

CASE REPORT

Diclofenac related skin rash, a case report

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Abstract

Diclofenac, is a widely used nonsteroidal anti-inflammatory drug (NSAID). Here, we reported a rare adverse effect of diclofenac as diclofenac related skin rash. The case was diagnosed on the present illness and follow up. This is a rare adverse effect of diclofenac with the incidence less than 0.1 %. The awareness of the physician to this widely used drug on its rare adverse effect is necessary.

Key word: diclofenac, skin rash

ผื่นผิวหนังจากยา diclofenac รายงานผู้ป่วย 1 ราย

บทคัดย่อ

Diclofenac เป็นยาต้านการอักเสบที่ไม่ใช่สเตียรอยด์ที่ใช้กันอย่างกว้างขวาง ในบทความนี้ได้รายงานผู้ป่วย 1 รายที่มีอาการผื่นผิวหนังจากยา diclofenac โดยอาศัยการวินิจฉัยจากประวัติเจ็บป่วยและการตรวจติดตาม ผลข้างเคียงจากยานี้พบได้น้อยมากโดยมีอุบัติการณ์ต่ำกว่าร้อยละ 0.1 แพทย์ควรให้ความตระหนักถึงผลข้างเคียงจากการใช้ยานี้

คำสำคัญ: diclofenac, ผื่นผิวหนัง

Introduction

Diclofenac, is a nonsteroidal anti-inflammatory drug (NSAID). Diclofenac, as the sodium or potassium salt, is a benzeneacetic acid derivative, designated chemically as 2-[(2,6-dichlorophenyl) amino]benzeneacetic acid, monosodium or monopotassium salt¹⁻². In pharmacologic studies, diclofenac has shown anti-inflammatory, analgesic, and antipyretic activity. As with other NSAIDs, its mode of action is inhibition of enzyme cyclooxygenase, involved in its anti-inflammatory activity, as well as contribute to its efficacy in relieving pain related to inflammation and primary dysmenorrhea¹⁻².

The most common adverse effects of this drug are gastritis, peptic ulceration, and depression of renal function, all of which result primarily from prostaglandin inhibition¹. The types of side effects observed with diclofenac are similar to those of other nonsteroidal anti-inflammatory drugs and are unavoidable given that the drugs are prostaglandin inhibitors. However, the incidences of such side effects may be lower with diclofenac than with some of the other nonsteroidal anti-inflammatory drugs². Here, we reported a rare adverse effect of diclofenac as diclofenac related skin rash.

Case report

Patient history

A 52 years old female patient visited the physician with the problem of skin rash in her both forearm. She revealed the persistence of this skin lesion for 10 days. She notified no past history of drug or food allergy. Concerning the present illness, she revealed the concomitant use of the self - prescribed diclofenac tablet and gel for her arm pain symptom. She notified the skin lesion three days after start of this medication and therefore she tried to stop the tablet on the seventh days. However, her skin rash was still persisted, therefore, she decided to visit the physician.

Physical examination and laboratory investigation

At first, this case was suspected for diclofenac related skin rash. The skin lesion can be described as erythema multiforme, itching iris (central lesion surrounded by concentric rings of pallor and redness) macule lesion on both arms. She was advised to stop any drug including the diclofenac gel application.

Result of therapy/follow up

On follow up visit, her skin rash disappeared completely within seven days. This case was diagnosed as diclofenac related skin rash.

Discussion

Adverse effect due to usage of nonsteroidal anti-inflammatory drugs is an important awareness for the physician in using these widely prescribed drug. Apart from the common adverse effects such as GI disorder, the rare disorder has also been reported¹. These include blood dyscrasias, erythema multiforme, hepatitis, and others, such as aseptic meningitis, anaphylaxis, and urticaria. Moreover, some nonsteroidal anti-inflammatory drugs appear to have unique side-effect profiles. Examples include a higher incidence of ulceration and erythema multiforme with piroxicam, and acute pancreatitis, in rare instances, with sulindac. From a careful survey, diclofenac appear to have less unusual adverse reactions than the other drugs³. Therefore, it is considered as a safe drug and widely prescribed.

Here, we reported a case of diclofenac related skin rash, which is a rare adverse effect of diclofenac with the incidence less than 0.1 %. Presently, the real pathogenesis of this disorder has not been clarified. This adverse effect is reported only in literature, not seen in clinical trials, and is considered rare. Indeed, the dermatologic reaction of diclofenac as pruritus is described in upto 1 % of the patient. However, the skin eruption as skin eruption, urticaria, erythema is infrequent (less than 0.1). In

very serious case, the Steven Johnson syndrome can be detected³. We diagnosed this case by the present illness and follow up. However, we did not performed any skin test⁴ or specific Ig for diclofenac determination to confirm the diagnosis.

The diclofenac is a widely used drug at present in Thailand. In addition, there are a number of reported adverse effects relating to diclofenac usage, 668 cases were reported during 1983 - 1998 according to the report of the Center for Surveillance of Adverse Drug Reaction, Thai Ministry of Public Health. Therefore, the awareness of the physician to this widely used drug on its rare adverse effect is necessary. Some adverse effects such as rhabdomyolysis⁵ and pneumonitis⁶ are very rare but serious. The review of the

published literature concerning the adverse effect of diclofenac was presented in Table 1.

Reference

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Table 1 Some interesting literatures on the adverse effects of diclofenac.

Authors	Descriptions
Hadar <i>et al</i> , 2000 ⁷	A case report of anaphylactic shock 10 minutes after the diclofenac, to which she had been exposed in the past without any side effects
Alkhawajah <i>et al</i> , 1993 ⁸	A case of apparent anaphylactic reaction to diclofenac sodium (Voltaren) 15 min after intramuscular injection of diclofenac for treatment of low back pain. The first case report of diclofenac anaphylactic shock
Mahboob and Haroon, 1998 ⁹	Retrospective study on the fix drug eruption cases. Diclofenac is a drug which can present this adverse effect
Bhogaraju <i>et al</i> , 1999 ¹⁰	A case report of diclofenac-induced hepatitis concomitant with GI bleeding
Aithal <i>et al</i> , 2000 ¹¹	Perform a pharmacogenetics study and found that there is no evidence that polymorphism in CYP2C9 is a determinant of diclofenac-induced hepatotoxicity.
Shrivastava <i>et al</i> , 1997 ¹²	The effect of ciprofloxacin was studied in electroconvulsive seizures in mice using the tonic extensor phase as end point and seizure threshold as observational parameter. It was found that ciprofloxacin produced a significant epileptogenic effect, potentiated by diclofenac

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