


necessarily requires the excitation of different cone systems.⁵ This model indicates that it is probably luminance channel contrast that is increased using the green filter on the slit lamp to aid detection of diabetic retinopathy rather than a colour channel contrast change.

Altering the spectral illuminant to maximise our ability to detect abnormality in the diseased retina may well be able to play a part in management in the future. One can envisage a series of different filters, each designed to highlight specific changes in the retina, that could allow earlier detection of many disease processes.


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Nigel Davies, MA, PhD, FRCOphth 
Moorfields Eye Hospital
City Road
London EC1V 2PD, UK

Sir,

We welcome the opportunity to reply to Mr Davies' letter to clear up the methodology questions that were raised. The filter available on the Haig-Streit slit lamp generated the green light, no filter was used for examination with white light and in all cases the slit lamp bulb was run at 4 volts. As stated the bulb voltages of both the direct and indirect ophthalmoscopes were controlled with a potentiometer and, while it was difficult to standardise, an attempt was made to use the minimum amount of light necessary to illuminate the fundus when using these instruments. We read with great interest his discourse on the physical mechanism underlying our findings; we agree with his theory and congratulate him on an elegant and erudite explanation.

Mark Cahill 
Beetham Eye Institute
Joslin Diabetes Center
One Joslin Place

Boston
MA 02215, USA

Sir,

We read with interest the case report on lightning-induced cataract by Cazabon and Dabbs,¹ who report their case to be possibly the first in the United Kingdom. However, we reported a case² in 1998 which was, to our knowledge, the first case of lightning-induced cataract reported in the UK and the very first in the world literature reporting a cataract caused by telephone-mediated lightning injury.

Cazabon and Dabbs describe a patient who developed cataract following a direct lightning strike. Our patient, a 9-year-old boy, developed a posterior subcapsular cataract in his right eye following a lightning strike whilst using a telephone in his home during a thunderstorm. The lightning strike damaged the telephone box and caused superficial facial burns. The cataract was similar to that described by these authors. An uneventful cataract extraction has resulted in a visual acuity of 6/5.

Lightning can traverse the telephone user in two ways.³ The first method is by the current generated in the communication line as it is struck by lightning. The second method is by an interesting phenomenon called 'earth potential rise' or EPR. The earth is thought to be at zero potential continuously, although the potential can rise when struck by lightning. The telephone is held at zero potential by its connection to the remote earth. When the earth potential rises during a strike, the potential difference between the telephone and the earth makes the current flow through the user to the remote earth, harming the telephone user. Hence the advice: do not use a telephone during a thunderstorm.

These two cases illustrate the dangers of lightning by direct and indirect strikes.

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S. Dinakaran 
Department of Ophthalmology
Royal Hallamshire Hospital
Glossop Road
Sheffield S10 2JF, UK
S.P. Desai
Department of Ophthalmology
Doncaster Royal Infirmary
Doncaster DN2 5LT, UK


D.M. Elsom
Oxford Brookes University
Oxford OX3 0BP, UK

Sir,

For our case report, lightning-induced cataract, a literature search was carried out using PubMed. The keywords used were 'lightning-induced cataract' and were matched to three reports,^{1–3} all found outside the UK. However, we acknowledge the case report telephone-mediated lightning-induced cataract by Dinakaran *et al.*,⁴ and also found it very interesting. We would therefore like to apologise if our information was in any way misleading, although it was not intended to be.

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S. Cazabon 
Department of Ophthalmology
Bradford Royal Infirmary
Duckworth Lane
Bradford BD9 6RJ, UK
T.R. Dabbs
Department of Ophthalmology
St James' University Hospital
Leeds LS9 7TF, UK

Sir,

We read with interest the report by Venugopalan *et al.*¹ of a girl with Proteus Syndrome associated with ocular anomalies. Ocular complications are frequently reported in patients with Proteus Syndrome.^{2–5} However, in a review of the literature, Bouzas *et al.* found that only two out of over 50 patients with Proteus Syndrome had a comprehensive ocular examination.⁶ Reported findings were periorbital exostosis, epibulbar tumour, retinal vascular tortuosity, 'enlarged eye', posterior segment hamartoma, heterochromia iridis, retinal coloboma, glaucoma, retinal detachment, cataract, lid hamartoma, strabismus, nystagmus and ptosis. The recent report by Venugopalan *et al.* provides an interesting addition to the ophthalmic literature on Proteus Syndrome, but their assertion that eye changes are unreported in this condition is clearly unsubstantiated by literature review.