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CORRESPONDENCE

Sir,
Are junior doctors in today's NHS competent in managing ophthalmic cases in the emergency department?

In a 2003 national survey of the management of eye emergencies in the accident and emergency department, Sim *et al*[1] found that 63.9% of senior house officers in the UK had little or no confidence in dealing with ophthalmic cases. Surprisingly, this proportion was unchanged from a previous similar national survey conducted by Tan *et al*[2] in 1993, despite the significantly higher availability of slit lamps in the departments and increased training on their use. Furthermore, there was no significant difference in the prevalence of training in the management of eye emergencies between the two studies. Hence, Sim *et al* rightly pointed out that the shift to a more competency-based training brought about by Modernising Medical Careers (MMC) could serve as a platform to enhance confidence and competence in managing ophthalmic emergencies. However, to our knowledge, there is no recent national survey similar to the aforementioned surveys, which begs the question: has anything changed over a decade on?

The introduction of MMC and the European Working Time Directive (EWTD) has lead to many inexperienced foundation year 2 trainees having to deal with ophthalmic cases.[3] Given the relative frequency of ophthalmic presentations to the emergency department, this points to the fact that suboptimal care is unacceptable, just like it would be for an acute cardiac presentation. Several identified issues have contributed to the poor confidence of junior doctors in dealing with eye emergencies. First, the deficit in basic ophthalmic training can be traced back to the undergraduate years where ophthalmology education is very limited owing to increased emphasis on core specialties and soft skills such as communication skills. Second, there is a lack of formal structured teaching of junior doctors in managing ophthalmic presentations to the emergency department, including the use of slit lamps or fluorescein staining, owing to time constraints and variable shift patterns. Third, there is no general consensus on the baseline core ophthalmic competencies expected of junior doctors allocated to a four month A&E rotation. Furthermore, there is no clear national guidance or protocol on the management of ophthalmic presentations in the different departments across the country.

In conclusion, we believe that a national survey is required to assess the current state of ophthalmic care delivered by junior doctors in the emergency department. Findings from the survey would form a basis for the need for a higher investment in resources, including finances and manpower, and organizational changes on a national level to improve ophthalmology training and supervision in the emergency department. This will ultimately ensure optimal ophthalmic care but also reduce out-of-hours ophthalmic workload in the department.

Conflict of interest

The authors declare no conflict of interest.

References

1 Sim D, Hussain A, Tebbal A, Daly S, Pringle E, Ionides A. National survey of the management of eye emergencies in the accident and emergency departments by senior house officers: 10 years on—has anything changed? *Emerg Med J* 2008; **25**: 76–77.
2 Tan MM, Driscoll PA, Marsden JE. Management of eye emergencies in the accident and emergency department by senior house officers: A national survey. *J Accid Emerg Med* 1997; **14**(3): 157–158.
3 Patel N, Zia R, Dewitd D, Morris S, Ionides A. Early structured core training of junior trainees in ophthalmology. *Postgrad Med J* 2007; **83**(986): 738.

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Sir,
Comment on 'The accuracy of the Edinburgh Red Eye Diagnostic Algorithm'

We congratulate the authors on the creation and evaluation of their Red Eye Algorithm, for use in primary care settings.[1] This algorithm suggests that bilateral red eyes, with signs and symptoms of infective conjunctivitis, should be given 2 weeks of chloramphenicol drops before review by their GP. However, we would suggest that, because of its prevalence and wider health implications, primary care practitioners should be encouraged to consider the possibility of chlamydial conjunctivitis and initiate investigations when appropriate.

It is estimated that the proportion of patients presenting with acute infective conjunctivitis in secondary care, diagnosed with chlamydial conjunctivitis, is around 2.5–5.6%.[2] However, it can be as high as 10% in 16–20 year olds[3] and up to 34%[4] among patients referred to some ophthalmology clinics.

We performed a retrospective audit of eye swabs, taken from last 300 patients referred to our Emergency Eye Care clinic, with apparent acute infective conjunctivitis. We found 15% tested positive on Chlamydial PCR. The proportion of positive swabs varied significantly according to age, with 29% of positive swabs taken from those aged 20–29 years, compared with 1% from those aged 40 years and over (see Table 1).

