LETTER TO THE EDITOR

Topical interferon alfa-2b or surgical excision for primary treatment of conjunctiva-cornea intraepithelial neoplasia

Dear Sir,

Intra-epithelial conjunctival neoplasia (ICN) is the most frequent malign tumor of the ocular surface. The classic treatment consisted in resection plus cryotherapy on the excision edges. Topical chemotherapy with Mitomycin C and Interferon (IFN) alfa-2b in eye drops has also proved its effectiveness in primary cases, relapses and combined with surgery.

Mitomycin C is applied in cycles, while treatment with IFN is longer. Significant adverse effects on the ocular surface have been described after topical use of Mitomycin C, among which we must mention dotted epitheliopathy, conjunctival hyperemia, allergy, corneal-scleral thinning, alterations in the stability of the lachrymal tear, lachrymal point stenosis, reduction of the conjunctival goblet cells, squamous metaplasia and loss of limbar stem cells (1). Topical treatment with IFN alfa-2b seems to be safer; however, the experience with IFN alfa-2b in eye drops as a primary treatment of the intra-epithelial conjunctival neoplasia has been based on the description of series of one or several cases, which include a brief follow-up (1). To date there were no comparative studies between this topical treatment and aggressive surgical excision plus cryotherapy. In addition, long follow-up series after the eradication of the neoplasia by means of the topical IFN were not documented.

Two recent studies have addressed the above questions and confirmed the effectiveness of this treatment mode for these neoplasiae (2,3). The first study (2) demonstrated total resolution of the tumor in 96.4% of cases in 28 eyes treated with IFN alfa-2b with a mean follow-up of 42.4 months. The second study (3) demonstrated that topical treatment with IFM in 15 patients and surgical excision in 14 had the same effectiveness as primary treatment for ICN for a mean follow-up of 35.6 months. The authors concluded that topical IFN alfa-2b and aggressive surgical excision can be considered equally effective as first choice for treating ICN (3). Treatment exclusively with eye drops of IFN alfa-2b is able to eradicate the neoplasia and avoid surgery (1). In theory, topical IFN alfa-2b has some advantages over conventional excision, including the reduction of risk of losing limbar stem cells caused by surgical trauma and thus compromising the integrity of the ocular surface. This therapeutic mode can be recommended particularly for patients who reject any type of surgery or mentally retarded patients in whom surgery is complicated as well as extended cases where an aggressive excision could cause the loss of limbar stem cells.

For some time already it has been known that 53% of recurrence of neoplasia may occur if the histological study after the excision reveals involved margins. This percentage goes down to 5% if said margins are confirmed to be free (1). This recurrence goes down even further to 3.7% in eyes exhibiting a full response to topical IFN (2). Considering the frequency of recurrence of the disease due to the difficulty of a complete resection and the potential for surgical complications associated to excision and adjacent cryotherapy, the pharmacological alternative via topical IFN is cost-effective. The side effects are minimal and, by eliminating surgery, the costs are reduced (1). The absence of severe systemic effects after topical instillation of IFN alfa-2b is also advantageous to initiate treatment with this mode (1). According to 2 recent papers (2,3), there should be no reason for postponing topical treatment with IFN alfa-2b as primary treatment in ICN cases. The ophthalmologist and the patient must consider the cost, the duration and possible adverse effects when deciding the initial treatment for primary ICN cases.

Huerva V
Ph. D. in Medicine
Ophthalmology Service
University Hospital Arnau de Vilanova
Lérida, Spain
E-mail: vhuerva@gmail.com

REFERENCES
