

Not just skin deep: Multiple cutaneous nodules as the first presenting sign of small cell cancer

Avneet Garg, Harshi Dhingra, Vinita Jindal, Simranjeet Kaur, Vijay Suri

Adesh Institute of Medical Sciences and Research, Bathinda, Punjab, India

A 65-year-old male who was a chronic smoker presented with complaints of dyspnea, cough, weight loss, weakness, and bony pains for the last 2-3 months. His medical history included hypertension and hypothyroidism. On presentation, his vitals were as follows: heart rate 86/min, blood pressure 122/78 mm Hg, respiratory rate 22/min, and an oxygen saturation of 96% on room air. Chest examination revealed a barrel-shaped chest, a hyperresonant note was heard on percussion, and diffuse polyphonic rhonchi were heard on expiration. Contrast-enhanced computed tomography (CT) of the chest showed bilateral extensive emphysematous changes. The right upper lobe had a heterogeneously enhancing soft tissue lesion and there was significant mediastinal lymphadenopathy encasing the lower trachea and great vessels. The patient was at high risk for developing a pneumothorax related to image-guided sampling of the right upper lobe lesion in view of extensive emphysema. Therefore, he was referred to us for EBUS-TBNA (endobronchial ultrasound-guided transbronchial needle aspiration) and guided mediastinal lymph node sampling. Prior to this, a physical examination revealed round, firm, non-tender, skin coloured, 2–3 cm sized skin nodules that were located as follows: 2 on the left lateral chest wall, 1 on the right lateral chest wall, and 1 in proximity to the umbilicus. Fine needle aspiration cytology (FNAC) was attempted from two of skin nodules which were suggestive of lung cancer. EBUS-TBNA was deferred and an excision biopsy was performed on one of the skin nodules. The histopathological report revealed small cell carcinoma and this was further confirmed by IHC. A CECT of the abdomen and brain was performed, and a Tc99m bone scan was completed which revealed bony metastases. The patient was recommended to undergo chemotherapy (cisplatin and etoposide) and palliative radiotherapy but was unwilling and was ultimately lost to follow-up.

In this case, we encountered a patient who presented with metastatic skin nodules that were the first clinical presentation of small cell lung cancer. Small cell cancers constitute about 16% of total lung cancer histological types and 75% present at an extensive stage as shown in the largest lung cancer study from India [1].

Skin metastasis as an initial presentation is rarely reported in lung cancer [2–4]. Although all histological types of lung cancer can metastasize to the skin, it is most commonly reported in adenocarcinomas. Squamous cell carcinomas are the second most common cause; small cell lung cancers rarely have this presentation [5]. Interestingly, skin metastasis has been reported more commonly in upper lobe lesions [3].

Common sites includes the chest, abdomen, back, head, and neck [5]. In our case, nodules were present on the chest and abdomen. The presence of metastasis to the skin makes the disease unresectable and is associated with a poor prognosis. The median survival time is about 5 months [4].

Our case emphasizes the importance of a detailed physical examination in cases of lung cancer in order to look for any manifestation of the disease on the skin, even if it is encountered rarely. Skin nodule sampling can confirm the diagnosis and may obviate the need for a more invasive procedure (e.g. image-guided lung mass sampling or mediastinal lymph node sampling, as in our case) in already debilitated lung cancer patients. Moreover, detection of skin nodules helps in the staging and prognosis of the disease.