One would not wish to encourage mass screening of all conjunctivitis. However, the decision to swab for chlamydia is driven by specific features of the history including patient demographics, asymmetry and chronicity of symptoms, along with characteristic signs

Table 1 Patient demographics for chlamydial positive swabs

Age (years)	n = *300* *% of patients with positive chlamydial swabs*
0–9	12 (3/26)
10–19	17 (9/52)
20–29	29 (27/94)
30–39	11 (6/57)
40 and over	1 (1/71)
Total	15 (46/300)

such as preauricular lymphadenopathy and follicles, which would be apparent in a primary care setting.[5] Up to 54% of men and 74% of women would be expected to have concurrent genital infection when presenting with chlamydial conjunctivitis,[2] although the majority of cases would be asymptomatic.[5]

We would therefore wish to encourage GP's using the Edinburgh Red Eye Diagnostic Algorithm, seeing apparent infective conjunctivitis cases, to consider taking swabs for chlamydia based on patient demographics, history and clinical features. This will minimize delay in diagnosis, or avoid entirely missing the opportunity to pick up chlamydial conjunctivitis, and prevent the systemic and public health implications of an untreated asymptomatic genital infection.

Conflict of interest

The authors declare no conflict of interest.

References

1 Timlin H, Butler L, Wright M. The accuracy of the Edinburgh Red Eye Diagnostic Algorithm. *Eye* 2015; **29**: 619–624.
2 Azari AA, Barney NP. Conjunctivitis: a systematic review of diagnosis and treatment. *JAMA* 2013; **310**: 1721–1729.
3 Rönnerstam R, Persson K, Hansson H, Renmarker K. Prevalence of chlamydial eye infection in patients attending an eye clinic, a VD clinic, and in healthy persons. *Br J Ophthalmol* 1985; **69**: 385–388.
4 Rao K, Madhavan HN, Padmanabhan P, Lakshmi GS, Natarajan K, Garg D. Ocular chlamydial infections. Clinicomicrobiological correlation. *Cornea* 1996; **15**: 62–65.
5 Denniston AKO, Murray PI. Chlamydial conjunctivitis. In: Denniston AKO, Murray PI (eds). *Oxford Handbook of Ophthalmology*, 2nd ed. Oxford University Press: Oxford, UK, 2009, pp 168–169.

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Sir,
Reply: 'The accuracy of the Edinburgh Red Eye Diagnostic Algorithm'

We thank Drs Soomro and Buchan for their interest in our article and for their very pertinent comments regarding the risk of chlamydial conjunctivitis going undiagnosed when clinicians use our diagnostic algorithm to help assess patients presenting with red eye(s). We will add a footnote to the diagnosis of 'infective conjunctivitis' to alert the user to consider chlamydia if the patient is in one of the at-risk groups; <40 years of age or has other suggestive symptoms (genital discharge) or signs such as pre-auricular lymphadenopathy or as per our original advice if symptoms persist despite treatment with topical chloramphenicol.

Conflict of interest

The authors declare no conflict of interest

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Sir,
Comment on 'Topiramate maculopathy secondary to dose titration: first reported case'

It was with much interest that we read the recent article by Severn *et al*[1] regarding the first documented report of topiramate maculopathy secondary to an increase in dose. In contrary, in 2014 we shared our experience of acute myopia syndrome secondary to topiramate discontinuation, a dose decrease.[2] Therefore, we assume that an increase as well as decrease of dosing may have a common physiological mechanism through which both ocular adverse effects are mediated.

We previously hypothesized that the change in topiramate plasma levels was the likely culprit of the ocular effects rather than the administration itself—a theory that corroborates findings of Severn *et al*. A sudden change in plasma levels of topiramate may result in abnormal carbonic anhydrase activity and subsequent fluid accumulation within the uveal tissue, suprachoroidal space and the vitreous body. The anticipated accumulation of H+ in the uveal tissue and consequently altered permeability of choriocapillaris could also account for the etiology of choroidal folds. Interestingly, we also found choroidal folds as a feature of advanced acute myopia syndrome suggesting that topiramate maculopathy may be one of the early signs or an incomplete manifestation of acute myopia syndrome.

We believe that the crux for ocular adverse effects of topiramate could be in its pharmacokinetics, which is known to be unbalanced as it accumulates