We present a case that had clinical and histologic characteristics both of lichen planus and of lichen striatus. This is exceptionally common, and supports the hypothesis that these 2 diseases represent the opposite ends of the same disease spectrum.

Correspondence:
Fernando Pulgar Martín.
C/ Norias, 47.
28220 Majadahonda. Madrid. Spain.
ferpulmar@hotmail.com

Conflicts of Interest
The authors declare no conflicts of interest.

References

1. Tilly JJ, Drolet BA, Esterly NB. Lichenoid eruptions in children. J Am Acad Dermatol. 2004;51:606-24.
2. Aloi F, Solaroli C, Pippione M. Diffuse and bilateral lichen striatus. Pediatr Dermatol. 1997;14:36-8.
3. Mittal R, Khaitan BK, Ramam M, Verma KK, Manchanda M. Multiple lichen striatus-An unusual presentation. Indian J Dermatol Venereol Leprol. 2001;67:204.
4. Peramiquel L, Baselga E, Dalmau J, Roé E, del Mar Campos M, Alomar A. Lichen striatus: clinical and epidemiological review of 23 cases. Eur J Pediatr. 2006;165:267-9.
5. Taniguchi Abagge K, Parolin Marinoni L, Giraldi S, Carvalho VO, de Oliveira Santini C, Favre H. Lichen striatus: description of 89 cases in children. Pediatr Dermatol. 2004;21:440-3.
6. Herd RM, McLaren KM, Aldridge RD. Linear lichen planus and lichen striatus–opposite ends of a spectrum. Clin Exp Dermatol. 1993;18:335-7.
7. Rubio FA, Robayna G, Herranz P, de Lucas R, Hernández-Cano N, Contreras F, et al. Linear lichen planus and lichen striatus: is there an intermediate form between these conditions? Clin Exp Dermatol. 1997;22:61-2.
8. Numata Y, Okuyama R, Tagami H, Aiba S. Linear lichen planus distributed in the lines of Blaschko developing during intramuscular triamcinolone acetonide therapy for alopecia areata multiplex. J Eur Acad Dermatol Venereol. 2008;22: 1370-1.

Unilateral Allergic Contact Dermatitis of the Eyelid Caused by Iopimax

M.T Bordel-Gómez, J. Sánchez-Estella, and J.C. Santos-Durán
Servicio de Dermatología, Complejo Asistencial Virgen de la Concha, Zamora. Spain

To the Editor:

Apraclonidine is a drug belonging to the group of α-2 adrenergic agonists; it is widely used as short-term additional treatment for chronic glaucoma in patients receiving medical treatment and who require additional reduction of intraocular pressure in order to delay treatment with laser or surgery. The drug is also widely used to control pressure within the eye after glaucoma surgery.

We report the case of a 63-year-old woman with a history of hypertension on treatment with Ameride (amiloride plus hydrochlorothiazide); the woman suffered from long-term glaucoma in the left eye for which she had been receiving treatment for several years with Xalatan ophthalmic solution (latanoprost, 50 mg). Despite this treatment, the last ophthalmic check-up, performed in early 2007, revealed high intraocular pressure and treatment with Iopimax (apraclonidine, 0.5%) ophthalmic solution was therefore added. The main objective of this additional treatment was to control intraocular pressure, as well as to delay surgery because the patient had already undergone surgery for glaucoma in the right eye. The patient consulted for an 8-month history of progressive and recurrent appearance of intensely pruritic, eczematous lesions on the upper and lower eyelids of the left eye; the lesions had developed after starting treatment with Iopimax and had improved substantially following application of different topical corticosteroids, although they recurred when corticosteroid treatment was suspended.

Examination of the skin revealed a small erythematous plaque with fine desquamation, located on each eyelid; desquamation was more accentuated on the internal surface (Figure 1). Laboratory tests (general analysis, immunologic study, and thyroid hormones) revealed no

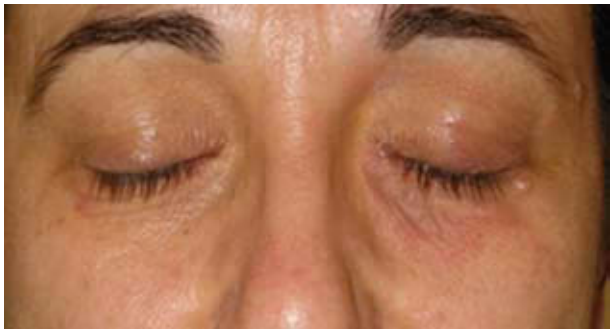

Figure 1. Eczematous lesions on the upper and lower left eyelids.

