Surgery of basal cell carcinoma around the lacrimal canaliculus can be necessary after primary treatment with intralesional interferon alpha 2b

Dear Editor,

Basal cell carcinoma (BCC) is the most common malignancy, accounting for 90% of malignant eyelid tumors.¹ Surgical excision is the treatment of choice for periocular BCCs. However, aggressive BCCs are therapeutically challenging because their excision results in marked tissue loss and may demand considerable oculoplastic and functional surgery. Surgery for BCCs around the canaliculus is mutilating. Interferon (INF) alpha 2b (Intron-A, Shering Corp) has been proposed as a nonsurgical approach to treat BCC arising far from the periocular zone.² Interferons are proteins that inhibit cell growth and cell differentiation and therefore exhibit an antineoplastic action.³

We used INF alpha 2b for management of a BCC below the periocular zone.² Interferons are proteins that inhibit cell growth and cell differentiation and therefore exhibit an antineoplastic action.³

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right inferior canaliculus in a 77-year-old man [Fig. 1]. The lesion was previously subjected to biopsy by his dermatologist with histologic results of nodular BCC. Chronic epiphora was not noted. Syringing of the canalicus by means of a cannula of 25 G showed patency of them. Total surgical excision would have caused a loss of the permeable canaliculus. Hence, intralesional treatment with recombinant INF alone was proposed. After informed consent was obtained, INF alpha 2b was injected three times a week for three weeks with 1.5 x 10 (6) IU (0.15 ml) per injection. The total dose received was 13.5 x 10 (6) IU. The lesion persisted during the follow-up of six months [Fig. 2]. Wide surgical resection was then proposed. The histologic study of the resected mass confirmed the persistence of nodular BCC. During a year of follow-up no recurrences have been noticed. However, a cicatricial medial ectropion was present.

We used the same dosage as reported in the first study which had 100% success rate for eight cutaneous BCCs after two months of therapy. However, later studies reported complete regression in only 67% of patients with cutaneous BCC treated with intralesional INF alone. A 90.9% success rate has been observed in the eyelids. In this study, the authors used intralesional INF alpha 2b as an adjunctive treatment after the resection of aggressive BCC and reconstruction. The patient in the presented case had undergone a prior minor biopsy but not a wide resection. It is possible that a wide resection followed by intralesional INF could attain better satisfactory results in BCC around the canaliculus. Surgical procedures may also stimulate the immune system and prevent recurrences. We have observed the absence of recurrence during follow-up in some cases in which pathology studies revealed involved margins after resection. In these cases, intralesional INF alpha 2b may be a useful adjunctive treatment, as has been proposed. In conclusion, intralesional INF alpha 2b cannot be the first choice in the treatment of BCC around the canaliculus.

References

1. Cook BE Jr, Bartley GB. Epidemiologic characteristics and clinical course of patients with malignant eyelid tumors in an incidence cohort in Olmstead County, Minesota. Ophthalmology 1999;106:746-50.
2. Fenton S, Kennedy S, Moriarty P. The role of interferon alpha 2b as an adjunctive treatment in the management of aggressive basal cell carcinoma of the eyelids. Acta Ophthalmol Scand 2002;80:674-5.
3. Greenway HT, Cornell RC, Tanner DJ, Peets E, Bordin GM, Nagi C. Treatment of basal cell carcinoma with intralesional interferon. J Am Acad Dermatol 1986;15:437-43.
4. Chimenti S, Peris K, Di Cristofaro S, Fargnoli MC, Torlone G. Use of recombinant interferon alpha-2b in the treatment of basal cell carcinoma. Dermatology 1995;190:214-7.

Figure 1: BCC below the inferior lacrimal canaliculus

Figure 2: BCC six months after treatment with intralesional interferon alpha 2b. The tumor persists. A nodular lesion is also present.