A Case Report on Steroid Induced Acneiform Eruptions

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ABSTRACT

Acne is the chronic inflammatory disease of the pilosebaceous unit, characterized by the formation of comedones, erythematous papules and pustules shortly after starting topical or oral corticosteroid. We report a case of acneiform eruptions on a Eosinophilic gastroenteritis (EGE) patient who was treated with prednisolone 30 mg 1-0-0, 2 weeks, three months ago. She developed pustular rashes over the face and back on and off during past 3 months. Presently she got admitted in the gastroenterology department for reoccurence of the symptoms associated with EGE and treated with prednisolone 30 mg 1-0-0. Dermatology opinion was sought for the aggravated pustular rashes over the face and back confirmed to be prednisolone induced acneiform eruptions. Following which, prednisolone was withdrawn within 48 h of admission and treated symptomatically with Clindamycin 1% gel.

Key words: Eosinophilic gastroenteritis, acneiform eruptions, Prednisolone, Steroids, Pustular Rashes.

INTRODUCTION

Eosinophilic gastroenteritis (EGE) is a rare and heterogeneous condition characterized by patchy or diffuse eosinophilic infiltration of gastrointestinal tissue. Prevalence of EGE is 28 per 100,000 people. Steroids remain the mainstay treatment for eosinophilic gastroenteritis.

Acneiform eruption is characterized by sudden onset of follicular papules and pustules shortly after starting topical or oral corticosteroid.[1] It results from a direct effect on the follicular epithelium causing a focal degeneration with localized intrafollicular and perifollicular neutrophilic inflammatory reaction.[2] Eruptions are characterized by their unusual distribution, monomorphic lesions, occurrence beyond the usual age of distribution of acne vulgaris, widespread involvement and clearing of lesions when the drug is discontinued.[1,3]

We report a case of prednisolone induced acneiform lesions in a 16 year old female patient.

CASE REPORT

A 16 year old female patient is known a case of eosinophilic gastroenteritis was on steroid therapy (prednisolone 30 mg 1-0-0) for 2 weeks, three months ago. She presented with the complaints of nausea and bilious vomiting with upper abdominal pain and loose stools for two days. She developed reddish pustular rashes which had spread over both the cheeks and forehead and on the back side of shoulders on and off during past 3 months (Figure 1 and 2). She was admitted and further evaluated. An institutional ethical committee approval and informed consent was obtained.

Complete blood count showed neutrophilic leucocytosis (neutrophils 80%) whereas the other blood parameters were normal. Serum Immunoglobulin E (558 IU/ml) was elevated. Ultra sonography of abdomen showed moderate ascites and areas of wall thickening in jejunal loops. Ascitic fluid analysis showed higher degree of eosinophilia (eosinophils 83%). Upper GI endoscopy showed corpus and antral gastritis and gastric mucosal prolapse. Dermatol-

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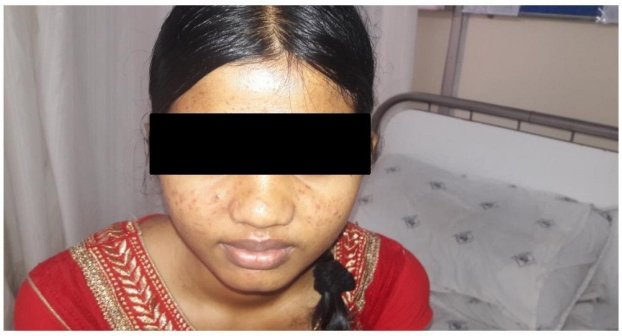

Figure 1: Prednisolone induced acneiform eruptions.

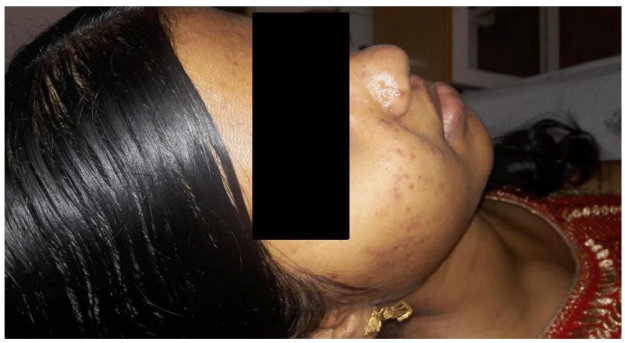

Figure 2: Pustular rashes over right side cheeks.

ogy opinion was sought for pustular rashes on the face and back which was hypothesized to be steroid induced acneiform eruptions, then it was assured by causality assessment at PSG Peripheral Pharmacovigilance Center, Coimbatore, TN using Naranjo ADR probability scale of 9 as prednisolone induced acneiform eruptions.[4]

Prednisolone was withdrawn within 48 hours of hospital admission. The patient was treated with Clear gel Clindamycin 1% twice daily as a local applicant over the face and the back of shoulders. Inj. Pantocid (Pantoprazole) 40 mg 1-0-0, T. Montek LC (Montelukast 10 mg and levocetrizine 5 mg) 10mg 0-0-1, Inj. emeset (ondansetron) 4 mg 1-1-1, T. Hetrazan (diethylcarbamazine) 100 mg 1-1-1. Syrup mucaine gel (aluminium hydroxide, magnesium hydroxide, oxetacaine) 10 ml 1-1-1, T. Ciplox (ciprofloxacin) 250 mg 1-0-1 and T. Shelcal (calcium carbonate and vitamin D_3) were given. On next day, the eruptions started to reduce, her clinical condition was stabilized. On the 4th day the condition of patient got improved and was discharged. However, the topical therapy was advised to continue until complete remission of her symptoms.

DISCUSSION

Acneiform eruptions formed a major part of cutaneous adverse drug reactions accounting for 11.3% of patients. Corticosteroids were found to be the third most common drug class implicated in cutaneous adverse drug reactions accounting for 14.6% of the patients.[5]

Acneiform eruptions induced by steroids may be caused by topical or systemic drugs. One which caused by systemic drugs is dependent on the dose, duration of administration and patients susceptibility.[6] Systemic drugs that induced acneiform eruptions include corticosteroids, epidermal growth factor receptor inhibitors, cyclosporine, anticonvulsants, antipsychotics, antidepressants, tumor necrosis factor-alpha inhibitor, anabolic steroids, danazole, anti-tuberculosis drugs, quinidine, azathioprine and testosterone.[3]

Acneiform eruptions are non-allergic reactions, in most cases the exact etiology and pathogenesis remains unknown. Therefore skin test is not useful in the diagnosis of drug induced acne. The patient's history, the clinical findings, the exposure to one of the known causative drugs and the disappearance of lesions after discontinuation of the offending medication should lead to the diagnosis.[2] Female sex is nearly 4 times more prone to steroid induced acne than the male sex.[3,7] Acne was subsided following discontinuation of drug within a week, though severe lesions may take several weeks to resolve and may require topical therapy.[1,3] The use of antihistamines is important when there is associated pruritis and oral antibiotics should be used in cases of secondary infection with pustules or impetiginization.[3] In our study, acneiform eruptions associated pruritis were managed by T.Monteleukast LC

CONCLUSION

Every health care practitioner should recognize the common presentation and appearance of adverse drug reaction associated with steroids. And thus for each patient, the risk must be weighed against the expected therapeutic benefit.[9]

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CONFLICT OF INTEREST

None

ABBREVIATIONS USED

ADR: adverse drug reaction; TN: tamil nadu; EGE: eosinophilic gastroenteritis; GI: gastrointestine.

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