relevant pathology data; we found only a slight increase in total cholesterol levels. Skin prick testing was performed using a standard battery of the Spanish Skin Research and Allergy Group (GEIDAC) and the standard technique recommended by the International Contact Dermatitis Research Group (ICDRG). The allergens were applied to normal skin on the upper back in vertical strips and were fixed to the skin by means of a hypoallergenic adhesive tape. The allergen patches were removed after 48 hours and the sites were examined; a second examination was performed at 96 hours. Patch testing was also performed with the following ophthalmic products: Timoftol (timolol, 0.25% and 0.5%), Trusopt (dorzolamide, 1%), Xalatan (latanoprost, 0.005%), and Iopimax (apraclonidine, 0.5% and 1%), as well as a 1% aqueous solution of atropine sulfate, 10% aqueous solution of phenylephrine hydrochloride, 1% aqueous solution of pilocarpine hydrochloride, and 0.1% aqueous solution of benzalkonium chloride, supplied by Trolab Hermal (Reinbek, Germany). Results for all of these products were negative on examination after both 48 hours and 96 hours, except for Iopimax, 0.5% (3+ at 96 h).

Treatment was started with moderate-potency topical corticosteroids and we recommended withdrawal of Iopimax and a new assessment by the ophthalmologist; treatment for the glaucoma was changed to Combigan ophthalmic solution (brimonidine and timolol). The clinical course was satisfactory and no new episodes of eczematous lesions developed.

Allergic contact dermatitis is a recognized adverse effect of several drugs used to treat glaucoma. A recent review identified 10 drugs that, when used topically to treat this eye disorder, may cause a contact allergic reaction. These agents include β-blockers (timolol, befunolol, betaxolol, carteolol, and metipranolol), carbonic anhydrase inhibitors (dorzolamide), a parasympathomimetic drug (pilocarpine), and sympathomimetic drugs (dipivefrin and apraclonidine).[1]

Apraclonidine, the active ingredient in Iopimax, is an α2-selective drug that blocks α2 presynaptic receptors, acting indirectly and inhibiting presynaptic stimulation for the formation of aqueous humor, thereby reducing intraocular pressure. It is also used in the treatment of Horner syndrome because it increases the tone of Müller's muscle, causing rapid elevation of the upper eyelid by between 1 and 3 mm. It is not associated with many side effects, but cases of allergic blepharoconjunctivitis,[2-4] burning sensation, eyelid retraction, and mydriasis have been attributed to it.

To our knowledge, only 3 cases of allergy to apraclonidine ophthalmic solution have been published[2,5]; 2 of these were confirmed by means of skin patch tests using a 5% aqueous solution of apraclonidine and the other by means of a patch test using Iopimax, 0.5%, and a 10% aqueous solution of apraclonidine. In our patient, the allergy was confirmed by patch testing exclusively with Iopimax, 0.5%. We have performed patch tests with Iopimax on control patients who had undergone patch tests (standard battery and others) and have not detected any positive allergic or irritative reactions to date.

The explosion of new drugs in recent decades has led to substantial advances in the treatment of many diseases, including glaucoma. As a result, their use has increased sharply, occasionally causing medical problems, including contact allergic dermatitis. We conclude that this type of dermatitis should be considered as a rare but possible adverse effect of treatment with apraclonidine (Iopimax) ophthalmic solution. An alternative for these patients is the use of other α1-adrenergic drugs, such as brimonidine or clonidine.[2,6]

Correspondence:
M.ª Teresa Bordel Gómez.
C/ Martínez Villergas, 6, 1º B.
49003 Zamora.Spain.
maitebordel@aedv.es
matebordel@yahoo.es

Conflicts of Interest
The authors declare no conflicts of interest.

References

1. Holdiness MR. Contact dermatitis to topical drugs for glaucoma. Am J Contact Dermatitis. 2001;12:217-9.
2. Silvestre JF, Carnero L, Ramón R, Albares MP, Botella R. Allergic contact dermatitis from apraclonidine in eyedrops. Contact Dermatitis. 2001;45:251.
3. Gross RL, Pinyero A, Orengo-Nania S. Clinical experience with apraclonidine 0.5 %. J Glaucoma. 1997;6:298-302.
4. Butler P, Mannschreck M, Lin S, Hwang I, Alvarado J. Clinical experience with the long-term use of 1% apraclonidine. Incidence of allergic reactions. Arch Ophthalmol. 1995;113:293-6.
5. Armisen M, Vidal C, Quitans R, Suárez A, Castroviejo M. Allergic contact dermatitis from apraclonidine. Contact Dermatitis. 1997;39:193.
6. Shin DH, Glover BK, Cha SC, Kim YY, Kim C, Nguyen KD. Long-term Brimonidine therapy in glaucoma patients with apraclonidine allergy. Am J Ophtalmol. 1999;127:511-5.