**SURGICAL PATHOLOGY REPORT**

**Date of sample collection :** 05/06/2013

**Received on :** 05/06/2013

**Reported Date :** 10/06/2013

**Clinical Impression :**

Carcinoma right buccal mucosa

**Gross Description :**

Received in formalin are 5 specimens. The I specimen labelled as "Right buccal mucosa + right sub mandibular

gland + segment of mandible consists of same measuring 6x8x4.5cm. Attached 3 teeth identified. Attached

mucosa measures 5cm anteroposteriorly, 2cm superoinferiorly and 3cm transversely. Attached cheek skin

measures 5cm AP and 4cm SI. Sub mandibular gland measures 4.5x3x3cm. Buccal mucosa shows an ulcerative

growth measures 2.5cm AP and 1.8cm ML. It is 1.3cm from posterior mucosal margin, 1cm from medial

mucosal margin, 1.5cm from superior mucosal margin. 1cm from anterior mucosal margin. Tumor extends to

overlying skin and it is 1cm from inferior, 1cm from anterior, and 0.7cm from posterior skin and soft tissue

margins. It is close to superior soft tissue margin of skin. In the postero lateral aspect (not covered by skin) the

tumor is 1mm from soft tissue margin. Sub mandibular gland grossly free of tumor. Two lymphnodes identified

in sub mandibular region largest measuring 1.5x1.2x1.2cm. Cut section grey white with cystic areas.

Representative sections are submitted as follows:

A1 - Medial mucosal margin (radial)

A2 - Medial mucosal margin (radial)

A3 - Posterior mucosal margin (radial)

A4 - Posterior mucosal margin (radial)

A5 - Superio mucosal amrgin (radial)

A6 - Anterior mucosal margin (radial)

A7 - Tumor with closest posterolateral soft tissue margin (radial)

A8 - Tumor with superior skin & soft tissue margin (radial)

A9 - Tumor with inferior skin & soft tissue margin (radial)

A10 - Anterior shaved margin of skin

A11 - Posterior shaved margin of skin

A12 - Sub mandibular lymphnodes

A13-A14 - Sub mandibular gland

AFB1 - Anterior mandible margin

AFB2 - Posterior mandible margin

Specimen II labelled as "Right level IIa and IIb", consists of fibrofatty tissue measuring 3x1.5x0.5cm.

Representative sections are submitted in B1 - B2 cassettes.

Specimen III labelled as "Right level III", consists of multiple fibrofatty tissue in aggregate measures

3x2x0.3cm. 3 lymphnodes identified. Entire specimen submitted in C1 - C2 cassettes.

Specimen IV labelled as "Right level IV", consists of multiple fibrofatty tissue measures 3x2x0.5cm. 6

lymphnodes identified. Entire specimen submitted in D1 - D2 cassettes.

Specimen V labelled as "Additional superior mucosal margin", consists of single linear tissue measures

1x0.3x0.1cm. Entire specimen submitted in cassette E.

**Microscopic Description :**

A) Right buccal mucosa :-

Tumor type - Poorly differentiated squamous cell carcinoma

Tumor size - 2.5x1.8cm

Tumor involves mandible and overlying skin

Type of infiltrative margin - Discohesive type

Lymphovascular emboli - Present

Perineural invasion - Present

All mucosal margins - Free and well away

All skin and soft tissue margin - Free of tumor and well away except superior skin margin which is 7mm away &

superior soft tissue which is 5mm away

Posterolateral soft tissue margin - 1mm free margin

Bone margins - Free of tumour

Sub mandibular gland - Free of tumor

Sub mandibular lymphnodes - 2/2 lymphnodes show metastasis with perinodal spread in both of them

