**Radiology Report**

**Created Date:** 25/06/2015

**Study Done:**

**MDCT NECK AND CHEST CONTRAST**

**Neck:**

Visualized brain parenchyma is normal.

Paranasal sinus are normal.

Nasopharynx, oropharynx are normal.

An ill defined enhancing lesion noted involving the lower alveolusin the region of the left carina extending into

the medullary cavity.

Soft tissue lesion is seen bulging into sublingual space and seen crossing the midline.

Mylohyoid and attachment of genioglossus muscles are in close proximity to the lesion and infiltration into the

muscle cannot be ruled out. Anteriorly the lesion is seen infiltrating the buccal mucosa- ? infiltration of

orbicularis oris muscle.

The right submandibular gland is enlarged and shows enhancement. The right submandibular duct is dilated- ?

due to infiltration of the duct opening by the tumor.

Left submandibular gland is atrophic.

Multiple lymphnodes noted at the following levels:

Bilateral level Ib (largest 8mm on right side).

Bilateral level II (largest 9mm on right side).

Bilateral level III (largest 8mm on right side).

Right level IV (largest 3mm).

Bilateral level V (largest 8mm on left side3).

Right level VI (6mm).

Bilateral parotid glands are normal.

Thyroid gland is normal.

**Chest:**

Bilateral axillary lymphnodes noted largest 1.6cm bilaterally.

Tracheobronchial tree is normal.

Subcentimetric lower paratracheal and para aortic lymphnodes noted.

A 1.3cm right hilar lymphnodes noted.

Mediastinal vascular structures are normal.

Right apical lobe shows Fibrotic changes.

Bilateral apical lobes show emphysematous changes.

No suspicious nodules/ pleural effusion.

Liver shows no focal lesion. No IHBRD.

GB, spleen, pancreas are normal.

Bilateral adrenals are normal.

Left visualized kidney shows cortical scarring with calcification.

Bones show no focal lesions.

**Impression:**

• **Ill defined soft tissue lesion involving the mandible in the region of the left carina with**

**sublinguinal extension and infiltration of the buccal mucosa. The right submandibular gland**

**is enlarged and the duct is dilated- ? due to infiltration of duct opening.**

• **Few small subcentimetric cervical lesion I, II, III, IV, V and VI lymphnodes noted.**

• **No evidence of suspicious nodules in the lung and liver**

**SURGICAL PATHOLOGY REPORT**

**Date of sample collection :** 07/10/2015

**Received on :** 07/10/2015

**Reported Date :** 13/10/2015

**Clinical Impression :**

Ca. alveolus with FOM

**Gross Description :**

Received in formalin are 10 specimens. The Ist specimen labelled "primary specimen with WLE+ segmental

mandibulectomy, Whole measuring 7.5x4.2x3cm. An ill defined lesion is seen in the left alveolus of mandible

with sublingual extension and infiltration of buccal mucosa. The lesion measures 2.8x2x0.8cm. The distance of

lesion from the margins as follows : Anterior mucosal margin 1.5cm, posterior mucosal margin 2cm, medial

mucosal margin 1cm, lateral mucosal margin 0.6cm. The lesion is seen infiltrating the bone. Representative

sections are submitted as follows:

A1 - Anterior mucosal radial margin

A2 - Posterior mucosal radial margin

A3 - Medial mucosal margin

A4 - Lateral mucosal margin

A5 - Anterolateral soft tissue shaved margin

A6 & A7 - Floor of mouth soft tissue shaved margin

A8 & A9 - From the ulcer

AFB1- anterior bone margin

AFB2- posterior bone margin

AFB3-8: tumor with bone

Specimen II labelled " Level I A", consists of fibrofatty tissue measuring 4x1.5x1cm. 1 lymph node identified

measuring 1cm. Entire specimen submitted in cassettes B1 to B4.

Specimen III labelled " Left Level I B", cosnists of nodular tissue measuring 5x3x2cm. Cut surface shows

salivary gland appearance 5 lymph node identified. Representative sections are submitted in cassettes C1 to

C7.

