lids. The lashes were long and fine, arising from the correct position, but curved and trapped in the conjunctival fornices. Otherwise, the eyelid positions were normal and there was no ocular abnormality. She underwent electrolysis of the offending eyelashes under GA which led to resolution of symptoms without any recurrence.

## Case 3

An 8-year-old girl was referred to the eye clinic with a long-standing history of irritable eyes due to ingrowing eyelashes. Epilation of the offending lashes prior to referral invariably led to recurrence of symptoms after a short symptom-free period. Ophthalmic examination revealed dysverted lashes at the lateral ends of both upper lids, trapped under the lid margin. There was no evidence of lid malpositioning, trichiasis or other ocular pathology. She underwent electrolysis of the offending eyelashes under GA, but on examination a month later was noted to have some remaining misdirected lashes on the right side. However, when she was admitted for further electrolysis 3 months later, despite persistent occasional irritation of the right eye, no dysverted lashes were seen and the procedure was cancelled. She remained relatively symptom free for 6 months when she was again noted to have obvious misdirected eyelashes at the temporal aspect of the right upper lid. These were subsequently treated with electrolysis which led to resolution of symptoms and no recurrence within the following 5 months.

## Discussion

We agree with Sadiq and Downes<sup>1</sup> that dysversion of the lateral eyelashes is a cause of recurrent sore, red, watery, sticky eyes in children. Our three cases support their findings, but demonstrate that this condition may occur in both girls and boys. We also found the lateral lash dysversion syndrome to be bilateral, although our first case suggests that initial presentation may be unilateral. Our third case demonstrates the ease with which it is possible to overlook this condition, as dysverted lashes may spontaneously reposition leading to temporary resolution of symptoms. Finally, although our cases were successfully treated with electrolysis, we would agree with Sadiq and Downes that manual repositioning of the dysverted eyelashes may be preferable as it prevents the need for surgery and a general anaesthetic.

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## Reference

1. Sadiq SA, Downes RA. Dysversion of lateral eyelashes in children: a new diagnosis. Eye 1996;10:473–5.

Sir

We read with interest the paper entitled 'Primary ocular relapse in acute lymphoblastic leukaemia' by MacLean et al. They presented four cases of isolated anterior segment relapse in acute lymphoblastic leukaemia (ALL) occurring within 2 months of stopping therapy. Ocular signs responded well to radiotherapy; however, three patients subsequently died from haematological relapse. Anterior segment relapse, presenting soon after maintenance treatment has been completed, has been upheld by previous reports.<sup>2-4</sup> Anterior segment relapse is not commonly associated with concurrent central nervous system (CNS) involvement,<sup>3,4</sup> but there seems to be a high risk of bone marrow relapse.<sup>2</sup> However, CNS involvement is frequently associated with posterior segment relapse.<sup>5</sup>

A recent report described posterior segment relapse in a 12-year-old boy who had been treated in accordance with the recent UKALL protocol, which did not include cranial irradiation. He developed leukaemic infiltration in the left eye while on maintenance chemotherapy 7 months after diagnosis. CNS relapse was confirmed on lumbar puncture. Radiotherapy resulted in initial resolution, but death occurred 11 months after the first ocular presentation.

Ocular relapse in ALL carries a poor prognosis for life and requires immediate treatment with high-dose radiotherapy. A multicentre study of leukaemic ophthalmopathy<sup>5</sup> suggested that doses of 20 Gy may be ineffective against ocular leukaemia and that doses of 30 Gy or more may be necessary to eradicate ocular leukaemic cells. Indeed, 5 of their 6 patients treated with chemotherapy and radiotherapy to the eye at doses of 20–30 Gy achieved ocular remission. However, only 2 of 4 patients treated with chemotherapy and radiotherapy at doses of 10–20 Gy achieved ocular remission. It has also been proposed that for cases of recurrent ocular relapse where the eye is the sole sanctuary site, enucleation may be considered.<sup>5</sup>

We agree with MacLean *et al.* that awareness of leukaemic relapse, particularly in those patients recently coming off chemotherapy, should aid early diagnosis and instigation of treatment. It is important that all cases of ocular leukaemic relapse are carefully monitored in order to fully evaluate the current treatment protocols.

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## References

1. MacLean H, Clarke MP, Strong NP, Kernahan J, Ashraf S. Primary ocular relapse in acute lymphoblastic leukaemia. Eye 1996;10:719–22.

- 2. Harnett AN, Plowman PN. The eye in acute leukaemia. 2. The management of solitary anterior chamber relapse. Radiother Oncol 1987;10:203-7.
- 3. Novakovic P, Kellie SJ, Taylor D. Childhood leukaemia: relapse in the anterior segment of the eye. Br J Ophthalmol 1989;73:354–9.
- 4. Ninane J, Taylor D, Day S. The eye as a sanctuary in acute lymphoblastic leukaemia. Lancet 1980;1:452–3.
- Lo Curto M, D'Angelo P, Lumia F, Provenzano G, Zingone A, et al. Leukemic ophthalmopathy: a report of 21 pediatric cases. Med Pediatr Oncol 1994;23:8–13.
- 6. McElvanney AM, Ridgway AEA, Gattamaneni HR, Stevens RF. Ocular relapse in acute lymphoblastic leukaemia. Arch Dis Child 1995;73:481.