B) (R) level IIa IIb :- 2/4 lymphnodes show metastasis, no perinodal spread seen

C) (R) level III :- 3 reactive lymphnodes

D) (R) level IV :- 6 reactive lymphnodes

E) Additional superior mucosa mass - Free of tumor

**Impression :**

A) Right buccal mucosa + right meck nodes + additional margin

- Poorly differentiated squamous cell carcinoma

- Tumor size - 2.5x1.8cm

- Tumor involves mandible and overlying skin

- Lymphovascular emboli & perineural invasion present

- All mucosal, skin margins and bone margins are free of tumour

- Closest margin is posterolateral soft tissue margin which is just 1 mm away

- 4/15 lymphnodes show metastasis with perinodal spread in 2 of them

pT4aN2bMx.

|  |  |
| --- | --- |
| **Date of Admission :**04/06/2013 | **Date of Procedure :**04/06/2013 |

|  |
| --- |
| **Date of Discharge :**03/07/2013 |

|  |
| --- |
|  |

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

|  |
| --- |
| **DIAGNOSIS :** |
| Carcinoma buccal mucosa T4N0 |

|  |
| --- |
| **PROCEDURE DONE :** |
| 1. Wide Local excision of Right Buccal Mucosa carcinoma + Right Neck Dissection (Level I - IV) + PMMC Flap + Tracheostomy on 04-06-2013 under GA 2. Debridement of PMMC Flap with partial Secondary suturing of PMMC Flap on 25-06-2013 3. Skin Grafting on 1-07-2013 |

|  |
| --- |
| **HISTORY :** |
| 56 year old Mrs.Kuku Rani Mondal presented to Head and Neck OPD with complaints of swelling and pain in the right cheek since three months. Came here for further management. Her case was discussed in Head and Neck tumour board and planned for WLE + ND + PMMC. |

|  |
| --- |
| **CLINICAL EXAMINATION :** |
| On examiantion no trimus Ulcero infiltrative lesion in the right lower GB sulcus Right cheek 4 x 3 cms firm swelling present Neck there is no palpable nodes |

**INVESTIGATIONS :**

**Haemogram:**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Date:** | **Hb: g/dl** | **PCV: %** | **PLT: ku/ml** | **TC: ku/ml** | **DC: N %** | **L: %** | **E: %** | **ESR: mm/1st hr** |
| 05/06/2013 | 8.1 | 24.5 | 152 | 10.9 | 90.6 | 4.3 | 0.5 | - |
| 24/06/2013 | 8.0 | 25.4 | 237 | 5.1 | 58.4 | 28.2 | 2.3 | - |
| 25/06/2013 | 12.1 | 39.1 | 198.0 | 5.13 | 58.5 | 30.7 | 0.918 | - |

**Renal Function Test and Serum Electrolytes:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Date:** | **Urea: mg/dl** | **Creatinine: mg/dl** | **Na+: mEq/L** | **K+: mEq/L** |
| 05/06/2013 | 30.0 | 0.86 | 141.3 | 4.6 |

Date: 25/06/2013

|  |  |
| --- | --- |
| RBC-COUNT-Blood : 4.92 M/uL | MCV-Blood : 79.5 fL |

|  |  |
| --- | --- |
| MCH-Blood : 24.6 pg | MCHC-Blood : 31.0 g/dl |

|  |  |
| --- | --- |
| RDW-Blood : 17.0 % | MPV-Blood : 9.51 fL |

|  |  |
| --- | --- |
| MONO -Blood : 9.4 % | BASO-Blood : 0.448 % |

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

Date: 24/06/2013

|  |  |
| --- | --- |
| RBC-COUNT-Blood : 3.43 M/uL | MCV-Blood : 74.1 fL |

|  |  |
| --- | --- |
| MCH-Blood : 23.3 pg | MCHC-Blood : 31.4 g/dl |

|  |  |
| --- | --- |
| RDW-Blood : 19.7 % | MPV-Blood : 9.0 fL |

|  |  |
| --- | --- |
| MONO -Blood : 10.6 % | BASO-Blood : 0.5 % |

Date: 05/06/2013

|  |  |
| --- | --- |
| Compatibility test; cross match complete (3 tests) : Compatible | RBC-COUNT-Blood : 3.24 M/uL |

