**Radiology Report**

**Created Date:** 6/12/2017

**Study Done:**

**MDCT CHEST-PLAIN**

**Clinical info:** Case of Ca lower alveolus CT 4a N2C planned for segmental mandibulectomy with WLE.

Thyroid gland shows multiple calcified nodules .

Subcentimetric right lower paratracheal and paraaortic nodes.

Multiple bilateral axillary and bilateral deep pectoral lymph nodes noted largest seen in the right side.

Tracheobronchial tree is normal.

Bilateral lung parenchyma appears normal. No suspicious nodules / consolidation.

No pleural effusion / pericardial effusion.

Bulky left adrenal.

Rest of the visualized upper abdomen is normal.

Degenerative changes noted in the spine.

**Impression:**

• No suspicious lung nodules.

**Radiology Report**

**Created Date:** 08/12/2017

**Study Done:**

**MRI NECK**

**Enhancing soft tissue mass noted involving the lower alveolus eroding the mandible .Lesion extends from**

**right last molar teeth to left retromolar trigone. Lesion infiltrates the floor of mouth ,both sublingual**

**space and undersurface of tongue.Orifice of both submandibular duct appear obliterated causing**

**retrograde dilatation.Lesion involves the mylohyoid sling,left anterior belly of digastric with infiltration**

**to left submandibular space. Lesion infiltrates the overlying skin and subcutaneous fat also.Lesion extends**

**to left cheek through inferior buccogingival sulcus.Masticator muscles appear normal.**

**Enlarged suspicious nodes seen in level IA,and level II on both sides,largest measures 16 x 10 mm with**

**perinodal infiltration in left level IB**

**Naso & oropharynx appear normal.**

**Larynx appear normal.**

**Both parotid and submandibular salivar glands appear normal.**

**Carotid and IJV appear normal.**

**Base of skull appear normal.**

**Impression:**

***Case of carcinoma alveolus***

• **Enhancing mass involving the lower alveolus eroding the mandible and infiltrating the floor of**

**mouth with enlarged nodes as described**

**SURGICAL PATHOLOGY REPORT**

**Date of sample collection :** 06/12/2017

**Received on :** 07/12/2017

**Reported Date :** 09/12/2017

**Clinical Impression :**

Ca. alveolus (lower)

**Gross Description :**

Received in formalin is a specimen consists of 2 grey white tissue bits measuring 1.5x0.5x0.2cm. Entire

specimen submitted in one cassette.

**Microscopic Description :**

Biopsy shows fragments of tissue lined by hyperplastic and dysplastic mucosa. Epithelium show disarray in

maturation and dyspasia with focal keratin pearls. Nests of dysplastic squamous cells are also seen invading

into the subepithelial tissue which also shows dense inflammation around.

**Impression :**

Moderately differentiated squamous cell carcinoma, biopsy lower alveolus

**SURGICAL PATHOLOGY REPORT**

**Date of sample collection :** 19/12/2017

**Received on :** 19/12/2017

**Reported Date :** 23/12/2017

**Clinical Impression :**

Ca. alveolus

**Gross Description :**

Received fresh is a specimen labelled " Floor of mouth muscle to rule of malignancy", consists of haemorrhagic

tissue bit measuring 0.8x0.6x0.2cm.

Frozen read as - Muscle and histiocytes focally.

Subsquently received in formalin are 9 specimens. The Ist specimen labelled 'WLE segmental mandibulectomy

+ ventral tongue + Level Ib / Ia lymph nodes + skin" consists of segment of left mandible end part of right

mandible with 3 teeth attached (1 left molar, 2 right (incisor + canine), floor of mouth with lesion, ventral part of

tongue, part of lower lip mucosa with soft tissue and skin overlying the left lateral portion of mandible.

