**Impression :**

**MDCT NECK - CONTRAST**

Asymmetrically thickened left sided buccal mucosa with maximum thickness measuring 2.2cm.

The lesion is causing minimal bony erosion of mandile on left side at the site of last molar teeth.

Left sided level II lymphadenopathy with largest one size measuring 1.4x0.9cm.

Bilateral level III cervical lymphadenopathy with largest one size measuring 1.23x0.81cm.

IMPRESSION

***Patient known case of left sided buccal mucosa.***

      **Malignant left sided buccal mucosal mass with adjacent mild mandibular bony erosion with left sided level II and bilateral level III lymphadenopathy.**

**SURGICAL PATHOLOGY REPORT**

**Date of sample collection :** 06/03/2012

**Received on :** 06/03/2012

**Reported Date :** 10/03/2012

**Clinical Impression :**

Case of left buccal mucosa and RMT lesions

**Gross Description :**

Received in formalin are 11 specimens. The Ist specimen labelled as "Left buccal mucosa with segmental

mandibulectomy, partial maxillectomy", measuring 8.1x8.6x5.1cm. Maxilla measuring 7.3x4.7x3.9cm and

mandible measuring 5.6cm in length. There is an ulceroproliferative lesion seen in the left buccal mucosa

involving the retromolar trigone. The lesion measuring 5x2.5x1.9cm. The lateral resection margin is inked. The

lesion is situated 1.2cm from anterior mucosal margin, 1.5cm from posterior mucosal margin, 2cm from

superomedial mucosal margin and 1.5cm from inferior mucosal margin. Closest deep margin is 0.3cm.

Representative sections are submitted as follows:

A1 - Anterior mucosal margin

A2 - Posterior mucosal margin

A3 - Superomedial mucosal margin

A4 - Inferior mucosal margin

A5 to A7 - Tumour with inked deep margin

A8 - Tumour

A9 - Tumour with deep soft tissue

A10 - Tumour with adjacent mucosa

A11 - Tumour with hard palate mucosa

A12 - Tumour

AFB1 TO AFB3-tumor with mandible

AFB4 to AFB6- tumor with maxila

AFB7 And AFB8-(one slice)anterior surgical maxilary margin

Specimen II labelled as "Lateral soft tissue margin buccal mucosa", consists of single fibrfoatty tissue bit

measuring 0.5x0.4x0.3cm. Entire specimens submitted in cassette B.

Specimen III labelled as "Deep soft tissue margin infratemporal fossa", consists of single grey brown tissue

measuring 1.2x0.7x0.4cm. Entire specimen submitted in cassette C.

Specimen IV labelled as "Level Ia", consists of single fibrofatty tissue measuring 3.9x3.7x0.8cm. 2 lymph nodes

identified, largest measuring 1x0.7x0.5cm. Representative sections are submitted as follows:

D1 & D2 - lymph node 1 each

D3 to D5 - Section from suspecious area

Specimen V labelled as "Level Ib", consists of single nodular fibrofatty tissue bit measuring 5.3x3.2x2.3cm. Cut

section shows salivary gland and 3 lymph nodes, largest measuring 2.1x1.3x1.2cm. Representative sections are

submitted as follows:

E1 & E2 - Largest lymph node bisected

E3 - 1 lymph node bisected

E4 - 1 lymph node bisetcted

E5 to E7 - ? one lymph node

Specimen VI labelled as "level IIa", consists of nodular fibrofatty tissue in whole measuring 4.3x3.7x1.3cm. 12

lymph nodes identified, largest measuring 2.3x1.3x0.8cm. Representative sections are submitted as follows:

F1 - 4 lymph nodes

F2 - 2 lymph nodes

F3 - 2 lymph nodes

F4 - 2 lymph nodes

F5 - Largest lymph node bisected

F6 - 1 lymph node bisected

Specimen VII labelled as "Level IIb left", consists of single fibrofatty tissue measuring 1.8x1.6x1cm. 3 lymph

nodes identified, largest measuring 0.8x0.5x0.4cm. Representative sections are submitted as follows:

G1 - Largest lymph node

G2 - 2 lymph nodes

Specimen VIII labelled as "Left level III", consists of 2 nodular grey brown tissue in aggregate measuring

2.1x0.8x0.7cm. Entire specimen submitted as follows:

H1 - 1 lymph node

H2 - ? 2 lymph node

Specimen IX labelled as "Left level IV", consists of 2 nodular fibrofatty tissue in aggregate measuring

5.2x2.5x1.3cm. 2 lymph nodes identified, largest one measuring 0.5x0.4x0.2cm. Representative sections are

submitted as follows:

J1 - 2 lymph nodes

J2 & J3- ? 1 lymph node each

Specimen X labelled as "Left level V", consists of 3 nodular fibrofatty tissue in agregate measuring

4.1x3.2x1.6cm. Representative sections are submitted in K1 to K5 cassettes (? lymph nodes).