|  |  |
| --- | --- |
| MCV-Blood : 75.5 fL | MCH-Blood : 24.9 pg |

|  |  |
| --- | --- |
| MCHC-Blood : 33.0 g/dl | RDW-Blood : 18.9 % |

|  |  |
| --- | --- |
| MPV-Blood : 9.4 fL | MONO -Blood : 4.5 % |

|  |  |
| --- | --- |
| BASO-Blood : 0.1 % |  |

|  |
| --- |
| **COURSE IN THE HOSPITAL AND DISCUSSION :** |
| On 3-06-2013 she was brought to the emergency room with bleeding from oral cavity. After all preliminary investigation and evaluation she was taken up for surgery. She underwent Wide Local excision of Right Buccal Mucosa carcinoma + Right Neck Dissection (Level I - IV) + PMMC Flap + Tracheostomyon 04-06-2013 under GA . Post operative period was uneventful. Tracheostomy tube was decannulated on the seventh postoperative day, tolerated well. On the eight postoperative day PMMC outer skin flap cover (Distal end of flap) found to be necrosed,initially it was managed conservatively with daily dressing. Later on she was taken to OT and Debridement of PMMC Flap with partial Secondary suturing of PMMC Flap was done on 25-06-2013 and Skin Grafting on 1-07-2013. She was started orally on the 12th postoperative day, tolerated orally hence Ryles tube removed at the time of discharge. Condition at discharge: Stable, afebrile, taking orally, skin graft taken well, all sutures removed. |

|  |
| --- |
| **OPERATIVE FINDINGS :** |
| 1. Surgery: Wide Local excision of Right Buccal Mucosa carcinoma + Right Neck Dissection (Level I - IV) + PMMC Flap + Tracheostomy under GA on 04.06.2013. Procedure:Patient is supine position, following aseptic precautions. Incision marked around the skin involvement with margin with angle split and left upper neck crease incision. Superior flap elevated, cheek flap lateralization. 4X5 cm lesion involving the left buccal mucosa from 2nd premolar to last molar with area of fibrosis. Segmental mandibulectomy done from premolar to the the condyle of the mandible with adequate margin. Wide local excision of Right Buccal mucosa with overlying skin along with Posterior segmental mandibulectomy performed, leaving the condyle intact. Submental fibrofatty tissue dissected and displaced inferiorly. Facial artery and vein ligated and cut. Submandibular duct divided and ligated. Submandibualr fibrofatty tissue along with the submandibular gland dissected out sparing facial vessels. SCM dissected on its medial border to expose the Spinal accessory nerve, internal jugular vein and the carotid artery. Dissection continued inferiorly till omohyoid cross over separating the specimen from the IJV, carotid sheath, vagus and hypoglossal while proceeding medially. Specimen completely separted from the IJV and delivered. Hemostasis confirmed. Drain placed in situ. Reconstruction with Right PMMC flap performed after harvesting the flap from below the Right breast.Flap bi paddled and insitted into the defect. Trachesotomy performed.Immediate post operative period 2. DIAGNOSIS:PMMC Flap skin discolouration S/P Wide Local excision of Right Buccal Mucosa carcinoma + Right Neck Dissection (Level I - IV) + PMMC Flap + Tracheostomy under GA on 04.06.2013. PROCEDURE DONE:Debridement of PMMC Flap with partial Secondary suturing of PMMC Flap on 25/06/2013 |

|  |
| --- |
| **DIET RECOMMENDATIONS :** |
| SOFT DIET |

|  |
| --- |
| **DISCHARGE MEDICATION :** |
| Tab. Doxy 100 mg 1-0-1 x 15 days Tab. Pan 20 mg 1-0-1 X 15 days Tab. Dolo 650 mg sos for pain Continue own medications Hexidine mouth gargles fourth hourly. |