Specimen measuring 7.5 (ML)x11(AP)x7(SI)cm. Skin above measuring 10x7cm. An ulceroproliferative growth

measuring 7.5(ML)x3.5(AP)x6.8(SI)cm is seen arising from the floor of mouth extending anteriorly towards the

part of lower lip mucosa, posteriorly towards lingual soft tissue, laterally towards left alveolus and towards part

of right alveolus, inferiorly into the mandibular bone below the floor of mouth and externally involving the skin

attached over the left lateral mandible. Proliferative lesion of skin is measuring 2cm.Tumour invasion is seen

into bone (depth 2cm)

Distance from margins:

Right gingival mucosa -2cm

Left RMT mucosa -3.5cm

Superior lingual mucosa -0.5cm

Anterior lip - 1.5cm

Left anterolateral mucosa 0.8cm

Right anterolateral mucosa -2.5cm

Left anterolateral soft tissue -3cm

Posterior soft tissue - 3.5cm

Anterior soft tissue - 2cm (medial)

Right lateral skin - 2.5cm

Left lateral skin -2cm

Superior skin - 1.6cm

inferior skin - 2.5cm

Left posterior bony margin - 1.5cm

Right posterior bony margin - 3cm

Representative sections are submitted as follows:

A1 - Right RMT mucosa margin - shaved

A2 - Left RMT mucosa margin - shaved

A3 & A4- Superior lingual mucosa margin - radial with lesion

A5 - Anterior lip margin - shaved

A6 - Left anterolateral mucosal margin - Radial

A7 - Right anterolateral mucosal margin - shaved

A8 - Left anterolateral soft tissue (salivary gland) margin - shaved

A9 - Posterior soft tissue margin - shaved

A10 -Anteromedial soft tissue margin - radial

A11 - Right lateral skin margin

A12 - Left lateral skin margin

A13 - Superior skin margin

A14 - Inferior skin margin

A15 - Lesion over skin

A10 to A18 - Lesion.

FB1 - right bony margin

FB2 - left bony margin

FB3-5 - lesion with bone

Specimen II labelled " Additional ventral tongue margin " consists of mucosa covered tissue bit same measuring

4x0.5cm. Entire specimen submitted in cassette B.

Specimen III labelled "Left level IIa lymph node" consists of nodular fibrofatty tissue measuring 3.4x2x1cm.

Representative sections are submitted in cassettes C1 & C2.

Specimen IV labelled "Left level IIb" consists of single nodular tissue bit measuring 2.4x1x0.9cm.

Representative sections are submitted in cassettes D1 & D2.

Specimen V labelled "Left level III" consists of fibrofatty tissue measuring 4.5x3x1cm. Representative sections

are submitted in cassettes E1 & E2.

Specimen VI labelled "Left level IV" consists of fibrofatty tissue measuring 5x3x0.5cm. Lymph node identified

measuring 2cm. Representative sections are submitted in cassettes F1 to F3.

Specimen VII labelled " Right level II, III, IV" consists of fibrofatty tissue measuring 4.5x2.5x1.2cm.

Representative sections are submitted in cassettes G1 to G3.

Specimen VIII labelled "Right level Ib" consists of nodular fibrofatty tissue measuring 5x2.5x3cm.

Representative sections are submitted in cassettes H1 to H5.

Specimen IX labelled "Right parotid lymph node" consists of single lymph node measuring 0.9x0.4x0.4cm.

Entire specimen submitted in cassette J.

**Microscopic Description :**

- Sections from frozen permanent confirm frozen report.

Sections from alveolus show an infiltrating neoplasm composed of squamous epithelium thrown into blunt

exophytic processes lined by dysplastic cells.Lobules and nests of cells are seen invading into the subepithelium.

Interface show moderate secondary inflammation.

**Impression :**

WLE segmental mandibulectomy + FOM + ventral tongue + bilateral SND:

- Well differentiated squamous cell carcinoma, lower alveolus

- Tumour measures 7.5x3.5x2cm.

- Tumour is involving the alveolus from left last molar to right half of alveolar mucosa, extending to anterior lip

mucosa, posterior lingual mucosa, lateral soft tissue and overlying skin.

- Bony invasion - seen.

