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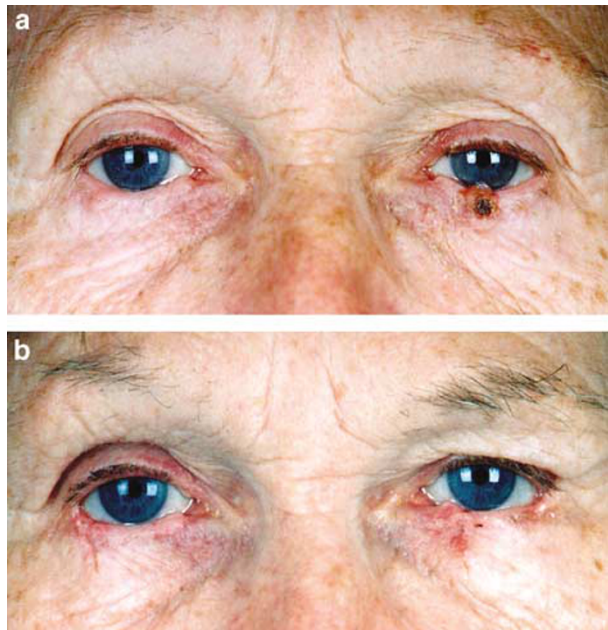
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Sir,  
**Bilateral basal cell carcinoma of the lower eyelids following radium treatment for blepharitis**

Approximately 5–10% of all skin cancers occur in the eyelid.<sup>1</sup> Basal cell carcinoma (BCC) is the most common malignant tumour of the eyelids. The most important environmental risk factor is repeated intense exposure to the sun, particularly second-degree solar burns during childhood.<sup>2</sup>

We present a case of bilateral lower lid BCC following therapeutic radium treatment for blepharitis in childhood.



**Figure 1** (a) Preoperative photograph showing pearly ulcerated nodule on left lower lid and smaller nodule on lateral half of right lower lid. (b) Appearance at 10 days postoperatively after removal of sutures. Although there is still some residual erythema, there is a satisfactory cosmetic result.

**Case report**

A 71-year-old lady presented with a 2-year history of slow growing bilateral lower lid lesions. She had an ulcerated nodule with pearly raised edges on her left lower lid measuring 7 mm across and a smaller nodule on her right lower lid measuring 3 mm across (Figure 1a).

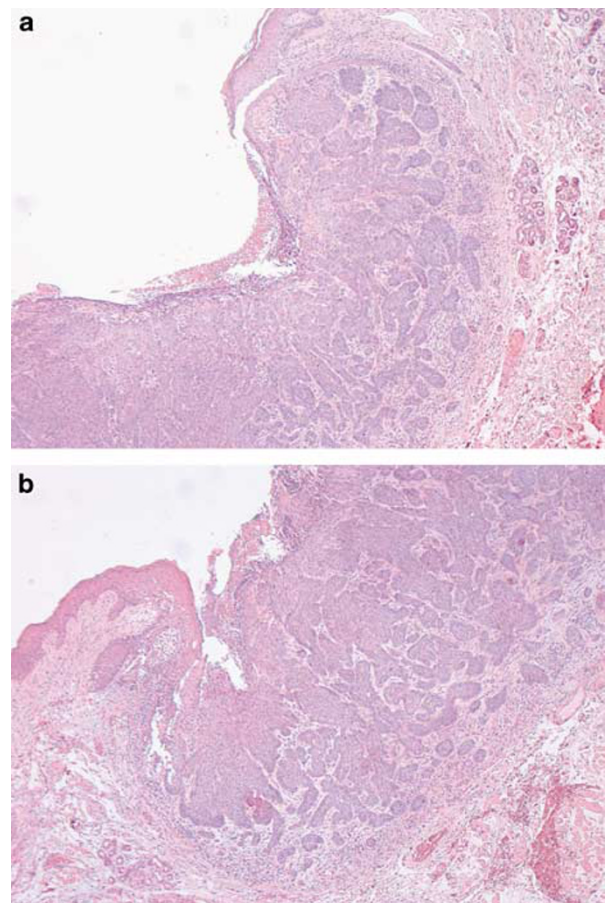
Her past ocular history was of particular interest. She had suffered from severe blepharitis in childhood and recalled a trial of radium irradiation for her condition at the age of 13. This took the form of six treatments over 6 weeks. 70 kv photons were used and she received 300 R in total (ie 50 R per treatment). The eyelid was held back and lead foil was used to protect the eye.

The clinical diagnosis was bilateral lower lid BCC. She underwent bilateral pentagon excision biopsies with a left semicircular flap. Histology confirmed nodulo-ulcerative BCC (Figure 2). All margins were clear of tumour.

The patient had an uneventful postoperative recovery and was satisfied with the cosmetic result. (Figure 1b).

**Comment**

Basal cell carcinoma is the most common malignant tumour of the eyelid.<sup>3</sup> The treatment of choice for



**Figure 2** Histological specimens of left (a) and right (b) lower lid excision biopsy specimens showing BCC with dilated glandular ducts and inflammation associated with ulceration.

BCC, where possible, is complete curative excision.<sup>2</sup> In this case, excision biopsies were undertaken using a clear clinical margin of 3 mm. The strongest evidence favours complete surgical removal using histologic controls to ensure tumour-free excision margins.<sup>1,4,5</sup> Moh's micrographic surgery and excision with frozen-section monitoring yield the highest cure rate and lowest frequency of recurrence.<sup>1,4</sup>

Blepharitis is a complex condition that is thought to encompass meibomian gland dysfunction, abnormal keratinization, inadequate tear film, increased bacterial populations of normal skin microflora, and associated inflammation. Treatment is aimed at targeting these conditions and has included the use of lid scrubs, topical and systemic antibiotics, and the use of topical corticosteroids in severe cases associated with keratoconjunctivitis.<sup>6</sup> To the best of our knowledge, there is no previously published literature on radium treatment for blepharitis or its risk association with BCC.

Radiation carcinogenesis in humans has been extensively studied. The use of radium for benign conditions has been linked to an increase of sarcomata of bone and the sinuses of the head.<sup>7</sup> Sebaceous gland carcinoma of the eyelid has been described after external irradiation.<sup>8</sup> Eyelid malignancies can be bilateral.<sup>9</sup> The bilaterality of the BCC in this case raises the suspicion that the radium treatment employed for blepharitis might have been a risk factor in the development of malignancy.

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