Specimen IV labelled "Left level IIA", consists of nodular fibrofatty tissue measuring 5x4x1cm. 5 lymph nodes

identified largest measuring 2.3cm in greatest dimension. Entire specimen submitted in cassettes D1 to D4.

Specimen V labelled " Left level II B", consists of multiple fragments of fibromuscular tissue measuring

2x1x1cm. Entire specimen submitted in cassettes E1 to F4.

Specimen VI labelled "Left level III & IV", consists of fibrofatty tissue measuring 5x4x3cm. 5 lymph nodes

identified. Largest measuring 1.2cm. Entire specimen submitted in cassettes F1 to F7.

Specimen VII labelled "Right level IB", consists of 7 lymph nodes, largest measuring 1.6cm in greatest

dimension. Representative sections are submitted as follows:

G1 - Largest lymph node

G2 - Lymph node

G3 - 4 lymph node

G4 & G5 - Fibrofatty tissue

G6 & G7 - RTS from salivary gland.

Specimen VIII labelled "Right level IIA"consists of multiple fibrofatty tissue with nodular tissue measuring

1.5x2x0.7cm. 3 lymph node identified. Sections submitted in H

Specimen IX labelled "Right level II B", consists of fibrofatty tissue measuring 3.5x2x1cm. 2 lymph nodes

identified. Entire specimen submitted in cassettes J1 to J4.

Specimen X labelled "Right level III and IV", consists of fibrofatty measuring 5x3.5x1.2cm. 2 lymph nodes

identified, largest measuring 0.9cm. Entire specimen submitted as follows:

KI- 1 lymph node

K2 to K5 - Fibrofatty tissue.

(Dr.Neenu/mm)

**Microscopic Description :**

Type of specimen: WLE +segmental mandibulectomy

Histologic type: Sections show mucosa with an ulcerated and infiltrating Moderately differentiated Squamous

cell carcinoma. Invasive front: Cohesive. Tumor size- 2.8x2x0.8cm. Maximum depth of invasion: 0.8cm;

Vascular invasion- present (occasional); Nerve invasion -present

Bone- Present

Margins: The tumor is 0.7cm from anterior mucosal, 0.8cm from posterior, 0.6cm from medial, 0.5cm from

lateral mucosal margins. Floor of mouth soft tissue margin- free of tumor.

Bone margins - free of tumor

Lymph nodes:

"Level IA": Three lymph nodes, free of tumor.

"Left Level IB":Four lymph nodes, free of tumor.

"Left level IIA": Seven lymph nodes, free of tumor.

"Level IIB": Fibroadipose tissue and 4 lymph nodes, free of tumor.

"Level III+IV": Twelve lymph nodes, free of tumor.

"Right level IB": Seven lymph nodes adn salivary gland, free of tumor.

"Right level IIA":Six lymph nodes, free of tumor.

"Right level IIB": Three lymph nodes, free of tumor.

"Right level III+IV": Eight lymph nodes, free of tumor.

**Diagnosis :**

Type of specimen: WLE +segmental mandibulectomy

Histologic type: Squamous cell carcinoma

Differentiation : Moderate

Invasive front: Cohesive

Tumor size- 2.8x2x0.8cm

Maximum depth of invasion: 0.8cm

Vascular invasion- present (occasional)

Nerve invasion -present

Bone- Present

Margins: The tumor is 0.7cm from anterior mucosal, 0.8cm from posterior, 0.6cm from medial, 0.5cm from

lateral mucosal margins. Floor of mouth soft tissue margin-free of tumor. Bone margins - free of tumor

Lymph nodes:

"Level IA": Three lymph nodes, free of tumor.

"Left level IB":Four lymph nodes, free of tumor.

"Left level IIA": Seven lymph nodes, free of tumor.

"Level IIB": Fibroadipose tissue and 4 lymph nodes, free of tumor.

"Level III+IV": Twelve lymph nodes, free of tumor.

"Right level IB": Seven lymph nodes adn salivary gland, free of tumor.

"Right level IIA":Six lymph nodes, free of tumor.

"Right level IIB": Three lymph nodes, free of tumor.

