



Lung Cancer Presenting as Abdominal Wall Growth

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ABSTRACT

Cutaneous metastases as initial manifestation of internal neoplasias, represent only 0.8% of total cases. When skin metastases of an unknown primary site appear, lung cancer is the first option to be discarded in case of men, and breast cancer in case of women. Lung cancer spreads to the skin in 2.8-8.7% of the cases and in 7-23.8% of the cases, cutaneous metastases appear as first manifestation of the primary tumor. We report here a case of metastases to anterior abdominal wall as initial presenting symptom of non small cell lung cancer. This case emphasises that we have to pay attention to such lesions even on rare sites. Such lesions if solitary and without any visceral or CNS involvement have better prognosis.

Keywords : pulmonary disease, skin, non small cell carcinoma

INTRODUCTION

Non small cell lung cancer is the most common type of lung cancer (80%). Only early stage operable disease can be cured. Most common sites of metastases include bones, liver, adrenal glands and brain. Skin is rarely affected and is an indicator of poor prognosis. Cutaneous metastases occur in 0.7% to 9% of all patients with cancer [1]. Women with skin metastases have primary malignancies in the breast 69% of time, in the lung 4% and in oral cavity 1% [2]. In men, the primary disease is most frequently in the lung, with frequency in oral cavity and breast being 12% and 2% respectively [2]. Brownstein and Helwig reported that underlying cancer had been undiagnosed in 60% of patients with lung cancer [3].

We report here a case of metastases to anterior abdominal wall as initial presenting symptom of NSCLC. This case emphasises that we have to pay attention to such lesions even on rare sites. Such lesions if solitary and without any visceral or CNS involvement has better prognosis.

CASE PRESENTATION

A 60 year male dye worker presented with a 3x2 cm non healing painless ulcer over anterior abdominal wall for past 7 months.



FIGURE 1

He was a chronic smoker with smoking index of 300. Hemogram was within normal limits. Abdominal examination revealed 3x2 cm nodulo-ulcerative growth in midline 15cm above the umbilicus. Margin of the ulcer was indurated and bled on touching. Ulcer was not fixed to underlying subcutaneous tissue. Ultrasound of abdomen did not reveal any abnormality. CECT was normal. FNAC showed adenocarcinoma. Wide local excision of ulcer was done.



FIGURE 2

Tissue biopsy showed adenocarcinoma.

Work up for colonic malignancy proved negative except for increased CEA level (62.5ng/ml). CECT thorax was done and a mass in right lower hemithorax was found.