Specimen XI labelled as "Additional lateral soft tissue (cheek)", consists of 4 fibrofatty tissue whole measuring

2.2x1.8x0.8cm. Entire specimen submitted in L1 and L2 cassettes.

**Microscopic Description :**

A) Sections show neoplasm arises from epithelium consists of cells arranged in nests and sheets. Individual cell

show round to oval vesicular nuclei, prominent nulcoeli, moderate to abundant eosinophilic cytoplasm and

distinct cells borders. 0-1 mitosis / 10 HPF. Subepithelium shows dense inflammative cells consists of

lymphocytes neutrophils and plasma cells. Numerous keratin pearls noted. No lymphovascular emboli and

perineural invasion noted. No necrosis. Lesion is 0.4 from deep resection margin. Maxilla and mandible is

uninvolved by the tumor.

Anterior mucosal margin is free of tumor

Posterior mucosal margin is free of tumor

Superomedial and inferior margins are free of neoplasm.

B) Lateral soft tissue margin buccal mucosa: show fibrofatty tissue with hair follicles, no neoplasm seen.

C) Deep soft tissue margin infratemporal fossa is free of tumor

D) Level Ia :6 lymphnode show reactive change

E) Level IB :4 nodes show reactive changes and salivary gland tissue free of tumor

F) Level II a : 9 nodes show reactive changes

G) Level II b : 3 lymphnodes showing reactive changes

H) Left level III : 2 lymphnodes show reactive changes

J) Left level IV : 1 lymphnode show reactive changes

K) Left level V : 1 lymphnode with fibrofatty tissue which is negative for malignancy.

L) Additional lateral soft tissue margin free of neoplasm

**Diagnosis :**

WLE of carcinoma left buccal mucosa + additional margins and selective neck dissection:-

Well differentiated squamous cell carcinoma, Buccal mucosa.

Tumor size : 5x2.5x1.9cms.

Deep inked margin 0.4cm away.

Depth of invasion is 5mm.

All other margins are free and well away.

26 reactive nodes.

pT3N0Mx

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| **Date of Admission :**05/03/2012 | **Date of Procedure :**06/03/2012 |

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| **Date of Discharge :**22/03/2012 |

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

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| **DIAGNOSIS :** |
| Known case of left sided buccal mucosa |

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| **PROCEDURE DONE :** |
| Wide local excision+ neck disection+ ALT flap on 06-03-2012 under GA |

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| **HISTORY :** |
| 54 year old Mr Basheer Rawuther was a case of left buccal mucosa growth, initially noted 4 years back. Biopsy outside was not showing malignancy. He was working in UAE after this. During this period the lesion has been increasing in size and he was ignoring it. A recent biopsy was showed squamous carcinoma. Hence came here for management. |

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| **CLINICAL EXAMINATION :** |
| Examination revealed a 4 cm ulceroproliferative growth on the left side buccal mucosa anteriorly reaching opposite first molar, inferiorly reaching mucosa of lower third molar region, rest of the lower GBS free. Superiorly lesion involves upper GBS and extends superiorly into the anterior maxillary soft tissue. Medially lesion extends to hard palate around the upper third molar, not crossing midline. Posteriorly lesion involves RMT region. GL sulcus, Tonsils free. Neck: Left prefacial lymph node is palpable, 1.5x1.5 cm, soft, mobile. |

**INVESTIGATIONS :**

**Haemogram:**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Date:** | **Hb: g/dl** | **PCV: %** | **PLT: ku/ml** | **TC: ku/ml** | **DC: N %** | **L: %** | **E: %** | **ESR: mm/1st hr** |
| 06/03/2012 | 9.47 | 27.7 | 328.0 | 13.2 | 84.5 | 9.05 | 0.186 | - |
| 07/03/2012 | 7.01 | 20.5 | 262.0 | 9.06 | 84.7 | 9.42 | 0.156 | - |
| 08/03/2012 | 7.89 | 23.3 | 224.0 | 10.2 | 82.2 | 10.7 | 0.684 | - |
| 09/03/2012 | 9.67 | 28.2 | 229.0 | 11.0 | 83.7 | 8.84 | 1.3 | - |
| 10/03/2012 | 10.0 | 29.2 | 351.0 | 8.21 | 79.0 | 11.0 | 1.45 | - |
| 16/03/2012 | 10.6 | 32.2 | 590.0 | 13.5 | 79.3 | 12.9 | 1.03 | - |

**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** |
| 07/03/2012 | 0.7 | - | - | - | - | - | 1.71 | - |

**Renal Function Test and Serum Electrolytes:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Date:** | **Urea: mg/dl** | **Creatinine: mg/dl** | **Na+: mEq/L** | **K+: mEq/L** |
| 06/03/2012 | - | - | 134.1 | 4.15 |
| 07/03/2012 | 23.2 | 0.88 | 136.6 | 3.96 |
| 09/03/2012 | 27.0 | 0.74 | 134.6 | 3.64 |