"Right level III+IV": Eight lymph nodes, free of tumor.

pTNM stage: pT4a N0

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| **Date of Admission :**05/10/2015 | **Date of Expiry :**07/10/2015 |

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| **Time of Expiry :**12.10 PM |

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| **CAUSE OF DEATH :** |
| cardio pulmonary arrest secondary to respiratory /Metabolic Acidosis |

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| **DIAGNOSIS :** |
| squamous cell Ca floor of mouth(T4a,N1,Mo) |

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| **HISTORY AND PHYSICAL FINDINGS:** |
| 72 year old male was seen in our OPD with a lesion over floor of mouth since 3months First noticed when he consulted a dentist for tooth extraction H/o alcohol and smoking+ No HTN/No DM They went to RCC on march 9/2015,punch biopsy done there(report not available) Diagnosed with squamous cell Ca floor of mouth(T4a,N1,Mo)+mandible erosion and he was planned for surgery followed by radiation As there was delay in date for surgery,neoadjuvant chemo was given (2 cycles of NACT with Cisplat/5FU of 17/4-19/4 and 8/5-10/5/2015 ) Due date for 3rd chemo was on 29/5/15(but deferred as Creat was 1.3) OPG taken in RCC-showed mandible erosion left side patient came here for further evaluation and management. |

**INVESTIGATIONS :**

Date: 07/10/2015

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| --- | --- |
| Compatibility test; cross match complete (3 tests) | Compatible |

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| --- | --- |
| Sodium; serum | 133.4 mmol/L |

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| Potassium; serum | 4.0 mmol/L |

**CBC WBC diff RBC and Platelet(HEM-PANEL)**

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| --- | --- |
| https://aimshr.amrita.edu:443/images/rarrow1.gifWBC-Blood | 12.0 K/uL |

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| https://aimshr.amrita.edu:443/images/rarrow1.gifRBC-COUNT-Blood | 3.75 M/uL |

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| https://aimshr.amrita.edu:443/images/rarrow1.gifHGB-Blood | 10.7 g/dl |

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| https://aimshr.amrita.edu:443/images/rarrow1.gifHCT-Blood | 34.7 % |

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| --- | --- |
| https://aimshr.amrita.edu:443/images/rarrow1.gifMCV-Blood | 92.6 fL |

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| https://aimshr.amrita.edu:443/images/rarrow1.gifMCH-Blood | 28.6 pg |

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| --- | --- |
| https://aimshr.amrita.edu:443/images/rarrow1.gifMCHC-Blood | 30.9 g/dl |

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| https://aimshr.amrita.edu:443/images/rarrow1.gifRDW-Blood | 12.3 % |

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| --- | --- |
| https://aimshr.amrita.edu:443/images/rarrow1.gifMPV-Blood | 8.70 fL |

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| --- | --- |
| https://aimshr.amrita.edu:443/images/rarrow1.gifNEU-Blood | 84.8 % |

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| --- | --- |
| https://aimshr.amrita.edu:443/images/rarrow1.gifLYM - Blood | 7.67 % |

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| --- | --- |
| https://aimshr.amrita.edu:443/images/rarrow1.gifMONO -Blood | 7.06 % |

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| --- | --- |
| https://aimshr.amrita.edu:443/images/rarrow1.gifEOS-Blood | .073 % |

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| --- | --- |
| https://aimshr.amrita.edu:443/images/rarrow1.gifBASO-Blood | .373 % |

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| --- | --- |
| https://aimshr.amrita.edu:443/images/rarrow1.gifPLT-COUNT-Blood | 94.4 K/uL |

Date: 06/10/2015

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| Blood typing; ABO and RhD | A Rh D Negative |

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| Compatibility test; cross match complete (3 tests) | Compatible |

Date: 05/10/2015

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| Anti HCV - Emergency Screen | 0.07 : Non reactive |

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| --- | --- |
| HBs Ag Test - Emergency Screen | 0.31 : Non reactive |

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| --- | --- |
| HIV - Emergency Screen(P24 Ag and HIV 1 and 2 Ab) | 0.19 : Non reactive |

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| Sodium; serum | 132.4 mmol/L |

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| --- | --- |
| Potassium; serum | 3.9 mmol/L |