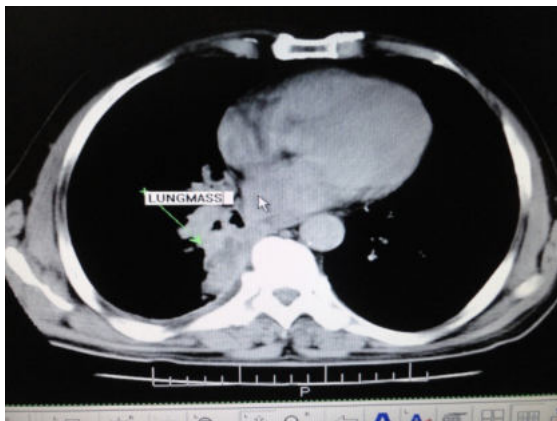


FIGURE 3

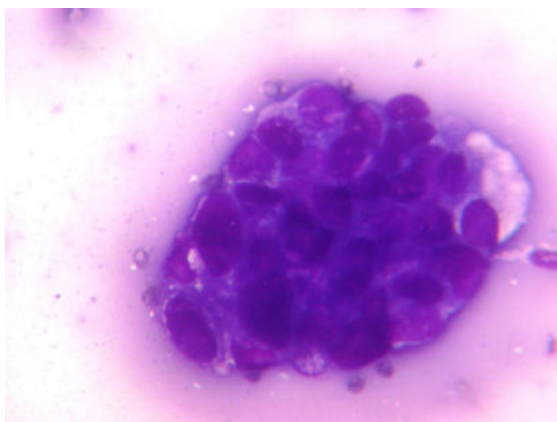


FIGURE 4

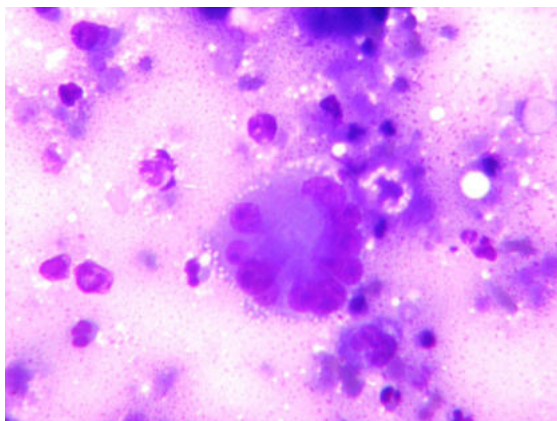


FIGURE 5

Bronchoscopy was done and biopsy was taken from the mass which showed poorly differentiated adenocarcinoma of NS-CLC. NCCT head was done which was normal. Patient did not have any symptom pertaining to primary lung carcinoma.

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DISCUSSION

Lung cancer is the second most common type of malignancy and leading cause of death from cancer [4]. The most common histologic type is adenocarcinoma. Frequent metastatic sites for lung cancer include higher lymph nodes, adrenal glands, liver, brain and bone [5]. Lung cancer spreads to skin in 7% (1.5%-12%) [6, 7]. Cutaneous metastasis usually involves the anterior chest, back of thorax, limbs but involvement of anterior abdominal wall is rare [8]. One study of 2080 cases of lung cancer found macroscopic metastases to the skin in 1.5% of patients [9]. In another series of 56 patients with skin metastases from lung malignancies, 7% developed a metastatic skin nodule before the primary tumor was diagnosed, and 16% had cutaneous metastases diagnosed simultaneously with the primary lung tumor [10]. Another report noted that in 11 of 21 patients (52%) with cutaneous metastases from lung cancer, the skin metastases were first site of intranodal involvement [11].

Skin metastases can appear on any cutaneous surface, including the scrotum [12]. Most common sites are chest wall and posterior abdomen. 20% to 60% of cutaneous metastases present before or at the same time as primary lung tumor [2]. Metastasizing is a complex process that the tumor cells have to detach from the primary tumor, and then, they must spread in the tissue, invade the blood or lymphatic vessels, and survive travel in the circulation. After this they have to settle in the microvasculature of the organ, extravasate through the vessel wall, invade the target organ and proliferate within the target tissue [4]. Cutaneous metastases from lung cancer do not have a characteristic presentation, however, they are often described as nodular, mobile or fixed, hard, single or multiple and painless [4]. Immunohistochemistry may be useful when the primary site of cutaneous metastases is unknown and a shorter differential is desired [6]. Coslet et al and Molina et al proposed that lung cancer in upper lobes have greater tendency of skin metastases [7]. Cutaneous metastases and their primaries in lung and usually incurable and suggest an unfortunate prognosis, mean survival is 5-6 months after diagnosis of cutaneous metastases [2]. In our case patient presented with solitary cutaneous lesion over the abdominal wall as first and the only symptom, without any symptom of the primary lung carcinoma which is very rare. Three cases with NS-CLC with cutaneous metastases and rapidly clinical course due to extensive CNS involvement are reported, of these, two cases were adenocarcinoma and skin lesion appeared after the primary was diagnosed and treated. All these three patients died within 3-4 months of skin metastases diagnoses. Our case has clearly shown that there was no involvement of any abdominal viscera or central nervous system and has better prognosis with uneventful follow up of 15 months. The surgical removal of a solitary skin lesion, without any signs of metastatic disease elsewhere should always be considered.

CONCLUSION

This case highlights the importance of maintaining a high index of suspicion for cutaneous metastatic disease. Prompt diagnosis and management of these metastases can dramatically improve a patient's quality of life and should be strived for.