Date: 16/03/2012

|  |  |
| --- | --- |
| RBC-COUNT-Blood : 3.71 M/uL | MCV-Blood : 86.8 fL |

|  |  |
| --- | --- |
| MCH-Blood : 28.7 pg | MCHC-Blood : 33.0 g/dl |

|  |  |
| --- | --- |
| RDW-Blood : 13.8 % | MPV-Blood : 7.13 fL |

|  |  |
| --- | --- |
| MONO -Blood : 6.26 % | BASO-Blood : 0.551 % |

Date: 10/03/2012

|  |  |
| --- | --- |
| RBC-COUNT-Blood : 3.47 M/uL | MCV-Blood : 84.3 fL |

|  |  |
| --- | --- |
| MCH-Blood : 28.9 pg | MCHC-Blood : 34.3 g/dl |

|  |  |
| --- | --- |
| RDW-Blood : 14.7 % | MPV-Blood : 6.72 fL |

|  |  |
| --- | --- |
| MONO -Blood : 7.94 % | BASO-Blood : 0.682 % |

Date: 09/03/2012

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| --- | --- |
| RBC-COUNT-Blood : 3.39 M/uL | MCV-Blood : 83.2 fL |

|  |  |
| --- | --- |
| MCH-Blood : 28.6 pg | MCHC-Blood : 34.3 g/dl |

|  |  |
| --- | --- |
| RDW-Blood : 14.8 % | MPV-Blood : 8.13 fL |

|  |  |
| --- | --- |
| MONO -Blood : 5.61 % | BASO-Blood : 0.57 % |

Date: 08/03/2012

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| --- | --- |
| MCHC-Blood : 33.9 g/dl | RDW-Blood : 13.8 % |

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| --- | --- |
| MPV-Blood : 7.98 fL | MONO -Blood : 5.75 % |

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| BASO-Blood : 0.658 % | RBC-COUNT-Blood : 2.72 M/uL |

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| --- | --- |
| MCV-Blood : 85.6 fL | MCH-Blood : 29.0 pg |

Date: 07/03/2012

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| --- | --- |
| Compatibility test; cross match complete (3 tests) : Compatible | RBC-COUNT-Blood : 2.44 M/uL |

|  |  |
| --- | --- |
| MCV-Blood : 84.0 fL | MCH-Blood : 28.7 pg |

|  |  |
| --- | --- |
| MCHC-Blood : 34.2 g/dl | RDW-Blood : 13.7 % |

|  |  |
| --- | --- |
| MPV-Blood : 8.47 fL | MONO -Blood : 5.29 % |

|  |  |
| --- | --- |
| BASO-Blood : 0.454 % |  |

Date: 06/03/2012

|  |  |
| --- | --- |
| RBC-COUNT-Blood : 3.31 M/uL | MCV-Blood : 83.6 fL |

|  |  |
| --- | --- |
| MCH-Blood : 28.6 pg | MCHC-Blood : 34.2 g/dl |

|  |  |
| --- | --- |
| RDW-Blood : 12.9 % | MPV-Blood : 7.3 fL |

|  |  |
| --- | --- |
| MONO -Blood : 5.89 % | BASO-Blood : 0.399 % |

Date: 05/03/2012

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

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| **COURSE IN THE HOSPITAL AND DISCUSSION :** |
| Patient was admitted after all priliminary investigations, he was taken up for surgery after Tumour board discusion. He underwent wide local excision of buccal mucosa lesion+ left selective neck disection+ free ALT flap reconsturction on 06-03-2012 under GA. In the post operative period patient developed reduced flap vascularity. Re exploration of the flap was done on 06/03/12, but partial flap loss had occurred. Debridement of the necrosed part of flap was done on 15/03/12. At the time of discharge patient is better. Patient is advised to follow up in HNS OPD on 29/03/2012. |

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| **DISCHARGE MEDICATION :** |
| Tab. Levoflox 500 mg 1-0-0 x 5 days. Tab. Dolo 650 mg 1-1-1 x 3 days. Tab. Pan 40 mg 1-0-0 x 3 days. Chlorhexidine mouth wash 1-1-1 x 1 weekl. |

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| --- | --- |
| **Date of Admission :**05/03/2012 | **Date of Procedure :**06/03/2012 |

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| **Date of Discharge :**22/03/2012 |

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

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| --- |
| **DIAGNOSIS :** |
| Known case of left sided buccal mucosa |

|  |
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| **PROCEDURE DONE :** |
| Wide local excision+ neck disection+ ALT flap on 06-03-2012 under GA |

|  |
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| **HISTORY :** |
| 54 year old Mr Basheer Rawuther was a case of left buccal mucosa growth, initially noted 4 years back. Biopsy outside was not showing malignancy. He was working in UAE after this. During this period the lesion has been increasing in size and he was ignoring it. A recent biopsy was showed squamous carcinoma. Hence came here for management. |

|  |
| --- |
| **CLINICAL EXAMINATION :** |
| Examination revealed a 4 cm ulceroproliferative growth on the left side buccal mucosa anteriorly reaching opposite first molar, inferiorly reaching mucosa of lower third molar region, rest of the lower GBS free. Superiorly lesion involves upper GBS and extends superiorly into the anterior maxillary soft tissue. Medially lesion extends to hard palate around the upper third molar, not crossing midline. Posteriorly lesion involves RMT region. GL sulcus, Tonsils free. Neck: Left prefacial lymph node is palpable, 1.5x1.5 cm, soft, mobile. |

