MCHC-Blood : 33.3 g/dl

RDW-Blood : 13.5 % MPV-Blood : 9.4 fL

MONO -Blood : 2.6 % BASO-Blood : 0.1 %

Date: 15/04/2020

RBC-COUNT-Blood : 2.73 M/uL MCV-Blood : 86.2 fL

MCH-Blood : 27.6 pg MCHC-Blood : 32.1 g/dl

RDW-Blood : 14.0 % MPV-Blood : 8.2 fL

MONO -Blood : 9.0 % BASO-Blood : 0.3 %

Date: 14/04/2020

RBC-COUNT-Blood : 3.44 M/uL MCV-Blood : 83.4 fL

MCH-Blood : 29.4 pg MCHC-Blood : 35.2 g/dl

RDW-Blood : 13.3 % MPV-Blood : 9.3 fL

MONO -Blood : 5.8 % BASO-Blood : 0.2 %

PT[Prothrombin Time with INR]-Plasma :

15.50/14.0/1.13 sec

RBC-COUNT-Blood : 3.67 M/uL

MCV-Blood : 82.0 fL MCH-Blood : 27.2 pg

MCHC-Blood : 33.2 g/dl RDW-Blood : 13.5 %

MPV-Blood : 9.0 fL MONO -Blood : 5.1 %

MRD No:2177283 Name:Mr. M. K SHAJAHAN

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BASO-Blood : 0.2 %

Date: 13/04/2020

Blood typing; ABO and RhD : A Rh D Positive

Date: 12/04/2020

Compatibility test; cross match complete (3 tests) :

Compatible

Blood typing; ABO and RhD : A Rh D Positive

HBs Ag Test - Emergency Screen : 0.27 : Non

reactive

Anti HCV - Emergency Screen : 0.04 : Non reactive

HIV - Emergency Screen(P24 Ag and HIV 1 and 2

Ab) : 0.10 : Non reactive

APTT[Activated Partial Thrombo-Plasma : 25.6/32 s

PT[Prothrombin Time with INR]-Plasma :

12.50/14.0/0.87 sec

**HISTOPATHOLOGY REPORTS**

Post OP HPR [Dated: 20/4/2020]

Total Glossectomy + B/L ND + STF:

Moderately differentiated Squamous cell carcinoma, Left lateral border of tongue

Tumor size- 5.2 x 4.5 x 2.8 cmDOI-3cm

PNI seen in small nerves

NO LVE

LHR pattern - 2 (1+)

WPOI pattern - 5 (3+)

Risk group - High

All mucosal and soft tissue margins are free of tumor

Salivary gland tissue free of tumor

Left level IV - 2/15 Lymph nodes show metastasis, largest deposit 0.5 cm. No extranodal extension

Right level IV - 8 reactive nodes, free of tumor

Right level III -3 reactive nodes - free of tumor

Left level III - 1/3 lymph node show metastasis, largest deposit 1 cm, extranodal extension seen

Left level II B - 0/6 reactive lymph node, free of tumor

Left level II A - 3/15 lymph nodes, show metastasis, largest deposit - 1.5cm

Right level II A + B - 1/11 - Lymph nodes show mets, largest deposit - 1.5 cm, extranodal extension absent

Left level I B - 1/4 nodes show metastasis measuring 0.5 cm, extranodal extension absent, salivary gland free of

tumor

Right level I B -5 reactive nodes, free of tumor, salivary gland free of tumor.

Level IA- 3 reactive nodes , free of tumor

pT4aN3bMx

**RADIOLOGY AND NUCLEAR MEDICINE REPORTS**

MRI Head and Neck with Contrast [Dated: 26/3/2020]

A T2W heterointense enhancing lesion noted in the ventral aspect of tongue on the left lateral border measuring

approximately 4.8 x 2.9 x 2.8 cm involving the intrinsic muscles of tongue, genioglossus, and geniohyoid The

lesion is seen crossing the midline. It is seen extending into the sublingual space and floor of mouth inferiorly

and gingivobuccal sulcus laterally. It is closely abutting the left neurovascular bundle. Contralateral

neurovascular bundle appears intact. Few subcentimetric submental (largest measuring 6 x 3 mm), left

submandibular ( 7 x 5 mm) and bilateral level II nodes seen. Enlarged enhancing left level II node measuring 1.4

x 1.2 cm noted. Naso and oropharynx appear normal. Supra glottis, glottis and subglottis appear normal. Carotid

and jugular vessels appear normal. Both parotid and submandibular salivary glands appear normal.

