Urticaria and Large Cell Undifferentiated Carcinoma of Lung

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Abstract

Association of urticaria to internal malignancies were known mostly with lymphoreticular system malignancies. Rarely, it was found with cancer of lung and mostly with adenocarcinoma or small cell variety. We report a unique incidence of urticaria on a patient who suffered from Large cell undifferentiated carcinoma of lung. Only the treatment for malignancy relieved the patient from his long standing cutaneous manifestation.

CASE REPORT

A very fit 57 years old farmer was referred to the Dermatology clinic in November 1996 for non-resolving itchy erythematous maculo-papular rash over his trunk, buttock and proximal limbs. The clinical diagnosis was urticaria. His other physical examination was unremarkable. He was on no regular medication. There was no relevant family history and only past medical history was sciatica and spondylosis. He smoked 50 pack year. His haemoglobin, white cell and platelet count, erythrocyte sedimentation rate, renal and liver functions, Anti-streptolysin O titers, serum C3, C4 and C1 esterase inhibitor levels were normal on repeated testing.

He was treated with different antihistaminic, steroid-based ointments, emollients and oral corticosteroids for nearly 4 years without any benefit. In June 2000 he presented to casualty department with right-sided pleuritic pain. The chest x-ray revealed a prominent right hilum and suggestion of right lower lobe collapse. Subsequently CT scan of chest confirmed a soft tissue mass at right main bronchus causing ipsilateral lower lobe collapse (T_4N_2M). Endobronchial histology confirmed large cell undifferentiated carcinoma.

He was treated by external beam high dose palliative radiotherapy (39 Gray in 13 fractions). His uriticarial rash disappeared first time since 1996.

One year following his radiotherapy his rash returned in the similar distribution along with swelling of his face. Clinical examination and CT chest confirmed recurrence of tumour and superior vena caval obstruction. Chemotherapy with Mitomycin, Ifosamide and Cisplatin helped not only in regression of the size the tumour mass but the rash disappeared as well.

10 months following his chemotherapy he again had similar cutaneous manifestation and clinically supra clavicular spread of tumour was confirmed. A second coarse of same chemotherapy regime helped physical and symptomatic improvement. Four year following diagnosis of his cancer he died of cerebral metastasis. During the end stage of his illness no particular attention was given to look for any rash.

Urticarial rash are generally associated with lymphoproliferative diseases and it's malignancies. Association of brochogenic malignancy with urticaria is very rare. Earlier, only two cases with adenocarcinoma [1,2] and two other with small cell [3,4] were reported. Large cell undifferentiated type is the first one to be known. Following positive response to the treatment of bronchial malignancy and disappearance of urticaria indirectly suggests a probable unknown biochemical or hormonal abnormality responsible for a possible paraneoplastic feature. Our case, therefore, once again stressed the importance of performing a plain chest x-ray on patients suffering from chronic urticaria.

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