**INVESTIGATIONS :**

**Haemogram:**

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| 07/03/2012 | 7.01 | 20.5 | 262.0 | 9.06 | 84.7 | 9.42 | 0.156 | - |
| 08/03/2012 | 7.89 | 23.3 | 224.0 | 10.2 | 82.2 | 10.7 | 0.684 | - |
| 09/03/2012 | 9.67 | 28.2 | 229.0 | 11.0 | 83.7 | 8.84 | 1.3 | - |
| 10/03/2012 | 10.0 | 29.2 | 351.0 | 8.21 | 79.0 | 11.0 | 1.45 | - |
| 16/03/2012 | 10.6 | 32.2 | 590.0 | 13.5 | 79.3 | 12.9 | 1.03 | - |

**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** |
| 07/03/2012 | 0.7 | - | - | - | - | - | 1.71 | - |

**Renal Function Test and Serum Electrolytes:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Date:** | **Urea: mg/dl** | **Creatinine: mg/dl** | **Na+: mEq/L** | **K+: mEq/L** |
| 06/03/2012 | - | - | 134.1 | 4.15 |
| 07/03/2012 | 23.2 | 0.88 | 136.6 | 3.96 |
| 09/03/2012 | 27.0 | 0.74 | 134.6 | 3.64 |

Date: 16/03/2012

|  |  |
| --- | --- |
| RBC-COUNT-Blood : 3.71 M/uL | MCV-Blood : 86.8 fL |

|  |  |
| --- | --- |
| MCH-Blood : 28.7 pg | MCHC-Blood : 33.0 g/dl |

|  |  |
| --- | --- |
| RDW-Blood : 13.8 % | MPV-Blood : 7.13 fL |

|  |  |
| --- | --- |
| MONO -Blood : 6.26 % | BASO-Blood : 0.551 % |

Date: 10/03/2012

|  |  |
| --- | --- |
| RBC-COUNT-Blood : 3.47 M/uL | MCV-Blood : 84.3 fL |

|  |  |
| --- | --- |
| MCH-Blood : 28.9 pg | MCHC-Blood : 34.3 g/dl |

|  |  |
| --- | --- |
| RDW-Blood : 14.7 % | MPV-Blood : 6.72 fL |

|  |  |
| --- | --- |
| MONO -Blood : 7.94 % | BASO-Blood : 0.682 % |

Date: 09/03/2012

|  |  |
| --- | --- |
| RBC-COUNT-Blood : 3.39 M/uL | MCV-Blood : 83.2 fL |

|  |  |
| --- | --- |
| MCH-Blood : 28.6 pg | MCHC-Blood : 34.3 g/dl |

|  |  |
| --- | --- |
| RDW-Blood : 14.8 % | MPV-Blood : 8.13 fL |

|  |  |
| --- | --- |
| MONO -Blood : 5.61 % | BASO-Blood : 0.57 % |

Date: 08/03/2012

|  |  |
| --- | --- |
| MCHC-Blood : 33.9 g/dl | RDW-Blood : 13.8 % |

|  |  |
| --- | --- |
| MPV-Blood : 7.98 fL | MONO -Blood : 5.75 % |

|  |  |
| --- | --- |
| BASO-Blood : 0.658 % | RBC-COUNT-Blood : 2.72 M/uL |

|  |  |
| --- | --- |
| MCV-Blood : 85.6 fL | MCH-Blood : 29.0 pg |

Date: 07/03/2012

|  |  |
| --- | --- |
| Compatibility test; cross match complete (3 tests) : Compatible | RBC-COUNT-Blood : 2.44 M/uL |

|  |  |
| --- | --- |
| MCV-Blood : 84.0 fL | MCH-Blood : 28.7 pg |

|  |  |
| --- | --- |
| MCHC-Blood : 34.2 g/dl | RDW-Blood : 13.7 % |

|  |  |
| --- | --- |
| MPV-Blood : 8.47 fL | MONO -Blood : 5.29 % |

|  |  |
| --- | --- |
| BASO-Blood : 0.454 % |  |

Date: 06/03/2012

|  |  |
| --- | --- |
| RBC-COUNT-Blood : 3.31 M/uL | MCV-Blood : 83.6 fL |

|  |  |
| --- | --- |
| MCH-Blood : 28.6 pg | MCHC-Blood : 34.2 g/dl |

|  |  |
| --- | --- |
| RDW-Blood : 12.9 % | MPV-Blood : 7.3 fL |

|  |  |
| --- | --- |
| MONO -Blood : 5.89 % | BASO-Blood : 0.399 % |

Date: 05/03/2012

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

|  |
| --- |
| **COURSE IN THE HOSPITAL AND DISCUSSION :** |
| Patient was admitted after all priliminary investigations, he was taken up for surgery after Tumour board discusion. He underwent wide local excision of buccal mucosa lesion+ left selective neck disection+ free ALT flap reconsturction on 06-03-2012 under GA. In the post operative period patient developed reduced flap vascularity. Re exploration of the flap was done on 06/03/12, but partial flap loss had occurred. Debridement of the necrosed part of flap was done on 15/03/12. At the time of discharge patient is better. Patient is advised to follow up in HNS OPD on 29/03/2012. |