- Margin clearance:

Superior lingual mucosa is 0.4cm away. However additional ventral tongue margin taken is free of tumour.

- All other mucosal, soft tissue, skin and bony margins are free of tumour.

- WPOI- Score 1

- PNI - absent

- LHR -Score 0

Lymph nodes

All lymph nodes sampled are free of tumour

(0/2 left level IIA + 0/5 left level IIB + 0/3 left level III + 0/5 left level IV + 0/7 right level II - IV + 0/4 right

level IB + 0/1 right parotid lymph node)

Stage pT4N0

**SURGICAL PATHOLOGY REPORT**

**Date of sample collection :** 12/04/2018

**Received on :** 12/04/2018

**Reported Date :** 13/04/2018

**Clinical Impression :**

Case of Ca. alveolus

**Gross Description :**

Received in formalin is a specimen consists of 2 mucosa covered tissue bits one measuring 1x0.5x0.4cm, Other

measuring 0.4x0.3x0.2cm. Entire specimen submitted in one cassette.

**Microscopic Description :**

Biopsy shows tissue lined by an acanthotic mucosa. Cells show duodenal maturation with prominent nucleoli

and suprabasal mitosis.Moderate pleomorphism also seen.Subepithelium show dense inflammation. Changes are

noted in upto 2/3rd of the thickness. No invasive malignancy seen.

**Impression :**

Moderate to severe dysplasia , tip of tongue biopsy.

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| **Date of Admission :**18/12/2017 | **Date of Procedure :**19/12/2017 |

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| **Date of Discharge :**01/02/2018 |

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

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| **DIAGNOSIS :** |
| Carcinoma lower alveolus cT4aN2c |

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| **PROCEDURE DONE :** |
| WLE Floor of mouth with ventral tongue + Segmental mandibulectomy (Rt second molar to left ascending ramus )with + B/L SND I-IV + Free fibula osteomyocutaneous flap + split thickness skin grafting + tracheostomy under GA on 19/12/2017. |

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| **HISTORY :** |
| 68 year old male came with a history of swelling and pus discharge from left of jaw since 2 months associated with pain , progressive h/o recent loss of teeth over 3-4 weeks c/o lesion with in oral cavity along lower jaw since 2 months which is progressive patient is not able to chew food and is on blend diet since 1 month no h/o oral bleed . |

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| **PAST HISTORY :** |
| patient is sedantary since 2010 following chikungunya fever and fall. with history of # right ?leg, left osteoarthritis patient did not follow up with any doctor for same and is on crutches since then known hypertensive on stamlo 10mg od |

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| **PERSONAL HISTORY :** |
| habits - h/o smoking + stopped since 7 years h/o tobacco chewing stopped since since 3 years |

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| **CLINICAL EXAMINATION :** |
| On examination: GC fair Vitals stable Oral cavity : mouth opening good. partly dentulous (loose teeth +) 4x5cm proliferative lesion seen involing lower alveolus from right Last molar socket to left last molar area, FOM involved from right 2cm anterior to RMT to left FOM 1 cm anterior to rmt, lesion also extends onto labial mucosa falling short of vermillion border by 1cm. induration extends onto ventral tongue by 1 cm from FOM. Tongue protrusion restricted. two loose teeth seen with in the lesion. Mandible expanded over left body of mandible for 2.5cm segment (2cm anterior to left angle of mandible) multiple non indurated whitish ?leukoplakia patches involving B/L buccal mucosa and tongue tip. neck: B/L Level IB, II, level IA hard measuring ranging from 1x1cm to 2.5 x 2cm . skin over left level IB 3x3cm involved with fungation with pus discharge, node is adhered to mandible no level III, IV or V nodes NPL scopy : minimal left base tongue bulge +. supple on palpation. other areas are normal |

