Case Report

Aceclofenac induced morbilliform eruptions: a case report

Priyanki¹*, Praveen Kumar Sinha¹, Shruti Suman², Pranay Kumar Mishra³

¹Department of Pharmacology & Therapeutics, ²Department of Dermatology, Venerology & Leprosy, Rajendra Institute of Medical Sciences, Ranchi University, Jharkhand, India
³Department of Surgery, Tinplate Hospital, Jamshedpur, Jharkhand, India

Received: 17 January 2018
Accepted: 28 February 2018
*Correspondence to:
Dr. Priyanki,
Email: priyanki.mishra@gmail.com

ABSTRACT

Maculopapular or morbilliform eruptions may be the most common of all cutaneous drug reactions. Antimicrobials, NSAIDS, barbiturates, anticonvulsants, oral hypoglycemics etc. have been commonly implicated in these adverse reactions (ADR). Here, authors are presenting a case of a 38-year-old female with morbilliform eruptions due to aceclofenac for the treatment of joint pain. The patient was treated with antihistaminics, steroids, antimicrobials and local application of GV paint. She was discharged after eleven days with good recovery.

Keywords: Adverse drug reaction, Aceclofenac, Morbilliform eruptions, NSAIDS

INTRODUCTION

Maculopapular or morbilliform eruptions may be the most common of all cutaneous drug reactions. Antimicrobials, NSAIDS, barbiturates, anticonvulsants, oral hypoglycemics etc. have been commonly implicated in these adverse reactions (ADR).¹ Antibiotics (penicillins, cephalosporins, sulphonamides, amphotericin B and gentamicin), NSAIDs, barbiturates, benzodiazepines, carbamazepine, phenothiazines, phenytoin, lithium, allopurinol, captopril, thiazide diuretics, gold, oral antihyperglycemics and quinidine have been implicated.² ADR is defined as a noxious response to a drug which is unintended, and which occurs at doses normally used in man for prophylaxis, diagnosis, or therapy of disease or for modification of physiological function.³ In the modern day, ADR imposes significant mental and economic burden to the patient who loses confidence in the health care system. The first principle to treat the patient should be “primum non nocere” i.e. above all do no harm, this being the purpose of being aware of all the possible ADRs of any drug prescribed by authors.⁴

A study from India showed that admissions due to ADR accounted for 0.7% of total admissions and deaths due to ADR accounted for 1.8% of total ADRs. Cutaneous ADRs
were the most frequent and serious for oral NSAIDs followed by gastrointestinal, hepatic, cutaneous and renal risks.\textsuperscript{3} Ocurring more frequently in women, the incidence of cutaneous adverse reactions (CADRs) increases with advancing age, the number of drugs being used and concomitant HIV infections and other immunosuppressive states.\textsuperscript{2}

Exanthematous (morbilliform) drug reactions accounting for 40-90\% of all reactions are one of the most common CADRs. The eruptions are characterized by erythematous macules and papules that first appear on the trunk, in area of pressure and foci of trauma, with subsequent peripheral spread. Histology reveals a focal interface vacuolar dermatitis with scattered necrotic keratinocytes at the dermo-epidermal junction, dermal oedema and a superficial perivascular lymphocyte infiltrate with admixed eosinophils.\textsuperscript{2}

**CASE REPORT**

A 38 year old female attended the emergency with thick scab and red itchy lesions all over the face and body for the last five days. It was associated with myalgia and low grade fever which increased on the last day. A complete drug history revealed that she was taking aceclofenac for the last five days before the appearance of rashes for the treatment of joint pain. She was transferred to the skin department for further treatment, after initial management.

![Figure 1: Honey crusted lesions on the face.](image)

On dermatological examination, erythema of the whole face with dry honey coloured crusting was observed. Multiple ill-defined maculopapular lesions were present all around the neck. Similar lesions were present over the scalp, chest and abdomen. Both the limbs were also involved but less than the other parts of the body. There was sparing of the palm, sole and conjunctival and oral mucosa.