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| PT[Prothrombin Time with INR]-Plasma | 15.8/14.60/1.11 sec |

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| --- | --- |
| Glucose [R]-Plasma | 145.8 mg/dl |

**Hepatic function panel: Protein (T), Alb, Glob, Bil-T&D, ALP, ALT, AST[CHEM-PANEL]**

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| --- | --- |
| https://aimshr.amrita.edu:443/images/rarrow1.gifProtein, total-serum | 6.28 g/dl |

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| --- | --- |
| https://aimshr.amrita.edu:443/images/rarrow1.gifAlbumin; serum | 3.58 g/dl |

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| https://aimshr.amrita.edu:443/images/rarrow1.gifGlobulin | 2.7 g/dl |

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| https://aimshr.amrita.edu:443/images/rarrow1.gifBilirubin Direct - Serum | 0.07 mg/dl |

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| https://aimshr.amrita.edu:443/images/rarrow1.gifBilirubin Total -Serum | 0.53 mg/dl |

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| https://aimshr.amrita.edu:443/images/rarrow1.gifALP[Alkaline Phosphatase]-serum | 78.1 IU/L |

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| https://aimshr.amrita.edu:443/images/rarrow1.gifALT [SGPT]-serum | 5.0 IU/L |

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| https://aimshr.amrita.edu:443/images/rarrow1.gifAST (SGOT) - serum | 19.0 IU/L |

**CBC WBC diff RBC and Platelet(HEM-PANEL)**

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| https://aimshr.amrita.edu:443/images/rarrow1.gifWBC-Blood | 6.6 K/uL |

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| --- | --- |
| https://aimshr.amrita.edu:443/images/rarrow1.gifRBC-COUNT-Blood | 4.53 M/uL |

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| --- | --- |
| https://aimshr.amrita.edu:443/images/rarrow1.gifHGB-Blood | 13.7 g/dl |

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| https://aimshr.amrita.edu:443/images/rarrow1.gifHCT-Blood | 42.3 % |

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| --- | --- |
| https://aimshr.amrita.edu:443/images/rarrow1.gifMCV-Blood | 93.3 fL |

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| --- | --- |
| https://aimshr.amrita.edu:443/images/rarrow1.gifMCH-Blood | 30.3 pg |

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| --- | --- |
| https://aimshr.amrita.edu:443/images/rarrow1.gifMCHC-Blood | 32.4 g/dl |

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| --- | --- |
| https://aimshr.amrita.edu:443/images/rarrow1.gifRDW-Blood | 14.4 % |

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| --- | --- |
| https://aimshr.amrita.edu:443/images/rarrow1.gifMPV-Blood | 9.2 fL |

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| --- | --- |
| https://aimshr.amrita.edu:443/images/rarrow1.gifNEU-Blood | 57.3 % |

|  |  |
| --- | --- |
| https://aimshr.amrita.edu:443/images/rarrow1.gifLYM - Blood | 30.8 % |

|  |  |
| --- | --- |
| https://aimshr.amrita.edu:443/images/rarrow1.gifMONO -Blood | 7.3 % |

|  |  |
| --- | --- |
| https://aimshr.amrita.edu:443/images/rarrow1.gifEOS-Blood | 4.0 % |

|  |  |
| --- | --- |
| https://aimshr.amrita.edu:443/images/rarrow1.gifBASO-Blood | 0.6 % |

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| https://aimshr.amrita.edu:443/images/rarrow1.gifPLT-COUNT-Blood | 120 K/uL |

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| CT Neck: Ill defined soft tissue lesion involving the mandible in the region of the left carina with sublinguinal extension and infiltration of the buccal mucosa. The right submandibular gland is enlarged and the duct is dilated- ? due to infiltration of duct opening. Few small subcentimetric cervical lesion I, II, III, IV, V and VI lymphnodes noted. No evidence of suspicious nodules in the lung and liver. |

