



ACNEIFORM ERUPTIONS INDUCED BY EGFR INHIBITOR: A CASE REPORT

Dermatology

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ABSTRACT

Acneiform eruption is the most common side effect of epidermal growth factor receptor inhibitors which occurs in 50-100% of patients. There is a dose dependent follicular papulopustular eruptions on the face, scalp, chest, and upper back. Skin lesions usually develop in the first 1-2 weeks of starting the therapy, peak at 3-4 weeks and decrease after 2 weeks but can persist over some time. This condition affects the quality of life and can lead to cessation of antineoplastic treatment.

KEYWORDS

EGFR inhibitors, impetiginization, sebaceous glands

Case Report

A 52 years-old male who was under going treatment for Lung cancer had presented to us with history of multiple painful skin lesions which started over chest and progressed to involve back and face within few days. Lesions evolve into pustules and some of them had crusting. Patient gave history of itching too. On physical examination there were erythematous acneiform skin lesions including papules and pustules over the above mentioned sites. On provoking the history we got to know that patient was on EGFR inhibitor for lung cancer. After 5 to 6 days of starting the treatment patient noticed the lesions. Keeping in view history and examination, a diagnosis of Acneiform eruptions secondary to EGFR inhibitor was made and patient was put on oral doxycycline 100mg twice a day, topical steroids, antihistamines and moisturiser without stopping the EGFR treatment. After 2 weeks there was marked improvement in the lesions. New lesions had stopped coming and previous lesions were dried up.

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DISCUSSION

EGFR is present in normal cells like skin, hair follicles and gut. EGFR inhibitors' skin manifestations are very common. Studies have shown that these inhibitors inhibit EGFR both over expressed in tumour cells and normal cells. These causes keratinocytes to release inflammatory chemokines which causes xerosis and papulopustular acneiform rash. Rash is more common in areas with a high density of sebaceous glands like scalp, face and chest. These papulopustular lesions always spare palms, soles and mucosa. Impetiginization can occur due to colonisation of lesions with staphylococcus aureus.

CONCLUSION

Acneiform eruptions caused by EGFR inhibitors are clinically and histopathologically different from acne. Rash caused here is mostly pustular. Moreover comedones are not present. Mild form of the rash can be controlled well without modifying the dose of these medications. If symptoms are not controlled even after treatment for 2-4 weeks, dose adjustment might be required.

Acknowledgement

We would like to thank patient who agreed to have his case reported

Declaration Of Patient Consent

We certify that we have obtained patient consent. Patient have given consent for images and other clinical information to be reported in the journal. The patient understands that their name and initials will not be published and due efforts will be made to conceal their identity, but anonymity can not be guaranteed.

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Conflicts of Interest: Nil

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