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| --- |
| **DISCHARGE MEDICATION :** |
| Tab. Levoflox 500 mg 1-0-0 x 5 days. Tab. Dolo 650 mg 1-1-1 x 3 days. Tab. Pan 40 mg 1-0-0 x 3 days. Chlorhexidine mouth wash 1-1-1 x 1 weekl. |

**TUMOUR BOARD DISCUSSION**

**DOA :** 19/04/2012 **DOS :** 19/04/2012 **DOD :** 19/04/2012

**Date of tumor board discussion :** 19/04/2012

54 year old gentleman with Ca buccal mucosa.

Clinically had a 6X4 cm ulceroproliferative growth on the left side buccal mucosa anteriorly reaching opposite

first molar, inferiorly reaching mucosa of lower third molar region, rest of the lower GBS free.

Superiorly lesion involves upper GBS and extends superiorly into the anterior maxillary soft tissue. Medially

lesion extends to hard palate around the upper third molar, not crossing midline. Posteriorly lesion involves RMT

region. GL sulcus, Tonsils free.

Underwent WLE of carcinoma left buccal mucosa + with segmental

mandibulectomy, partial maxillectomy + additional margins and selective neck dissection on 6.3.2012:-

Well differentiated squamous cell carcinoma, Buccal mucosa.

There is an ulceroproliferative lesion seen in the left buccal mucosa

involving the retromolar trigone. The lesion measuring 5x2.5x1.9cm.

The lateral resection margin is inked.

The lesion is situated 1.2cm from anterior mucosal margin,

1.5cm from posterior mucosal margin,

2cm from superomedial mucosal margin and

1.5cm from inferior mucosal margin.

Closest deep margin is 0.3cm

Deep inked margin 0.4cm away.

Maxilla and mandible is uninvolved by the tumor

Depth of invasion is 5mm.

All other margins are free and well away.

26 reactive nodes.

pT3N0Mx

Had orocutaneous fistula on the left side , under the submandibular region, surgical closure done last week.

**Progress Notes**

**Date : 24/02/2012**

**ProgressNotes :**

Tumour board decision explained.

Advice: To get date for surgery.

PAC, Blood investigations.

**Progress Notes**

**Date : 09/01/2013**

**ProgressNotes :**

Diagnosis [Site, Histology, Stage]: Well-Differentiated Squamous Cell Carcinoma of the Left Buccal mucusa;

T3 N0 M0; Stage III; Surgery and Date of Sx: Left Buccal Mucosa Wide Local Excision + Partial

Maxillectomy + Segmental Mandibulectomy + Left Modified Radical Neck Dissection on 05/03/2012. Close

Margin; Ideally required Post-Operative Adjuvant Concurrent Chemo-Irradiation

Due to poor General Condition and Oro-Cutaneous fistula, chemotherapy was not done but planned for RT

alone. Completed 6600 cGy in 33 fractions. RT Commencement: Date: 26/04/2012

o/e- oro antral fistula in the left side

otherwise nad

**Speciality :** RadiationOncology

**D/O Commencement of RT** 26/04/2012 **D/O Completion of RT** 09/06/2012

**FINAL DIAGNOSIS, STAGE AND HISTOLOGY**

Carcinoma Left Buccal Mucosa

S/P Left Buccal Mucosa Wide Local Excision + Partial Maxillectomy + Segmental Mandibulectomy + Left

Modified Radical Neck Dissection on 06.03.2012

pT3N0M0, Stage III

Well Differentiated Squamous Cell Carcinoma,

Close Deep Margin

Completed PostOp 3DCRT, 66Gy in 32 fractions on 9.6.2012

**CLINICAL HISTORY AND PHYSICAL FINDINGS**

54 year old gentleman, Mr Basheer Rawuther noticed a ulcer over the left buccal mucosa 4 years back. Not

associated with any pain, but complained of burning sensation while having food.The disease was initially

evaluated with a biopsy at Kottayam Medical College, (no reports) but there was no malignancy. He was

working in UAE after this. During this period the lesion has been increasing in size and he was ignoring it.Then

he came to Aleppey Medical College and there he was evaluted with a biopsy , showed Squamous

Carcinoma.(bystander reporting to op , has no reports) Hence he came here for further management. He was seen

initially at Head and Neck OPD, On examination there was a 4 cm ulceroproliferative growth on the left side

buccal mucosa anteriorly reaching opposite first molar, inferiorly reaching mucosa of lower third molar region,

rest of the lower GBS free. Superiorly lesion involves upper GBS and extends superiorly into the anterior

maxillary soft tissue. Medially lesion extends to hard palate around the upper third molar, not crossing midline.

