



## METASTATIC SUBCUTANEOUS NODULES AS A FIRST PRESENTING COMPLAINT OF INTERNAL MALIGNANCY -A CASE REPORT

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### ABSTRACT

Metastasis of internal malignancy to the subcutaneous and cutaneous regions is one of the rarest entity and carries a very poor prognosis. This is because the tumor invades the skin and subcutaneous regions as a last resort after metastasizing to various internal organs. The incidence of silent invasion of a fatal visceral malignancy to skin and subcutaneous regions were found to be around 0.8% in some studies. Here is an interesting case of a middle aged man with multiple subcutaneous nodules as a first presenting complaint of unknown, asymptomatic primary internal malignancy which was later diagnosed to be bronchogenic adenocarcinoma. We conclude by explaining the poor prognostic nature of the disease and the need for high degree of suspicion in the cases with atypical subcutaneous nodules with associated systemic disease.

**KEYWORDS :** skin neoplasms; skin cancer; Bronchogenic carcinoma

### INTRODUCTION:

Subcutaneous nodules are often benign and ignored especially in an otherwise asymptomatic patient, but rarely they could point out the presence of a fatal internal malignancy. The incidence of silent invasion of a fatal visceral malignancy to skin and subcutaneous regions was found to be around 0.8% in some studies[1]. It is of clinical significance as even after intensive chemo-radiation the disease is fatal and survival is less than a year[2].

### CASE PRESENTATION:

A 40year old man plumber by occupation presented with a 6cm x 5cm swelling over inner side of left elbow for past 4months and a swelling in right axilla for last 3 months, ulcerated 1 month back, associated with sharp pain over the swelling and multiple asymptomatic swellings in anterior abdominal wall ,b/l thighs, back and face for last 3 months. He also complained of tachypnoea and easy fatigability after walking for about 100metre distance but denied for orthopnoea and paroxysmal nocturnal dyspnoea. He gives H/O smoking with smoker index of 18 and chews tobacco for past 15years. 10days after admission he had two episodes of hemoptysis.

FNAC of the right axillary swelling revealed clusters of malignant epithelial cells with occasional acinar pattern suggestive of metastatic adenocarcinoma. CT revealed a well defined heterogeneously enhancing soft tissue density lesion in right pre hilar and hilar region may be neoplastic lesion and soft tissue density lesions in left paravertebral location at D7 and anterior and posterior aspect of chest and abdomen, B/L pararenal space, epigastric, peripancreatic , along right psoas muscle, left inguinal re-gion and intramuscular soft tissue density lesions in left adductor and left gluteus medius muscle. CT abdomen also revealed B/L adrenal metastasis. His blood picture was unremarkable except for a mild eosinophilia(8.7%). Bronchoscopic endo-bronchial biopsy was taken from Right secondary carina which showed poorly differentiated adenocarcinoma. So, the case was finally diagnosed to be metastatic adenoarcinoma with primary as bronchogenic carcinoma and the patient was started on chemo-radiotherapy.



Figure 1 Multiple metastatic subcutaneous nodules seen in anterior abdominal wall



Figure 2 An ulcerated metastatic subcutaneous nodule in right side axilla

### DISCUSSION

Breast cancer, melanoma and lung carcinoma are the most common cancers that metastasize to the skin and subcutaneous regions. In one study of 4,020 patients, Lookingbill et al stated that, breast carcinoma accounted for maximum number of cases of skin metastasis -51% of total cases and 73% of the cases in women.[3]

In one study, Hidaka T et al showed incidence of skin metastasis from lung cancer to be 2.8% (men-3.0%, women-1.7%), of which majority of the cases found to metastasize to skin where large cell carcinoma of lung[4]

Major sites of metastases from lung cancer include liver (33-40%), adrenal glands (18-38%), brain (15- 43%), bone (19-33%), kidney (16-23%), and abdominal lymph nodes (29%).[5]

In patients who died of metastatic carcinoma, 0.75- 9% cases had soft tissue metastasis during autopsy[5]

The primary cancer that metastasized to subcutaneous region decides the median survival of the patient. Breast carcinoma: 13.8 months, melanoma: 13.5 months, lung carcinoma: 2.9 months (36 cases).It infers that 50% of patients with cutaneous metastasis die within the first 6 months after the diagnosis[2]

Nupur sinha et al reported a case of small cell carcinoma of lung in a non-smoker femer which presented with subcutaneous nodule which is extremely rare and thereby suggesting low threshold for biopsy of any atypical soft tissue nodules.[6]

Non-resectability of primary tumor, primary as small cell lung cancer and simultaneous discovery of other cutaneous or extra-cutaneous metastases are the features that carry a poor prognosis[7]

In one study of 141 cases of subcutaneous metastasis from different internal malignancies, a subset of breast cancer patients had good prognosis[8]

## CONCLUSION

Although rare, subcutaneous nodules may be a first presenting complaint of internal malignancy and also a poor prognostic factor. All atypical nodules (especially fast-growing, ulcerated nodules) in skin and subcutaneous regions with suspicion of associated systemic disease should be biopsied as they may be feature of internal malignancy.

## CONFLICTS OF INTEREST

The authors declare that they have no conflicts of interest

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