## **Case Report**

# A rare case report of synchronous malignancy – Squamous cell carcinoma of tongue and adenocarcinoma of liver

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#### ABSTRACT

The Synchronous occurring of squamous cell carcinoma of tongue and adenocarcinoma of liver is very rare. Second neoplasm are classified as 'synchronous, defined as occurrence of index tumor and second malignancy within 6 months of each other. We reported a rare case of 75 years female who presented to radiotherapy opd with complaints of ulcerative lesion left lateral border tongue for 2 months. She also complained of decreased appetite and pain abdomen for about 2 months. Ultrasound (usg) abdomen revealed mass in right lobe of liver. Biopsy from tongue lesion confirmed squamous cell carcinoma and usg-guided fnac liver mass confirmed poorly differentiated adenocarcinoma liver. We reported this case to highlight a rare occurrence of synchronous malignancy of tongue and liver. Proper diagnostic and metastatic workup should be done to detect any synchronous malignancies. Keywords: Synchronous malignancies, tongue, liver.

#### INTRODUCTION

Globally head and neck carcinoma accounts for 5,50,000 cases and around 3,00,000 deaths annually

<sup>(1)</sup>. Lip and oral cavity accounts for 3,00,373 cases; nasopharynx accounts for 8669 cases and other pharyngeal cancers about 1,42,387 cases annually<sup>(2)</sup>. About 90% of the head and neck carcinomas are squamous cell carcinoma. Tobacco and alcohol consumption and HPV infection are the known risk factors for head and neck carcinomas.

Liver cancer is largely a problem of the less developed regions where 83% of the estimated 782451 new cancer cases worldwide occurred in 2012. It is the most common cancer in men and the ninth in women. Liver cancer is the second most common cause of death worldwide, estimated to be responsible for nearly 746,000 deaths in  $2012^{(2)}$ . The prognosis for liver cancer is very poor.

With the increasing survival time of patients and better screening programs for early detection of

neoplastic lesions synchronous and metachronous tumours are being related.

However, the synchronous occurrence of primary squamous cell carcinoma tongue and adenocarcinoma of liver is very rare.

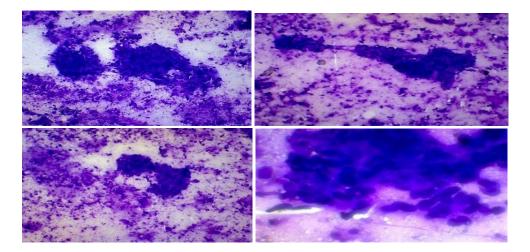
#### **Case Report:**

A 75 years old woman presented to cancer opd with complaints of ulcerative lesion left lateral border tongue, pain left side mouth radiating to left ear, decreased appetite, and pain abdomen for about 2 months. Patient took symptomatic treatment for the above complaints for 2 months from private hospitals.

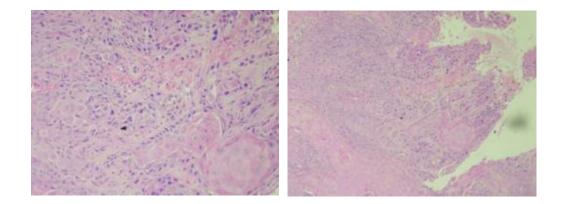
On examination orodental hygiene was fair, mouth opening normal. Tongue movement was normal. There was an ulcerative lesion present on the left lateral border tongue. There was left cervical level 2a lymph node.

Ultrasound abdomen revealed, enlarged liver with 12.8\*7.8\*8cm in-homogenously hypoechoic mass in the right lobe of the liver abutting anterior gall bladder wall -? primary hepatic mass. Histopathology and Cytology:

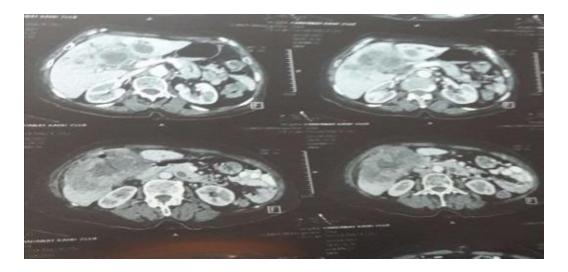
1. The first specimen of ultrasound guided FNAC hepatic mass showed poorly differentiated adenocarcinoma.



2. Incisional biopsy growth left side tongue showed well differentiated squamous cell carcinoma.



3. Imaging: CT scan abdomen revealed hepatomegaly with mass right lobe liver displacing gall bladder anteriorly.



After routine haematology and biochemistry, the patient was started on gemcitabine and carboplatin regimen. She received one cycle, defaulted after that for 3 months and reported again in cancer opd with complaint of pain abdomen. Ultrasound abdomen revealed hepatomegaly with liver span 21cm. A mass of 10cmx9.18cmx10.33 cm in right lobe of liver displacing gall bladder posteriorly and causing IHBR dilatation.

Patient was put on palliative treatment with weekly Paclitaxel 100mg and carboplatin 150mg. She received only one cycle and defaulted again.

### DISCUSSION

In recent decades multiple primary cancers in one patient is not uncommon. Second neoplasm are classified as 'synchronous, defined as occurrence of index tumor and second malignancy within 6 months of each other <sup>(3)</sup>. Our case highlights a rare occurrence of synchronous malignancies consisting of squamous cell carcinoma tongue and adenocarcinoma liver.

First incidence of multiple tumours was reported by Theodor Bilroth in 1889. Billroth suggested three criteria for the diagnosis of a second primary tumor<sup>(4)(5)</sup>:

1. The two tumours should have different histologic appearances.

2. The tumours should arise in different situations.

3. The tumours must be seen to produce their own separatemetastases.

In 1932, <sup>(6)</sup> Warren and Gates modified these criteria and suggested that the following three criteria be added: <sup>(1)</sup> both neoplasms must be malignant, <sup>(2)</sup> the two neoplasms must be anatomically separate, and <sup>(3)</sup> the possibility of the second primary neoplasm being a metastasis from the index tumor must be excluded.

The frequency of multiple primary tumors has been reported between 3.7% and 12% of all cancers. The occurrence of synchronous squamous cell carcinoma tongue and adenocarcinoma liver is rare.

The concept of field cancerization or "condemned mucosa syndrome" is the most popular theory put forward to explain the development of multiple cancers <sup>(3)</sup>. This concept, used to explain the high local recurrence rate of oral cancer, also is applicable to the high rate of multiples synchronous primary lesions in the upper aerodigestive tract. Carcinoma of other distant sites and specifically those arising from the nasal cavity, salivary glands, orbit, lacrimal apparatus, skin of the lips, thyroid, stomach and liver should be ruled out.

These tumors are believed to have an etiology different from those oropharyngeal

/laryngeal/esophageal tumors, which are mucosal in origin and exposed to similar irritants, e.g. tobacco20 cigars <sup>(3)</sup> a day and alcohol 37g <sup>(3)(7)</sup>. The average age of patients with multiple versus single lesions is greater at the time of diagnosis by 3 to 4. The sex ratio of 4 to 1 for male to female is seen (7)(8)(9).

Although liver cancer and head and neck cancer share risk factors, the presence of both cancers is rare and conclusions regarding prognosis are difficult to extrapolate.

#### CONCLUSION

When making a diagnosis, staging a cancer and evaluating treatment response, we should be aware that there may be potential cancer lesions other than the index tumor. Hence, proper diagnostic and metastatic workup should be done to detect any synchronous malignancies and through proper management with surgery, chemotherapy and radiotherapy, there can be improvement in the patient's survival.

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