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| **COURSE IN THE HOSPITAL AND DISCUSSION :** |
| The patient was admitted and after all preliminary investigation he was taken up for surgery. He underwent WLE + B/l SND + Segmental mandibulectomy + DCIA flap reconstruction + Tracheostomy (Head and Neck Major Resection + Selective Neck Dissection + Reconstruction for cancer defect Grade III ) under GA on 6.10.2015. Post operative period he developed asystole at 7.40 am on 07-10-2015, cardio pulmonary rescusitation was done till 8.20 am. Patient had ventricular tachycardia which was managed conservatively. Patient was in sinus rhythm till 11.40 am when he devoloped asystole again. Patient was given cardio pulmonary rescusitation till 12.10 pm. Patient could not be rescusitated and declared dead at 12. 10 pm on 07-10-2015. |

**Tumour Board Discussion**

**Date of tumor board discussion :** 17/06/2015

**Relevant clinical details :**

squamous cell Ca floor of mouth T4aN1M0 s/p 2 cycles of NACT

**Agreed Plan of management :**

-MDCT neck and chest with contrast

WLE+segmental mandibulectomy(anterior)+b/l selective neck dissection+bone flap

Medical oncology

**Progress Notes**

**Date : 15/06/2015**

**ProgressNotes :**

Case of sq cell carcinoma floor of mouth

Diagnosed in MArch 2015

Had 2 cycls of NACT with Cisplat/5FU of 17/4-19/4 and 8/5-10/5/2015

As he is having ECHS facility here, he was ref to here

Plan surgery->RT

**Progress Notes**

**Date : 15/06/2015**

**ProgressNotes :**

72 year old male from kottarakkara(ECHS pt)

noticed a lesion over floor of mouth since 3months

First noticed when he consulted a dentist for tooth extraction

H/o alcohol and smoking+

No HTN/No DM

They went to RCC on march 9/2015,punch biopsy done there(report not available)

Diagnosed with squamous cell Ca floor of mouth(T4a,N1,Mo)+mandible erosion

and he was planned for surgery followed by radiation

As there was delay in date for surgery,neoadjuvant chemo was given (2 cycles of NACT with Cisplat/5FU of

17/4-19/4 and 8/5-10/5/2015 )

Due date for 3rd chemo was on 29/5/15(but deferred as Creat was 1.3)

OPG taken in RCC-showed mandible erosion lt side

patient came here for further evaluation

O/E

Oral cavity-adentulous

Lesion left lower alveolus 2x1 cm with submucosal bulge in the floor lt side

Neck-Rt level I b node-3x2 cm size

Ilscopy-smokers mucosa(hyperpigmentation+)over arytenoid,mild edema of false cord

base of tongue and vallecula-normal

B/l Vc normal and mobile

adv

MDCT neck and chest with contrast

Plan -WLE+segmental mandibulectomy(anterior)+b/l selective neck dissection+bone flap

EChs clearance for Preops,PAC,procedure and cardio Cx given

**Operative notes - Resection**

**Date : 07/10/2015**

**ProgressNotes :**

WLE + B/l SND + Segmental mandibulectomy + DCIA flap reconstruction + Tracheostomy under GA on

7.10.2015

findings: ulceroproliferative lesion in the anterior alveolus and extending to buccal mucosa and floor of mouth

, b/l suspicious nodes present

Procedure:

under GA , horizontal skin crease incision was taken and subplatysmal flaps were elevated and b/l Marginal

mandibular nerve was identified and preserved and elevated off the mandibular area , mandible exposed

intraoral mucosal incisions were marked with adequate margins and segmental mandibulectomy was done after

preplating the recon plate(2.5 mm) on the mandible using 2mm screws and specimen taken out

b/l myelohyoid , anterior belly of digastric and genioglossus was cut in the process of tumour resection

lingual artery had to be ligated in the process

b/l neck dissection 1 to 4 levels were completed

Clearance of level 1A done. Submandibular triangle clearance done after identifying facial vessels. Facial

vessels dissected out from submandibular gland and preserved. Medial end of SCM identified and muscle

separated exposing internal jugular vein. In level II spinal accessory nerve identified and separated. Level II B

cleared. Next level IIA, III and IV cleared of lymph nodes and fibro fatty tissue. Same process repeated on the

opposite side.Hemostasis secured after Valsalva maneuver.Drains placed.