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| **COURSE IN THE HOSPITAL AND DISCUSSION :** |
| Patient came to our hospital with above mentioned complaints.After all examination and investigation he underwent WLE Floor of mouth with ventral tongue + Segmental mandibulectomy (Rt second molar to left ascending ramus )with + B/L SND I-IV + Free fibula osteomyocutaneous flap + split thickness skin grafting + tracheostomy under GA on 19/12/2017. Patient developed Pleural efuusion in post op period , Pulmonology reference done and orders followed BAL culture was s/o Klebsiella resistant to all first line medications.He developed donor site infection , Tendon debridement and dressing with VAC done . At the time of discharge patient is stable and afebrile.Donor site wound healed . |

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| **OPERATIVE FINDINGS :** |
| WLE Floor of mouth with ventral tongue + Segmental mandibulectomy (Rt second molar to left ascending ramus )with + B/L SND I-IV + Free fibula osteomyocutaneous flap + split thickness skin grafting + tracheostomy FIndings : oral cavity : m 4x5cm proliferative lesion seen involing lower alveolus from right first molar socket to left last molar area, FOM involved from right 2cm anterior to RMT to left FOM 1 cm anterior to rmt, lesion also extends onto labial mucosa falling short of vermillion border by 1cm. induration extends onto ventral tongue by 1 cm from FOM. Mandible expanded over left body of mandible for 2.5cm segment (2cm anterior to left angle of mandible) neck: B/L Level IB, II, level IA hard measuring ranging from 1x1cm to 2.5 x 2cm . skin over left level IB 3x3cm involved with fungation with pus discharge, node is adhered to mandible no level III, IV or V nodes Pt taken under GA .PPD Skin incision marked including involved fungating skin of lvel IB LN and mental skin extending into horizontal neck crease incision Incision taken as marked . Lower Lip vermilion border and mucosa preserved , skin over mentum skin and level IB Lymphnode included in specimen. Cervicofacial flaps raised mandibular cortex exposed Segmental mandibular cuts taken Rt side behind second molar and left side ascending ramus taken and segmental mandibulectomy completed .WLE of floor of mouth and adjacent ventral tongue. Tongue supple on palpation contrary to MRI findings. Frozen sent negative for malignancy Enblock specimen of Segmental madibulectomy with FOM ventarl tongue left LevelIb LN with involved skin excised B/L SND Level I- Iv done hemostasis achieved , RVD drain secured Rt FIbula osteomyocutaneous flap harvested with large skin paddle Angled plate moulded , Fibula two osteotomies done ,Fibula inset done with skin paddle cover for tongue and FOM. Microanastamosi done Outer skin defect closed with SSG on vascualr bed of fibula skin paddle Fibula donor site hemostais achieved. RVD secured . Closure done in layers. tracheostomy done.Pt shifted to ICU for observation .Pt tolerated the procedure well. Tendon debridement under LA Debridment done and VAC Applied |

