

An original case of lip metastasis, from non small cell lung cancer

To the Editor: In many hospitals in India, lung cancer is reported to be the most common cancer in males [1]. Most of the patients present in an advanced incurable stage [1]. Most common sites of metastases from non small cell lung cancer (NSCLC) are adrenals, liver, bones and brain. Cutaneous metastases are seen in only 1.5% to 2.6 % of the cases of various pulmonary cancers [2] and from 0.7%-9.0%, with an average of 5% from all internal metastases [3]. Commonly skin metastasis are associated with advanced stage, 7%-19% of skin metastasis appeared as first sign of lung cancer [4]. Metastases from lung cancer usually involve the chest and the abdomen, rarely the face indicating disseminated disease with poor prognosis [5]. Therefore, any unusual skin lesion in patients with history of malignancy needs proper evaluation.



Figure 1. Photo of the patient with the lower lip lesion

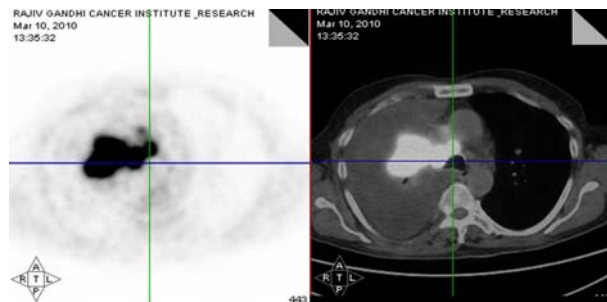


Figure 2. Transaxial PET and PET/CT images revealing the hypermetabolic central right lung mass involving right main bronchus with associated collapse of lung and pleural effusion.

We present a 68 years old male smoker, with diabetes mellitus type II and hypertension who presented to us with dyspnea since one week. On physical examination, an ulcerated lesion with indurated margin was found in the lower lip (Fig. 1) persistent since one month. Chest X-rays were suggestive of right lung upper zone opacity. Contrast computed tomography (CT) of the chest revealed a heterogeneous enhancing central right lung mass encasing the right main bronchus with distal complete collapse of the right upper lobe. Few enlarged mediastinal lymph nodes and right pleural effusion were also noted. Bronchoscopy showed a right upper lobe bronchus mass. Bronchial biopsy suggested NSCLC. On immunohistochemistry (IHC), tumor cells expressed CK5, p63 and were negative for TTF-1 and CD15. Fluorine-18-fluorodeoxyglucose positron emission tomography/computerized tomography (^{18}F -FDG PET/CT) was advised for staging and revealed a hypermetabolic central right lung mass involving the right main bronchus with distal

complete collapse of the right upper lobe (Fig. 2). This mass was inseparable from mediastinal lymphadenopathy. Few enlarged right mediastinal lymph nodes and mild right pleural effusion were also noted (Fig. 2). A hypermetabolic focus was also seen in the lower lip nodule (Fig. 3), where biopsy showed squamous cell carcinoma. Final diagnosis was right lung NSCLC stage IV with mediastinal lymphadenopathy and lip metastasis. Patient was planned for palliative chemotherapy.

We did not find a case report of lip metastasis from lung cancer in the literature. However, we found few case reports of lip metastases associated with colon and gastro-esophageal junction cancers [6-8]. Dermal lesions of lung cancer usually present as a mobile firm nodule, and may associate with erythema, exudates ulceration and pain.

Various types of lung cancer were reported with dermal metastases. Researchers reported that the highest tendency for cutaneous metastases had in large cell carcinomas 10.3 %, adenocarcinomas in 3.1% to 3.4%, microcellular carcinomas in 1.7% to 2.0% and squamous cell carcinomas (SqCC) in 1.4% [9, 10]. Small cell carcinomas and SqCC had the lowest frequency of skin metastases.

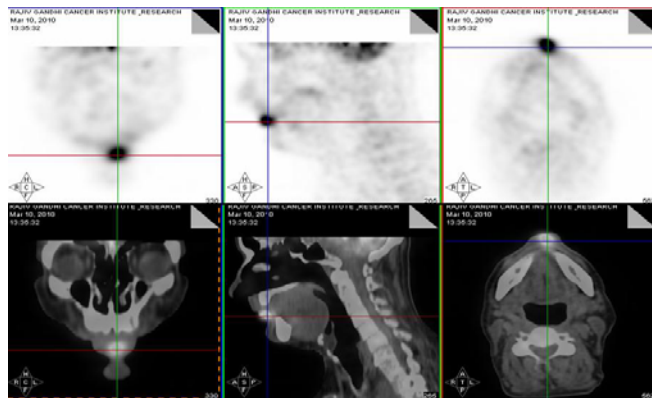


Figure 3. Coronal, sagittal and transaxial images from left to right: PET and PET/CT images from above, revealing the hypermetabolic lower lip lesion.

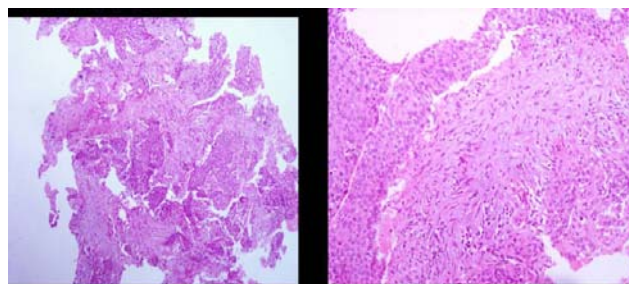


Figure 4. H&E stained histopathology slides of the lip lesion show squamous cell carcinoma.

After diagnosis of cutaneous metastases of lung cancer, median survival is reported to be 4.5 months [11]. Others reported that 50% of their patients died within 3 months of the diagnosis of skin metastases of lung cancer [10].

In our Institute we have performed more than 4500 ¹⁸F-FDG PET/CT scans so far. About 20%-30% of all patients studied had lung cancer. We have also seen many patients of lung cancer with skin metastases, but not with lip metastasis. Pertinent to this case, we found lip lesion, as the only site of distant metastasis. Since without any evidence of other distant site involvement, lip metastasis was difficult to explain, we confirmed its origin by histopathology.

In conclusion, we report for the first time a lip metastasis from NSCLC because it indicates an advanced disease and poor prognosis.

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The winged Victory. From the Archeological Museum of Pella. Alexander the Great was born in Pella where his palace has lately been excavated. Photographed by Professor Gurupad Bandopadhyaya.