Past history revealed intake of sulfasalazine and hydrochloroquine for joint pain for the last one year. All routine examinations were within normal limits. The casualty assessment was carried out by using the Naranjo’s ADR probability scale. Severity of ADR was assessed by Modified Hartwig and Siegel scale. Preventability was assessed by Modified Schumock and Thornton scale.\textsuperscript{6}

![Figure 2: Morbilliform eruptions on the lower limbs.](image)

A diagnosis of morbilliform eruptions due to aceclofenac was made and the patient was advised not to take the drug again. The treatment was started with antihistaminics, steroids, antimicrobials and local application of GV paint. She was discharged with complete recovery after eleven days.

**DISCUSSION**

Aceclofenac is a moderately specific COX2 inhibitor, a congner of diclofenac, containing an additional esterified acetoxy side chain.\textsuperscript{7} It is used for relief of pain and inflammation in rheumatoid arthritis, osteoarthritis and ankylosing spondylitis. Route of administration are oral and topical. The dose for the oral route is 100mg twice daily. The drug works by inhibiting the production of PGE2 which is accountable for pain, swelling, inflammation and fever. The incidence of gastric ulcerogenicity with aceclofenac has been reported to be significantly lower than that of frequently prescribed NSAIDS.\textsuperscript{7} Overall adverse effects like nausea, vomiting, heart burn and gastritis are much less with significantly lower level of exudation and erythema with aceclofenac in comparison to diclofenac and ibuprofen.

Based on the total score of +6 on the Naranjo’s scale, the adverse reaction was characterized as ‘probable’ due to aceclofenac administration. Severity assessment using Modified Hartwig and Siegel scale is ‘moderate’. Preventability assessment using Schmock and Thornton scale showed it to be ‘definitely preventable’.

**CONCLUSION**

Morbilliform eruptions are the commonest cutaneous reactions encountered with NSAIDs. Yet, we reported it to emphasise the fact that though this group of drugs is very
commonly used, they should be prescribed with caution to prevent this type of reaction. Aceclofenac is considered to be one of the safest NSAIDS with very low incidence of these reactions, still they can sometimes be the culprit.

ACKNOWLEDGEMENTS

The authors are thankful to Mrs. Sangita Chaudhary for help with layout and Miss Kavita Kumari, Associate, Pharmacovigilance Department for her support.

Funding: No funding sources
Conflict of interest: None declared
Ethical approval: Not required

REFERENCES

1. Shimizu’s Textbook of Dermatology: Drug induced skin reactions and GVHD, Chapter 10; English Edition, Hokkaido University Press; 2017.
2. Ramdial PK, Naidoo DK. Journal of Clinical Pathology. 2009;62:493-504.
3. Prabhu MN, Khumar A, Kumar D. Diclofenac Induced Fixed Drug Eruption, Journal of Pharmacology & Clinical Research, November 2016;1(5).
4. Jamunarani R, Priya M. Analysis of adverse drug reaction related hospital admissions and common challenges encountered in ADR reporting in a tertiary care teaching hospital, Asian J of Pharmaceutical and Clinical Research. 2014;7(1).
5. Lapeyre-Mestre M, Grolleau S, Jean-Louis M. Association Francaise des Centres Regionaux de Pharmacovigilance: Adverse drug reactions associated with the use of NSAIDS: a case/noncase analysis of spontaneous reports from the French pharmacovigilance database 2002-2006, Fundamental & Clinical Pharmacology. 2013;27:223-30.
6. Verma R, Tiwari S, Gupta CM, Verma N. Cutaneous adverse drug reactions—a study of clinical patterns, causality, severity & preventability. Journal of Dental and Medical Sciences. 2014;13(7):102-9.
7. Tripathi KD. Essentials of Pharmacology, 7th Edition, 204, Jaypee Brothers Medical Publishers (P) Ltd.; 2013.

Cite this article as: Priyanki, Sinha PK, Suman S, Mishra PK. Aceclofenac induced morbilliform eruptions: a case report. Int J Basic Clin Pharmacol 2018;7:816-8.