Posteriorly lesion involves RMT region. GL sulcus, Tonsils free.

Neck: Left prefacial lymph node is palpable, 1.5x1.5 cm, soft, mobile. clinically T3N1M0

CT scan done on 15/2/12, showed asymmetrically thickened left sided buccal mucosa with maximum thickness

measuring 2.2cm. The lesion is causing minimal bony erosion of mandile on left side at the site of last molar

teeth. Left sided level II lymphadenopathy with largest one size measuring 1.4x0.9cm. Bilateral level III cervical

lymphadenopathy with largest one size measuring 1.23x0.81cm.The case was discussed in the tumor board , and

was planned for surgery, underwent Wide local excision+ neck disection+ ALT flap on 6-03-2012. Post op HPR

showed Well differentiated squamous cell carcinoma.

Tumor size : 5x2.5x1.9cms. Deep inked margin 0.4cm away. Depth of invasion is 5mm. All other margins are

free and well away.

26 reactive nodes

He was then referred to Radiation Oncology for adjuvant radiation after tumour board recommended the same.

In view of the close deep margin, concurrent chemoradiation was considered, but because of the oroantral fistula

and poor general condition, it was decided to omit chemotherapy and to go ahead with adjuvant radiation

treatment 66Gy in 33 fractions with 3DCRT. He was on NG tube feeds. CT simulation was done on 19.4.2012

after pre RT dental prophylaxis.

**INVESTIGATIONS :**

**Haemogram:**

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

**ku/ml**

**TC:**

**ku/ml**

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

**mm/1st hr**

25/04/2012 11.6 35.7 365.0 7.2 58.6 31.7 2.76 -

29/04/2012 12.5 37.7 333.0 5.82 67.0 24.9 1.43 -

07/05/2012 12.2 37.4 337.0 6.24 50.3 38.1 3.89 -

14/05/2012 12.7 39.0 322.0 6.62 75.0 12.0 3.31 -

21/05/2012 13.2 44.0 377.0 5.96 70.6 16.7 4.68 -

29/05/2012 13.5 40.2 325.0 5.01 66.2 18.1 5.24 -

06/06/2012 11.7 35.2 297.0 4.5 74.3 10.9 6.03 -

**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**

25/04/2012 0.35 0.01 19.5 13.6 54.0 7.84 3.81 4.0

**Renal Function Test and Serum Electrolytes:**

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

25/04/2012 21.0 0.75 140.9 4.0

29/04/2012 11.9 0.82 133.7 4.3

06/06/2012 - 0.87 133.2 3.8

Date: 06/06/2012

RBC-COUNT-Blood : 4.3 M/uL MCV-Blood : 82.0 fL

MCH-Blood : 27.3 pg MCHC-Blood : 33.3 g/dl

RDW-Blood : 15.2 % MPV-Blood : 7.14 fL

MONO -Blood : 7.95 % BASO-Blood : 0.805 %

Date: 29/05/2012

RBC-COUNT-Blood : 4.88 M/uL MCV-Blood : 82.3 fL

MCH-Blood : 27.6 pg MCHC-Blood : 33.5 g/dl

RDW-Blood : 15.5 % MPV-Blood : 7.8 fL

MONO -Blood : 9.7 % BASO-Blood : 0.819 %

Date: 21/05/2012

RBC-COUNT-Blood : 5.35 M/uL MCV-Blood : 82.2 fL

MCH-Blood : 24.6 pg MCHC-Blood : 29.9 g/dl

RDW-Blood : 15.0 % MPV-Blood : 7.83 fL

MONO -Blood : 7.4 % BASO-Blood : 0.646 %

Date: 14/05/2012

RBC-COUNT-Blood : 4.72 M/uL MCV-Blood : 82.6 fL

MCH-Blood : 26.9 pg MCHC-Blood : 32.6 g/dl

RDW-Blood : 15.6 % MPV-Blood : 7.92 fL

MONO -Blood : 8.75 % BASO-Blood : 0.889 %

Date: 07/05/2012

RBC-COUNT-Blood : 4.48 M/uL MCV-Blood : 83.3 fL

MCH-Blood : 27.2 pg MCHC-Blood : 32.6 g/dl

RDW-Blood : 15.0 % MPV-Blood : 7.99 fL

MONO -Blood : 7.0 % BASO-Blood : 0.691 %

Date: 29/04/2012

RBC-COUNT-Blood : 4.55 M/uL MCV-Blood : 82.9 fL

MCH-Blood : 27.5 pg MCHC-Blood : 33.2 g/dl

RDW-Blood : 17.2 % MPV-Blood : 6.91 fL

MONO -Blood : 5.88 % BASO-Blood : 0.79 %

Date: 25/04/2012

RBC-COUNT-Blood : 4.22 M/uL MCV-Blood : 84.6 fL

MCH-Blood : 27.4 pg MCHC-Blood : 32.4 g/dl

RDW-Blood : 17.6 % MPV-Blood : 8.4 fL

MONO -Blood : 6.15 % BASO-Blood : 0.785 %

**HISTOPATHOLOGY REPORTS**

Histology Lab No :S12-2490 Received on :06/03/2012

Clinical Impression : Case of left buccal mucosa and RMT lesions

Gross Description : Received in formalin are 11 specimens. The Ist specimen labelled as "Left buccal mucosa

