Pride Syndrome

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Epidermal growth factor receptor (EGFR) inhibitor therapy has been approved for the treatment for head and neck malignancy and non-small cell carcinoma. Anti-EGFR therapy can cause cutaneous side effects because of high concentration of EGFR in basal keratinocytes, sebocytes and outer root sheath of hairs. EGFR inhibitors can cause side-effects which are clubbed in PRIDE syndrome (papulopustulosis, paronychia, regulatory changes in hair, itching and dryness.

Introduction

Over the last decade, EGFR inhibitor has been increasingly be used for the treatment of advanced SCC and head and neck squamous cell carcinoma. Treatment with EGFR inhibitor can lead to wide range of dermatological side effect which include papulopustular lesions, alopecia, mucositis and nail changes.

Case report

A 34 y old female was being treated with EGFR inhibitor for non small cell carcinoma was referred from radiotherapy and chemotherapy department for multiple pruritic reddish raised lesions on the face, trunk, and extremities for 1 month. On examination, there were multiple discrete follicular, erythematous papules and pustules over the face, upper chest, upper arm, abdomen, and thigh {figure1(a ),1(b) and 1(c)}. There was crusting, scabbing and diffuse hair loss over the entire scalp. Paronychia present on right thumb and right ring finger. Systemic examination revealed no abnormality. Histopathology from pustules over the left thigh revealed sub corneal, and intraepidermal abscess consisting mainly neutrophils, perivascular and peri adnexal mixed inflammatory infiltrate, and oedema in the upper dermis. Routine investigation was normal in this patient. Based on the clinical features and histopathological examination, a diagnosis of PRIDE
complex was made in our case. Patient was started on doxycycline100mg twice daily, KOH soak and moisturiser. Lesions resolved after 2 months of medication figure 2(a, b and c).

Discussion

EFGR inhibiting drugs can be classified as monoclonal antibodies e.g., Cetuximab and small molecule group as erlotinib. As a group, these drugs are associated with prominent dermatologic adverse events, the most common of which is a papulopustular acneiform eruption. Acneiform eruption includes papules and pustules, typically without comedones occurring in approximately two-third of anti EFGR receiving patient. Pruritis is present in one-third of the patients. Presence of acneiform eruption has positive correlation with patient survival. Other skin related side effects are paronychia which include cuticular inflammation, pyogenic granuloma and secondary bacterial infection of nails.

Conclusion

In future, the dermatological side effects of these anticancer drugs are going to increase due to their relative safe profile. So, knowing about the side effect and their impact on patient prognosis will help dermatologist and oncologist to effectively manage the patient.