Ocular surface squamous neoplasia treated with topical interferon α 2b

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DESCRIPTION

A 64-year-old male patient presented with fleshy lesion over the right temporal conjunctiva for the past 3 months with a gradual increase in size. History of trauma and pain was absent, and past history did not reveal any significant ocular/systemic morbidities. Right eye examination showed single 6*8 mm fleshy mass on the temporal aspect of right conjunctiva extending from the limbus, and the surface showed 'corkscrew' vessels, with prominent 'feeder' vessel; impression cytology revealed dysplastic cells consistent with ocular surface squamous neoplasia (OSSN) (figure 1A).

The patient requested for medical line of management, and he was started on eye drop interferon α -2b (1 million IU/mL) four times/day; at the end of 2 weeks, there was small reduction (~25%) in the size of the lesion (figure 1B) and at the end of 5 weeks, there was complete resolution of the lesion (figure 1C). There has been no recurrence during 1 year of follow-up.

OSSN includes tumours that vary from mild dysplasia to carcinoma in situ and invasive carcinoma breaching the basement membrane; they mainly involve the cornea and conjunctiva. The preferred treatment modality is surgical excision with 'no-touch technique' along with the application of cryotherapy to the conjunctival margins, but surgery can cause infection, limbal stem cell deficiency, symblepharon and other complications.

Nowadays there is a growing experience about the use of interferon- α 2b as the initial treatment modality. As compared to surgical modality and earlier use of mitomycin-C, the side effect profile of this medication is minimal. Other agents used as topical chemotherapy include 5-fluorouracil and mitomycin-C. In this scenario interferon, α -2b eye drops showed an excellent response with complete regression of the mass along with the feeder vessel.^{1 2}

Figure 1 (A) Clinical picture of the tumour before starting topical interferon α 2b. (B) At the end of 2 weeks, approximately a quarter reduction in the size of the tumour mass. (C) At the end of 5 weeks, there is a complete regression of the tumour mass along with feeder vessel.

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Learning points

- ▶ Interferon α 2b is a very effective topical chemotherapeutic drug for the treatment of ocular surface squamous neoplasia (OSSN) with minimal adverse effects.
- ▶ This clinical example highlights the important role of this drug in early, small, limbal, corneal and giant OSSN tumours.

Competing interests None declared.

Patient consent Obtained.

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