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Papulopustules and paronychia in a lung carcinoma

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1. Introduction

A 61 years old male was referred from pulmonary medicine department with 2- week history of acneiform lesions over face and upper back, with associated complaints of pain in proximal nail folds of both great toes and left middle finger with purulent discharge and generalized pruritus. Historically, patient was diagnosed case of advanced non-small cell lung carcinoma (NSCLC) receiving gefitinib 250 mg once daily past 1 month. Patient had received six cycles of chemotherapy and was not taking any other medication. Clinical examination revealed skin colored to erythematous follicular papules and pustules over face, neck and upper back (Fig. 1A and B) with xerosis over back and limbs. Nail folds of both great toes and middle finger of left hand revealed paronychia and granulation tissue with serosanguinous discharge (Fig. 1C). Patient demonstrated excessive growth of eyebrows and eyelashes (Fig. 1B). What is the diagnosis?

2. Diagnosis

Epidermal growth factor receptor (EGFR) is a transmembrane

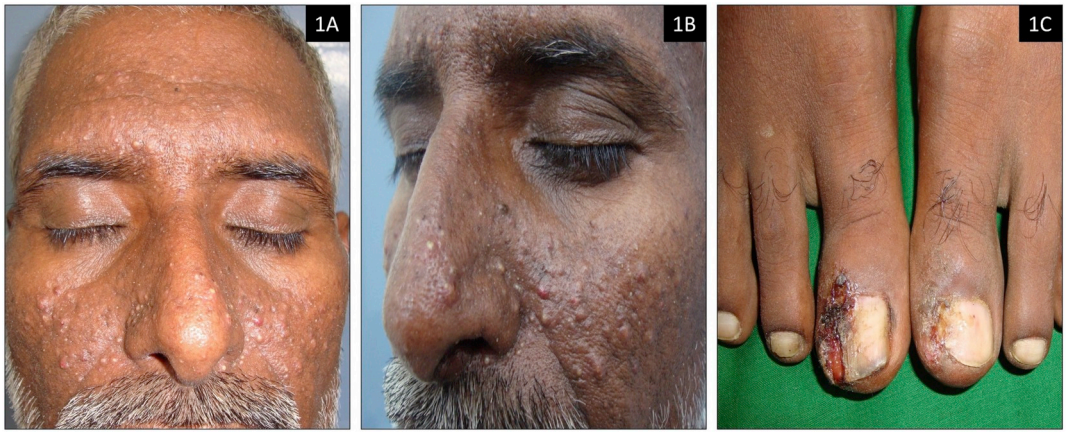

Fig. 1. Cutaneous manifestations of EGFR inhibitors. 1A. erythematous papulopustules over forehead, cheeks and nose. 1B. papulopustules over cheek and nose with increase growth of eyelashes and cut eyebrows. 1C. paronychia of lateral nail fold of left great toe and granulation tissue with hemorrhagic discharge over right great toe.

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protein which regulates cell proliferation, differentiation and apoptosis. Overexpression of EGFR has been found in many solid organ tumors and EGFR inhibitors have been widely used in these malignancies with valuable results but frequent adverse effects. The spectrum of cutaneous manifestations caused by these EGFR inhibitors are known as PRIDE (Papulopustules/Paronychia, Regulatory abnormalities of hair growth, Itching, Dryness due to EGFR inhibitors) syndrome [1]. Cutaneous adverse effects include PRIDE complex, allergic reactions, photosensitivity, vasculitis and mucositis [2]. Our patient had papulopustular lesions, paronychia, xerosis and hair abnormalities after 2 weeks of gefitinib treatment. A significant correlation between cutaneous adverse effects and tumor response has been found in various studies showing improved survival rates with increasing severity of rash [3]. Treatment of cutaneous manifestations includes oral tetracyclines, topical antibiotics for papulopustular rash, antihistamines and emollients for itching and xerosis, antibacterial soaks and silver nitrate for nail manifestations. Mild to moderate reactions does not require drug discontinuation or dose modification and advised only in severe cutaneous manifestations. Our patient was treated with doxycycline 100 mg once daily and clindamycin 1% gel. Literature on PRIDE complex is scarce, this report was intended to exemplify knowledge of EGFR inhibitors associated cutaneous manifestations to aid in prompt diagnosis and also help in predicting the tumor response and optimizing favorable outcomes from uninterrupted EGFR inhibitors use.

Conflict of interest disclosure

None Declared.

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