**Progress Notes**

**Date : 22/05/2013**

**ProgressNotes :**

c/o right cheek swelling x 3 months

c/o pain in the right cheek

o/e- no trimus

Ulcero infiltrative lesion in the right lower GB sulcus

Right cheek 4 x 3 cms firm swelling

nekc no nodes

Ca. buccal mucosa : T4N0

From andaman: financial constraints

plan for WLE + ND + PMMC

OPG

TB discussion

date/FIC

**Progress Notes**

**Date : 12/08/2013**

**ProgressNotes :**

Carcinoma buccal mucosa

1. Wide Local excision of Right Buccal Mucosa carcinoma + Right Neck Dissection (Level I - IV) + PMMC

Flap + Tracheostomy on 04-06-2013 under GA

2. Debridement of PMMC Flap with partial Secondary suturing of PMMC Flap on 25-06-2013

3. Skin Grafting on 1-07-2013

HPE:

Right buccal mucosa + right meck nodes + additional margin

- Poorly differentiated squamous cell carcinoma

- Tumor size - 2.5x1.8cm

- Tumor involves mandible and overlying skin

- Lymphovascular emboli & perineural invasion present

- All mucosal, skin margins and bone margins are free of tumour

- Closest margin is posterolateral soft tissue margin which is just 1 mm away

- 4/15 lymphnodes show metastasis with perinodal spread in 2 of them

pT4aN2bMx.

S/b Dr. SI

Came back for RT

o/e:

Non healing orocutaneous fistula, 2 ulcers on the right side of the chin

Wedge biopsy taken from the Ulcer base, margin and normal appearing skin

12/8/13

Wedge biopsy - ulcer site: Suggestive of a poorly differentiated carcinoma with ulceration

O/e:

Nodule on the right cheek

Impression: ?Local Recurrence

**Speciality :** RadiationOncology

**D/O Commencement of RT** 23/08/2013 **D/O Completion of RT** 02/09/2013

**FINAL DIAGNOSIS, STAGE AND HISTOLOGY**

Carcinoma Right Buccal Mucosa - post operative with local recurrence

**CLINICAL HISTORY AND PHYSICAL FINDINGS**

presented to Head and Neck OPD with complaints of swelling and pain in

the right cheek since three months. clinical examiantion showed ulcero infiltrative lesion in the right lower GB

sulcus , Right cheek 4 x 3 cms firm swelling present. Neck there is no palpable nodes. After all preliminary

investigation and evaluation she was taken up for surgery. She underwent Wide Local excision of Right Buccal

Mucosa carcinoma + Right Neck Dissection (Level I - IV) + PMMC Flap +

Tracheostomyon 04-06-2013 under GA . On the eight postoperative day PMMC outer skin flap cover (Distal end

of flap) found to be necrosed,initially it was managed

conservatively with daily dressing. Later on she was taken to OT and Debridement of PMMC Flap with partial

Secondary suturing of PMMC Flap was done on 25-06-2013 and Skin Grafting on 1-07-2013.

Final HPR came as Poorly differentiated squamous cell carcinoma , Tumor size - 2.5x1.8cm , Tumor involves

mandible and overlying skin , Lymphovascular emboli & perineural invasion present , All mucosal, skin margins

and bone margins are free of tumour , Closest margin is posterolateral soft tissue margin which is just 1 mm

away , 4/15 lymphnodes show metastasis with perinodal spread in 2 of them pT4aN2bMx.

Her case was discussed in HNS Tumour board and decided for adjuvant RT.

But patient went back home in Andaman and reported to HNS OPD on 07/08/2013 [ 2 months post op].

Clinical examination showed non healing orocutaneous fistula and 2 ulcers on the right side of the chin. Wedge

biopsy taken from the Ulcer base, margin and normal appearing skin reported as Suggestive of a poorly

differentiated carcinoma with ulceration. Her case was rediscussed in HNS tumour board and in view of local

recurrece decided for palliative RT. She was then referred to Radiation oncology.

The diagnosis, prognosis, treatment protocol , palliative nature of treatment were explained to the patient and

relatives.

Even though earlier date for CT sim and start was given , patient reported after 1 week due to delay in arranging

the financial assistance for the treatment.