Address for correspondence: Avneet Garg, Department of Pulmonary Medicine, Adesh Institute of Medical Sciences and Research, AIMSR, Bathinda, Punjab, India; e-mail: dravneetgarg@gmail.com

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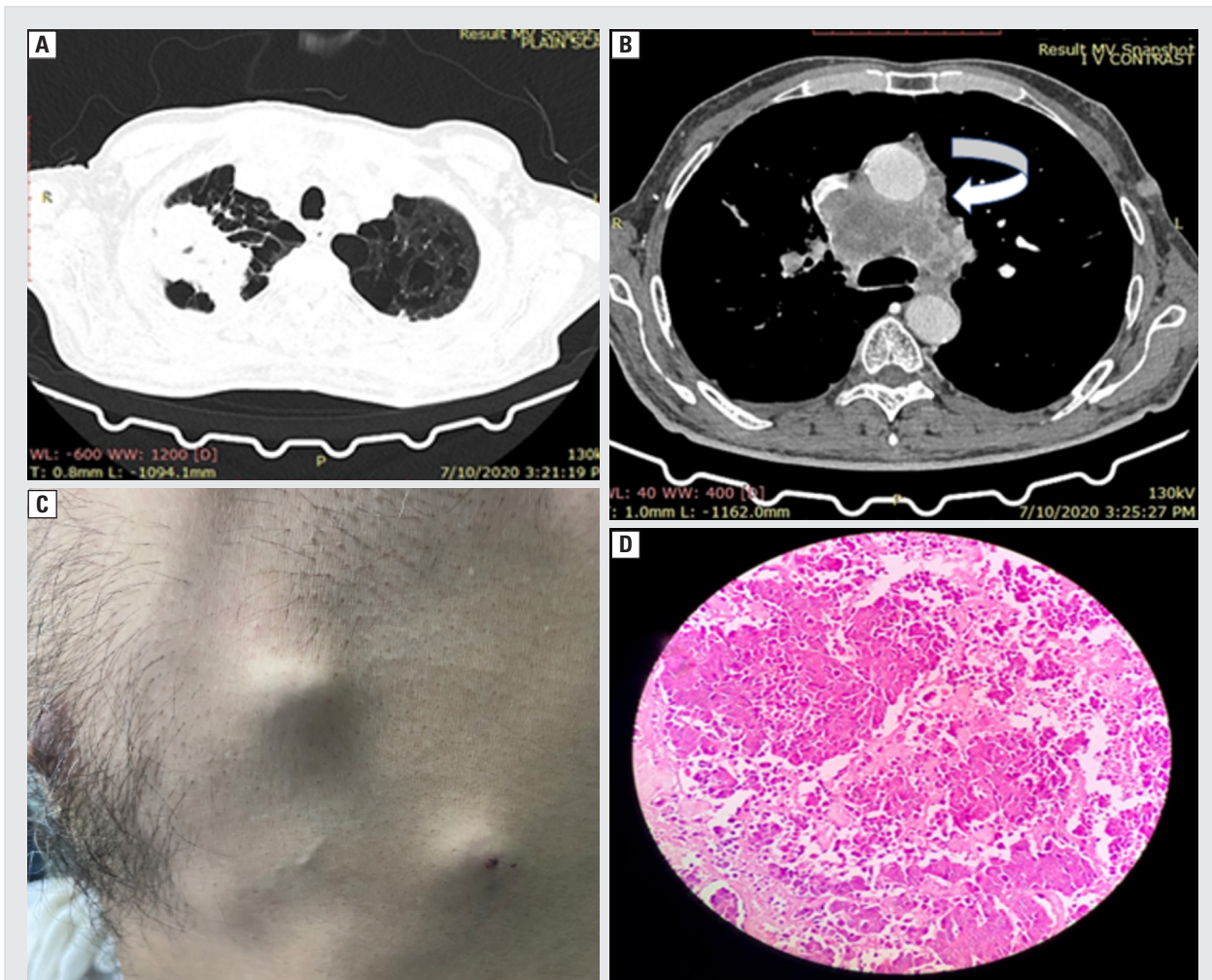


Figure 1. CT of the chest in pulmonary window (A) showing a right lung mass in the apical segment and extensive emphysematous changes in bilateral upper lobes. CT of the chest in mediastinal window (B) with a curved arrow is at a lower level and shows conglomerated multiple mediastinal lymph nodes. C. Skin nodules on the left lateral chest wall. D. Histopathological confirmation of small cell carcinoma. (H&E, × 400)

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