Impression: Growth noted in the ventral aspect of tongue at the left lateral border crossing midline and inferiorly

extending into the sublingual space with suspicious ipsilateral level II cervical lymph nodes as described.

Treatment Given:

**SURGERY DETAILS :**

S/P WLE(Pull-Through technique Total Glossectomy) + B/L SND(I-IV) + ALT Flap + T'stomy + PEG Tube

insertion under GA on 13-04-2020.

Re-exploration of neck wound under GA done on 13.04.2020.

**RADIATION DETAILS :**

Intent: Curative, as adjuvant chemoradiation.

Technique: IGRT

Site of Disease: Left lateral border tongue

Cat Scan Simulation on 11/5/2020

Complex Computerised Treatment Planning on 18/5/2020

RT Started on 18/5/2020

RT Completed on 26/6/2020

Treatment breaks- Nil

Total Dose: 6600 cGy in 30 fractions

**Primary Tumour And Drainage Area :**

Site: PTV 66 Gy [Left level III Nodal station]

Energy: 6 MV Photons

Dose: 6600 cGy in 30 fractions

Schedule: 220 cGy per fraction and 5 fractions a week

Dose prescribed to 100 % isodose line.

Site: PTV 60 Gy [Post OP bed+ Bilateral level I- III, Left level IV and V Nodal station]

Energy: 6 MV Photons

Dose: 6000 cGy in 30 fractions

Schedule: 200 cGy per fraction and 5 fractions a week

Dose prescribed to 100 % isodose line.

Site: PTV 54 Gy [Right level IV and Right level V and Left RP/RS]

Energy: 6 MV Photons

Dose: 5400 cGy in 30 fractions

Schedule: 180 cGy per fraction and 5 fractions a week

Dose prescribed to 100 % isodose line

**CHEMOTHERAPY DETAILS :**

Received 6 cycles of Concurrent chemotherapy with Inj.Cisplatin 70 mg weekly. Last on 22/6/2020.

**TREATMENT COURSE :**

Mr. M K Shajahan, 52 year old gentleman, diagnosed as a case of Carcinoma Left lateral border Tongue, Post

Operative, pT4N2cMx, completed planned course of PostOperative Concurrent chemoradiation therapy well

without interruptions. He was taking PEG feeds and is on step I analgesics.

**ADVICES AT DISCHARGE, MEDICATIONS AND FURTHER PLAN**

1. Review after 2 weeks in RT OPD.

2. Review after 4-6 weeks in HNS-RT Combined Follow Up Clinic for evaluation of Primary Disease, Neck

Nodes.

3. Review every month in RT OPD for one year and then as advised.

1. CXR PA View, CBC, RFT and Liver Enzymes [SGOT, SGPT and Alkaline Phosphatase] 4- 6 weeks post RT

and then as advised by the Physician [CXR every 6 months].

2. TFT [T3, T4, TSH] every 6 months routinely to rule out post RT hypothyroidism.

Oral and Skin Care:

1. Mix a pinch of Soda Bicarbonate powder and one table spoon of common salt in a liter of water and use as

mouth wash every 4 to 6 hours. Neem Leaf mouth wash as advised.

2. Skin care: Avoid applying oil and washing with soap. Gentle splashing of water followed by mopping with

towel. Normal daily bath can be resumed after 3 weeks of completion of RT. Apply ointments or creams only as

per Doctors' advice.

3. Silver Sulfadiazine Cream for Local Application TID for wounds [for healing].

Specific:

1. High calorie feeds: 3500 calorie and 120 gm protein with mineral and vitamin supplementation in 2.5 liters of

liquid diet. Orally as tolerated.