Short communication

Intra-lesional injection of betamethasone for the treatment of symptomatic pinguecula

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ABSTRACT

Clinical cases: The pinguecula is a degenerative lesion which is usually asymptomatic, except when it is associated with an inflammatory reaction. We present 2 clinical cases of patients that had symptomatic pinguecula, in which intra-lesional betamethasone in depot form was used as treatment, obtaining a significant clinical improvement.

Discussion: The administration of intra-lesional betamethasone in depot form may be a good alternative for the treatment of the symptomatic pinguecula.

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Infiltración intralesional de betametasona como tratamiento de la pinguecula sintomática

RESUMEN

Casos clínicos: La pinguecula es una lesión degenerativa que suele ser asintomática, excepto cuando se produce alguna reacción inflamatoria asociada. Se presentan dos casos clínicos de pacientes que cursan con pinguecula sintomática en los cuales se utilizó betametasona intralesional de depósito como tratamiento, obteniendo una mejoría clínica significativa.

Discusión: La administración de betametasona intralesional de depósito podría constituir una buena alternativa para el tratamiento de la pinguecula sintomática.

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Introduction

Pinguecula is a degenerative lesion of the conjunctiva which does not usually present discomfort except when an associated inflammatory reaction occurs. Many patients with inflamed pinguecula report foreign body feeling, pain, itching and reddening. For managing this condition, Frucht et al. described the beneficial effects of topical use of indomethacin during 2 weeks. Subsequent studies found similar effects with the use of topical corticosteroids applied for the same period. On the basis of the authors’ experience with the use of intra-corneal depot corticosteroids for treating corneal transplant rejections, 2 clinic cases are reported in which intralesional depot betamethasone was applied for treating symptomatic pinguecula.

Technique

A 30-gauge insulin needle was utilized, placing the bezel at an angle of 30° (Fig. 1). Intralesional injection was placed in an area in which no vessels were observed after instilling topical anesthetic drops (proparacaine), 0.01 cc of a commercial preparation containing betamethasone dipropionate (Merck Sharp & Dhome, Italy) equivalent to 5 mg of betamethasone, and betamethasone disodium phosphate equivalent to betamethasone 2 mg (Fig. 2).

Clinic cases

Clinic case 1

Female patient, 44, who visited due to photophobia, visual fatigue, ocular irritation and bilateral reddening. In addition, she referred ocular pain, poor near vision and foreign body feeling in the right eye (RE). Exploration produced a far visual acuity (VA) of 20/20 in both eyes, near VA of J1 in both eyes and bilateral intraocular pressure of 12 mmHg, with previous pupil dilatation. Biomicroscopic examination revealed in the RE a typical pinguecula highly raised on the nasal side which stained upon application of vital stain. Intralesional injection was applied according to the technique described above, assessing symptom improvement 15 days later on a scale from 0 to 100, zero being absence of improvement and 100 complete improvement. The patient referred an improvement of 100 in symptoms, with bilateral intraocular pressure of 12 mmHg without pupil dilatation. Additional ophthalmological examinations were carried out at 35 and 50 days without reporting deterioration in symptom improvements and at day 35 the patient exhibited bilateral ocular pressure of 12 mmHg with previous pupil dilatation. During the follow-up period no local or systemic side effects were reported.

Clinic case 2

Female patient, 40, who consulted due to bilateral ocular reddening and fatigue. In addition she referred a fleshy protrusion in the left eye (LE) without additional symptoms. Far VA was of 20/20 in both eyes, near VA of J1 in both eyes and bilateral intraocular pressure of 10 mmHg, with previous pupil dilatation. Biomicroscopy revealed nasal pinguecula which stained with application of vital stain. The above described preparation was injected according to the aforementioned technique. The patient was examined 15 days later and referred an improvement of 80 in symptoms. Intraocular pressure without previous dilatation was of 15 mmHg in the RE and 13 mmHg in the LE. In addition, 4 examinations were carried out: the first after 81 days, the second and third after 2 years and the last after 4 years, during which the patient did not refer any regression of the improvements. In the visit at day 81, bilateral intraocular pressure was of 12 mmHg without previous pupil dilatation, and 15 mmHg in the RE and 13 mmHg in the LE at 4 years, with previous pupil dilatation. No additional side effects were documented.

Discussion

Corticoids have been applied in clinical practice since 1949, with beneficial results for treating superficial and deep
inflammatory processes.\textsuperscript{4} However, their use is limited due to the side effects that might ensue.\textsuperscript{5} As intralesional corticoid application is able to suppress inflammatory reactions in local processes, it could be efficient for managing symptomatic pinguecula.

The authors have reported 2 clinic cases in which the use of intralesional betamethasone produced significant clinical improvement. In the experience of the authors, said improvements were much faster and evident than those produced by any other conventional treatments. In addition, negative effects were not evidenced in the tissue or other ocular globe structures. However, a slight increase of bilateral intraocular pressure was recorded in the second clinic case reported herein.

The satisfactory improvement found with intralesional application of a minimal dose of betamethasone could offer a simple alternative for cases in which symptoms are discomforting and evident in order to avoid surgical extirpation. However, said documented improvements should be reaffirmed in subsequent studies because this report does not compare the improvements with those obtained with conventional topical medication, which constitutes a significant limitation.

Conflict of interests

No conflict of interests has been declared by the authors.

REFERENCES