with segmental mandibulectomy, partial maxillectomy", measuring 8.1x8.6x5.1cm. Maxilla measuring

7.3x4.7x3.9cm and mandible measuring 5.6cm in length. There is an ulceroproliferative lesion seen in the left

buccal mucosa involving the retromolar trigone. The lesion measuring 5x2.5x1.9cm. The lateral resection

margin is inked. The lesion is situated 1.2cm from anterior mucosal margin, 1.5cm from posterior mucosal

margin, 2cm from superomedial mucosal margin and 1.5cm from inferior mucosal margin. Closest deep margin

is 0.3cm. Representative sections are submitted as follows:

A1 - Anterior mucosal margin

A2 - Posterior mucosal margin

A3 - Superomedial mucosal margin

A4 - Inferior mucosal margin

A5 to A7 - Tumour with inked deep margin

A8 - Tumour

A9 - Tumour with deep soft tissue

A10 - Tumour with adjacent mucosa

A11 - Tumour with hard palate mucosa

A12 - Tumour

AFB1 TO AFB3-tumor with mandible

AFB4 to AFB6- tumor with maxila

AFB7 And AFB8-(one slice)anterior surgical maxilary margin

Specimen II labelled as "Lateral soft tissue margin buccal mucosa", consists of single fibrfoatty tissue bit

measuring 0.5x0.4x0.3cm. Entire specimens submitted in cassette B.

Specimen III labelled as "Deep soft tissue margin infratemporal fossa", consists of single grey brown tissue

measuring 1.2x0.7x0.4cm. Entire specimen submitted in cassette C.

Specimen IV labelled as "Level Ia", consists of single fibrofatty tissue measuring 3.9x3.7x0.8cm. 2 lymph nodes

identified, largest measuring 1x0.7x0.5cm. Representative sections are submitted as follows:

D1 & D2 - lymph node 1 each

D3 to D5 - Section from suspecious area

Specimen V labelled as "Level Ib", consists of single nodular fibrofatty tissue bit measuring 5.3x3.2x2.3cm. Cut

section shows salivary gland and 3 lymph nodes, largest measuring 2.1x1.3x1.2cm. Representative sections are

submitted as follows:

E1 & E2 - Largest lymph node bisected

E3 - 1 lymph node bisected

E4 - 1 lymph node bisetcted

E5 to E7 - ? one lymph node

Specimen VI labelled as "level IIa", consists of nodular fibrofatty tissue in whole measuring 4.3x3.7x1.3cm. 12

lymph nodes identified, largest measuring 2.3x1.3x0.8cm. Representative sections are submitted as follows:

F1 - 4 lymph nodes

F2 - 2 lymph nodes

F3 - 2 lymph nodes

F4 - 2 lymph nodes

F5 - Largest lymph node bisected

F6 - 1 lymph node bisected

Specimen VII labelled as "Level IIb left", consists of single fibrofatty tissue measuring 1.8x1.6x1cm. 3 lymph

nodes identified, largest measuring 0.8x0.5x0.4cm. Representative sections are submitted as follows:

G1 - Largest lymph node

G2 - 2 lymph nodes

Specimen VIII labelled as "Left level III", consists of 2 nodular grey brown tissue in aggregate measuring

2.1x0.8x0.7cm. Entire specimen submitted as follows:

H1 - 1 lymph node

H2 - ? 2 lymph node

Specimen IX labelled as "Left level IV", consists of 2 nodular fibrofatty tissue in aggregate measuring

5.2x2.5x1.3cm. 2 lymph nodes identified, largest one measuring 0.5x0.4x0.2cm. Representative sections are

submitted as follows:

J1 - 2 lymph nodes

J2 & J3- ? 1 lymph node each

Specimen X labelled as "Left level V", consists of 3 nodular fibrofatty tissue in agregate measuring

4.1x3.2x1.6cm. Representative sections are submitted in K1 to K5 cassettes (? lymph nodes).

Specimen XI labelled as "Additional lateral soft tissue (cheek)", consists of 4 fibrofatty tissue whole measuring

2.2x1.8x0.8cm. Entire specimen submitted in L1 and L2 cassettes.