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| **DISCHARGE MEDICATION :** |
| Tab Pan 40mg 1-0-0 x 5days Tab Dolo 650mg 1-1-1 x 5days Tab.Ciplox 500 mg X 5 days. Syr.Ascoryl 5 ml BD Megaheal oinment dressing over local area.  **Tumour Board Discussion**  **Date of tumor board discussion :** 13/12/2017  **Relevant clinical details :**  h/o swelling and pus discharge from left of jaw since 2 months associated with pain , progressive  h/o recent loss of teeth over 3-4 weeks  c/o lesion with in oral cavity along lower jaw since 2 months which is progressive patient is not able to chew  food and is on blend diet since 1 month  no h/o oral bleed  co morbidities  patient is sedantary since 2010 following chikungunya fever and fall. with history of # right ?leg, left  osteoarthritis patient did not follow up with any doctor for same and is on crutches since then  known hypertensive on stamlo 10mg od  habits - h/o smoking + stopped since 7 years h/o tobacco chewing stopped since since 3 years  no evaluation done outside  o/e KPS: 80  Oral cavity : mouth opening good. partly dentulous (loose teeth +) 4x5cm proliferative lesion seen involing  lower alveolus from right Last molar socket to left last molar area, FOM involved from right 2cm anterior to  RMT to left FOM 1 cm anterior to rmt, lesion also extends onto labial mucosa falling short of vermillion border  by 1cm. induration extends onto ventral tongue by 1 cm from FOM. Tongue protrusion restricted. two loose  teeth seen with in the lesion. Mandible expanded over left body of mandible for 2.5cm segment (2cm anterior to  left angle of mandible) multiple non indurated whitish ?leukoplakia patches involving B/L buccal mucosa and  tongue tip.  neck: B/L Level IB, II, level IA hard measuring ranging from 1x1cm to 2.5 x 2cm . skin over left level IB 3x3cm  involved with fungation with pus discharge, node is adhered to mandible no level III, IV or V nodes  NPL scopy : minimal left base tongue bulge +. supple on palpation. impression : Ca lower alveolus cT4aN2c  **Histology (include histology done / reviewed elsewhere) :**  BIOPSY - Moderately differentiated squamous cell carcinoma, biopsy lower alveolus.  **Other relevant investigations (including metastatic workup) :**  MRI mandible involved from angle to angle and also left level IB node, with extensive involment of FOM,  ventral tongue mylehyoid, geniohyoid origin.  CT Chest- no nodules  **Agreed Plan of management :**  segmental mandibulectomy with WLE (resection defect will include mandible angle to angle, mucosal defect  from lower lip + total glossectomy, skin defect will include left level IB overlying skin )+ b/l ND + fibula flap  large sin paddle + PMMC for tongue +/- DP flap  + adjuvant CTRT  **Histopathology tumour Board Discussion**  **Histology (include histology done / reviewed elsewhere) :**  WLE segmental mandibulectomy + FOM + ventral tongue + bilateral SND:  - Well differentiated squamous cell carcinoma, lower alveolus  - Tumour measures 7.5x3.5x2cm.  - Tumour is involving the alveolus from left last molar to right half of alveolar mucosa, extending to anterior  lip mucosa, posterior lingual mucosa, lateral soft tissue and overlying skin.  - Bony invasion - seen.  - Margin clearance:  Superior lingual mucosa is 0.4cm away. However additional ventral tongue margin taken is free of tumour.  - All other mucosal, soft tissue, skin and bony margins are free of tumour.  - WPOI- Score 1  - PNI - absent  - LHR -Score 0  Lymph nodes  All lymph nodes sampled are free of tumour  (0/2 left level IIA + 0/5 left level IIB + 0/3 left level III + 0/5 left level IV + 0/7 right level II - IV + 0/4 right  level IB + 0/1 right parotid lymph node)  Stage pT4N0  **Agreed Plan of management :**  AdjRT  **Progress Notes**  **Date : 11/12/2017**  **ProgressNotes :**  proxy bystander  scan reviewed  plan: to review with patient  3 days early admission for cardiology fitness  segmental mandibulectomy + b/l nd+ fibula flap + pmmc for external skin cover  **Progress Notes**  **Date : 30/09/2019**  **ProgressNotes :**  Carcinoma lower alveolus cT4aN2c WLE Floor of mouth with ventral tongue + Segmental mandibulectomy  (Rt second molar to left ascending ramus )with + B/L SND I-IV + Free fibula osteomyocutaneous flap + split  thickness skin grafting + tracheostomy under GA on 19/12/2017.  came for follow up  c/o urinary incontinence  o/e- L/R NED  poor oral hygiene  adv  adv geriatric consult  **OPERATIVE NOTES**  **Date : 22/12/2017**  **ProgressNotes :**  WLE Floor of mouth with ventral tongue + Segmental mandibulectomy (Rt second molar to left ascending  ramus )with + B/L SND I-IV + Free fibula osteomyocutaneous flap + split thickness skin grafting +  tracheostomy  FIndings :  oral cavity : m 4x5cm proliferative lesion seen involing lower alveolus from right first molar socket to left last  molar area, FOM involved from right 2cm anterior to RMT to left FOM 1 cm anterior to rmt, lesion also  extends onto labial mucosa falling short of vermillion  border by 1cm. induration extends onto ventral tongue by 1 cm from FOM. 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