O/E in RT OPD 12/8 13:

Nodule with skin involvement in the zygomatic region right cheek.

Multiple s/c nodules right cheek

orocutaneous fistula + with ulceration reaching one third of lower lip. Skin involvement seen crossing midline in

the submandibular region and level II region

Right lower neck level III-IV region : swelling of 4x3cm

**INVESTIGATIONS :**

**HISTOPATHOLOGY REPORTS**

1. Right buccal mucosa + right meck nodes + additional margin

- Poorly differentiated squamous cell carcinoma

- Tumor size - 2.5x1.8cm

- Tumor involves mandible and overlying skin

- Lymphovascular emboli & perineural invasion present

- All mucosal, skin margins and bone margins are free of tumour

- Closest margin is posterolateral soft tissue margin which is just 1 mm away

- 4/15 lymphnodes show metastasis with perinodal spread in 2 of them

pT4aN2bMx.

2. Wedge biopsy - Orocutaneous fistula site: Suggestive of a poorly differentiated carcinoma with ulceration.

(K/C/O poorly differentiated squamous cell carcinoma, buccal mucosa)

Treatment Given:

**SURGERY DETAILS :**

1. Surgery: Wide Local excision of Right Buccal Mucosa carcinoma + Right Neck Dissection (Level I - IV) +

PMMC Flap + Tracheostomy under GA on 04.06.2013.

2. Debridement of PMMC Flap with partial Secondary suturing of PMMC Flap on 25/06/2013

3. Skin Grafting on 1-07-2013

**RADIATION DETAILS :**

Intent: Palliative

Technique: 3DCRT

Cat scan simulation: 17-08-2013

Computerised Planning and Resimulation: 23-08-2013

RT started on: 23-08-2013

RT discontinued after 7 fractions on : 02-08-2013

**Primary Tumour And Drainage Area :**

Site: Right Buccal Mucosa Tumor bed + ITF

Portals: LAO Upper, RPO upper

Energy: 6 MV Photons

Dose: 3000 cGy in 10 fractions

Schedule: 300 cGy per fraction and 5 fractions per week

Dose prescribed to 100% isodose line

Site: Right , Buccal mucosa , B/L Level I a, IB, II, III nodal stations

Portals: R LAT, L LAT

Energy: 6 MV Photons

Dose: 3000 cGy in 10 fractions

Schedule: 300 cGy per fraction and 5 fractions per week

Dose prescribed to 100% isodose line

Site: B/L Level IV, V Nodal station

Portals: LAN

Energy: 6 MV Photons

Dose: 3000 cGy in 10 fractions

Schedule: 300 cGy per fraction and 5 fractions per week

Dose prescribed to 100% isodose line

Bolus was kept to ensure adequate skin dose.

She decided to discontinue radiation treatment after 7 fractions on : 02-08-2013

**TREATMENT COURSE :**

diagnosed to have Carcinoma Right Buccal mucosa post operative with local recurrence. In

view of rapidly growing disease with ulceration and skin involvement she was advised palliative Radiotherapy.

The diagnosis, prognosis, treatment protocol , palliative nature of treatment were explained to the patient and

relatives. The CT simulation imaging done for RT planning showed small nodule in the left lung [ suspicious of

metastases].

During the course of treatment she was also seen by pain & palliative consultants and pain was kept under

adequate control with Morphine. While on treatment she had an episode of bleeding from edge of ulcer which

was managed conservatievly with the help of HNS consultants.

After 7 fractions patient & relatives decided to discontinue the treatment as they want to go back to hometown at

Andaman as early as possible.

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

Continue Pain clinic Medication as advised.

Continue C&D of the ulcer

Oral and Skin Care:

1. Soda Bicarbonate powder 2.5 G and Sodium Chloride 2.5 G in 500 cc water as mouthwash every 4 to 6 hours.

Neem Leaf mouthwash to continue as before.

2. Skin care: Apply ointments or creams only as per Doctors' advice. Only Silver Sulfadiazine Cream for Local