Microscopic Description : A) Sections show neoplasm arises from epithelium consists of cells arranged in nests

and sheets. Individual cell show round to oval vesicular nuclei, prominent nulcoeli, moderate to abundant

eosinophilic cytoplasm and distinct cells borders. 0-1 mitosis / 10 HPF. Subepithelium shows dense

inflammative cells consists of lymphocytes neutrophils and plasma cells. Numerous keratin pearls noted. No

lymphovascular emboli and perineural invasion noted. No necrosis. Lesion is 0.4 from deep resection margin.

Maxilla and mandible is uninvolved by the tumor.

Anterior mucosal margin is free of tumor

Posterior mucosal margin is free of tumor

Superomedial and inferior margins are free of neoplasm.

B) Lateral soft tissue margin buccal mucosa: show fibrofatty tissue with hair follicles, no neoplasm seen.

C) Deep soft tissue margin infratemporal fossa is free of tumor

D) Level Ia :6 lymphnode show reactive change

E) Level IB :4 nodes show reactive changes and salivary gland tissue free of tumor

F) Level II a : 9 nodes show reactive changes

G) Level II b : 3 lymphnodes showing reactive changes

H) Left level III : 2 lymphnodes show reactive changes

J) Left level IV : 1 lymphnode show reactive changes

K) Left level V : 1 lymphnode with fibrofatty tissue which is negative for malignancy.

L) Additional lateral soft tissue margin free of neoplasm

Diagnosis : WLE of carcinoma left buccal mucosa + additional margins and selective neck dissection:-

Well differentiated squamous cell carcinoma, Buccal mucosa.

Tumor size : 5x2.5x1.9cms.

Deep inked margin 0.4cm away.

Depth of invasion is 5mm.

All other margins are free and well away.

26 reactive nodes.

pT3N0Mx

**RADIOLOGY AND NUCLEAR MEDICINE REPORTS**

Impression :

MDCT NECK - CONTRAST

Asymmetrically thickened left sided buccal mucosa with maximum thickness measuring 2.2cm.

The lesion is causing minimal bony erosion of mandile on left side at the site of last molar teeth.

Left sided level II lymphadenopathy with largest one size measuring 1.4x0.9cm.

Bilateral level III cervical lymphadenopathy with largest one size measuring 1.23x0.81cm.

IMPRESSION

Patient known case of left sided buccal mucosa.

Malignant left sided buccal mucosal mass with adjacent mild mandibular bony erosion with left sided level II

and bilateral level III lymphadenopathy.

Treatment Given:

**RADIATION DETAILS :**

Teletherapy

Intent: Curative

Cat scan simulation:19.04.2012

Computerised planning and resimulation: 26.04.2012

RT started on: 26.04.2012

RT completed on: 9.6.2012

Total dose: 6600cGy in 32 fractions

Elapsed days: 45

Treatment breaks: NIL

**Primary Tumour And Drainage Area :**

1.Tumour bed +Surgical BED + Left NST [I-VI]+ Margin=CTV 60Gy:

Treated with a dose of 6000cGy in 30 fractions with 200cGy per fraction, 5 fracions per week.

**Boost Fields :**

Boost: 400cGy in 2 fractions, to the high risk region.

Total dose: 6600cGy in 32 fractions.

**TREATMENT COURSE :**

As the high risk region already received 66Gy in 32 fractions, the last fraction was skipped.

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

Follow up Pattern:

1. Review after 1 and 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, PEG site, Tracheostomy site etc.

3. Review every month on Wednesdays / Fridays in RT OPD for one year and then as

advised.

Investigations:

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

6 weeks post RT and then as advised by Doctors [CXR every 6 months].

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

Oral and Skin Care:

1. Soda Bicarbonate powder 2.5 G and Sodium Chloride 2.5 G in 200 cc water to mouthwash

every 4 to 6 hours. Neem Leaf mouthwash to continue as before.

2. Skin care: Do not wash the irradiated area for the next two weeks. Apply ointments or

creams only as per Doctors' advice.

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

4. Avoid washing with soap and oil / shaving for 4 weeks. Gentle splashing of water followed

by mopping with towel 2 weeks after completion of EBRT. Normal bathing after 4 weeks.

Specific:

1. PEG site care and regular dressing alternate day at home.

2. High calorie PEG feeds: 3500 calorie and 120 gm protein with mineral and vitamin

supplementation in 2.5 liters of liquid diet. Orally as tolerated.

3. Tracheostomy stoma care and suction SOS if required at nearby hospital.

4. All patients who has undergone chemotherapy should take care the following.

IN CASE OF FEVER, TIREDNESS, VOMITING, THROAT PAIN OR ANY UNTOWARD SYMPTOMS,

CONSIDER POTENTIAL COUNTS DROP [RULE OUT FEBRILE NEUTROPENIA].

INFORM IMMEDIATELY RADIATION ONCOLOGY ON-CALL [1776] OR MEDICAL ONCOLOGY

ON-CALL

[2850] AND FOLLOW UP THE INSTRUCTIONS BY THE DOCTOR.