

CASE REPORT

Periocular dermatitis in a pediatric patient. Report of a case and clinical findings.

Andrea Aguilar,* Paulina Dassum,* Veronica Uraga**

* Rotating Doctors of the "Dr. Uraga Dermatological Center"

** Dermatologist of the "Dr. Uraga Dermatological Center"

Correspondence:
andrea.aguilar.aviles94@gmail.com

Key words: Contact dermatitis.
Tobramycin. eye drops

Reception date: 07/25/2022
Acceptance date: 08/09/2022

ABSTRACT

Periocular dermatitis is commonly seen in skin diseases such as atopic dermatitis, psoriasis, but is mostly associated with allergic contact dermatitis. We present a case of lesions located on the skin of the face after contact with antibiotic ophthalmic eye drops (tobramycin) and a brief review of the literature on the subject is made.

INTRODUCTION

Periocular dermatitis, peripalpebral or located in nearby related areas, can be observed in multiple dermatological processes, such as both allergic and irritant contact dermatitis, seborrheic dermatitis, dermatomyositis, psoriasis, etc. Among these different causes, the most frequent is allergic contact dermatitis (ACD).

Irritant contact eczemas are non-allergic inflammatory reactions triggered on the skin by the application of a chemical product and manifesting as an eczematous reaction.¹ Its appearance in people depends on the irritant and its concentration. "Ectopic" contact dermatitis (by dragging the allergen with the fingers) or specific sensitizations, for example to components of ophthalmic eye drops, can manifest on the eyelids. In atopic individuals, fissured dermatitis of the upper eyelids is frequently observed, probably due to an irritative mechanism.²⁻³ Preparations in the form of drops and eye drops used to maintain or disinfect contact lenses can also cause contact dermatitis.⁴

CLINICAL CASE

A 4-year-old male patient with a history of atopic dermatitis, who consulted due to presenting a clinical picture of four days of evolution, characterized by erythema with micropapules, xerosis, desquamation and fissures, with the appearance of a dripping drop that extends from the lacrimal groove to the nasolabial fold (Photo 1). Observation reveals lichenification and fissures in the lower eyelid accompanied by burning and itching, in addition to generalized xerosis (Photo 2). The mother reports that during the last week the child was administered tobramycin eye drops to treat bacterial conjunctivitis.

For treatment, cold decongestant compresses, corticosteroid and antibiotic cream, oral antihistamine (hydroxyzine), oral corticosteroid were indicated for a period of seven days, as well as constant and abundant lubrication and hydration of the skin. The patient returned fifteen days later with a marked improvement in his condition, observing a discrete residual erythematous area that later disappeared completely (Photos 3 and 4).



Fotos 1 y 2. Lesiones eritematoeccematosas subpalpebrales y en surco nasogeniano al momento de la consulta.



Fotos 3 y 4. Mejoría casi total de sus lesiones tras dos semanas de tratamiento.

At this point, maintenance treatment focuses on improving the symptoms of generalized atopic dermatitis, for which he is instructed to maintain the use of special soaps and lotions to treat his underlying pathology.

DISCUSSION

Tobramycin is an antibiotic that belongs to the group of aminoglycosides.⁴ Tobramycin via the ophthalmic route

is used to treat infections located in the eye caused by bacteria sensitive to this antibiotic.⁵ Its side effects on skin and subcutaneous tissues are rare. They affect less than 1% of every 100 patients and the symptoms that present are made up of a skin rash with erythema and edema of the area, associated with intense pruritus.⁶ This is a rare case of reaction to tobramycin, since the application of this antibiotic in eye drops generally has a very good range of safety.

CONCLUSION

The exposed clinical case is striking due to the lesion distribution as well as the fact that tobramycin was the causative agent, since case reports of allergic contact dermatitis or periorbicularis dermatitis caused by this antibiotic are extremely rare. We recommend remembering the possibility of reactions with this type of medication in topical use, especially when they are administered to children with a personal history of atopic dermatitis or a general allergic background, in order to avoid possible adverse reactions to them.⁷

REFERENCES

1. MIYAZATO, H., YAMAGUCHI, S., TAIRA, K., ASATO, Y., YAMAMOTO, Y., HAGIWARA, K., & UEZATO, H. (2010). Allergic contact dermatitis due to diclofenac sodium in eye drops. *The Journal of Dermatology*, 38(3), 276-279.
2. Puig Sanz, L. (2002, September 01). Contact dermatitis. Allergy and irritation. Retrieved October 27, 2022, from <https://www.elsevier.es/es-revista-farmacia-profesional-3-articulo-dermatitis-contacto-alergia-e-irritacion-13036533>.
3. Alvarez, MS, & Brancaccio, RR (2006). Periorbital dermatitis. *Dermatitis*, 2006;17:43-44.
4. Aminoglycosides. Practical applications. Bogota, Colombia: Pontifical Javeriana University. Archived from the original on April 2, 2015. Retrieved October 14, 2008.
5. University Hospital Complex of Santiago de Compostela Pharmacy Service - Formula file. (n.d.). Retrieved October 28, 2022, from <https://www.basesoft.es/compounds/compound0024.html>.
6. Tobramycin Ophthalmic.(n.d.). Retrieved October 27, 2022, from https://www.medicinanet.com.br/conteudos/medicamentos/1019/tobramycin_ofthalmico.htm.
7. Superficial Second Degree Burn from Slime. Case report. *Magazine of the "Dr. Uruga Dermatological Center"*. 2021;3:42-45.