











C. Remy,PT; A. Laungani, MD; A. Magnette,RN; D. Jacquemin, MD, PhD.
Burn center, CHU Sart Tilman, Liège, Belgium

Introduction

Ketoprofen gels are often used for trauma and rheumatological affections. Despite their interesting actions, these gels can be associated with serious cutaneous adverse drugs reactions. The aim of this report is to inform both practitioners and pharmacists that a non-steroidal anti-inflammatory gel is a drug which can be useful but can lead to serious complications including a hypersensitivity reaction.

						
Affection originelle	Epicondylite	Trauma poignet	Gonalgies	Tendinite Achille	Tendinite Achille	Entorse
Modalité d'application	3x/jour (sans bandage)	3x/j + bandage	3x/j + bandage	1x	2x/j	3x/j
Délai d'apparition	10j	3j	1j	4j	3j	23j
Exposition UV	Non	Non	Non	Oui	Oui mais pas la zone traitée (chaussette)	Oui mais pas la zone traitée (chevillière)
Réaction à distance		Non		Non		

Observations

Within the last six months, we admitted 6 patients with cutaneous lesions. The patients were not properly burnt and after anamnesis, the injuries appeared to be caused by the use of ketoprofen gels. For three of them, the injuries appeared after exposing to natural UV radiations following one application of gel. The affected areas were primarily those treated but distant skin reactions, usually in UV exposed zones, were also observed.

Three other patients developed only contact reactions. Two patient of them presented cutaneous reactions associated with an extension of erythema to the face and chest after 1 week for one and 3 weeks for the second. The third patient, developed the same kind of burn 24 hours after a generous application of ketoprofen gels covered with an occlusive dressing sheet.

Reactions like itchy erythema and swelling, were noticed on other parts of the body of these patients.

Both patients were treated for a hypersensitivity reaction with oral corticotherapy during 2 weeks and locally with paraffin gauze. All non-steroidal anti-inflammatory drugs were stopped for 6 months period in order to avoid crossed reactions.

References

Mathieu L et al. *Contact and photocontact allergy to ketoprofen. The Belgian experience.* Contact Dermatitis. 2004 Apr;50(4):238-41

Ketoprofen gel: severe photosensitisation. *Prescrire Int.* 2010 Oct;19(109):216

Noize P et al. *Cutaneous Adverse Effects of Ketoprofen for Topical Use: Clinical Patterns and Costs.* American Journal of Clinical Dermatology. 2010;11(2):131-6

Discussion

Many studies showed the high frequency of cutaneous intolerances to ketoprofen but in 85 percent of them, these were photoallergies. The Belgian dermatologists demonstrated the importance to avoid prescription of topical ketoprofen during sunny periods. Our experience showed the risks of lesions even without exposing to UV radiations.

A new element seems to be important: the various observed reactions suggest that besides the local skin damages after gel contact, the ketoprofen would cause a wide spectrum of hypersensitivity lesions in different body areas even those which are not directly UV exposed.

Conclusion

NSAI gels are widely used by the public to treat benign symptoms. In France, many questions have already been asked about these gels and they were even the object of a temporary withdrawal. In physiotherapy, they are also regularly used by practitioners who rarely know the risk of photoallergies and often ignore the possibility of severe skin injuries. One should be aware of that before using a drug on free sale.

In the near futur, **we think that it would be interesting to diffuse information for prevention among all medical an paramedical actors.**