Susceptibility to tetracycline was not performed in six isolates.

*Numbers indicate intermediate isolates/total isolates.

Microbiological processing and interpretation

Diagnosis of external ocular infections: microbiological processing and interpretation

Editors,—We thank Dr Sharma for her interest in our article on the identification and antibiotic susceptibility testing of coagulase negative staphylococci (CoNS) isolated in corneal/external infections. Apart from being a common component of the normal ocular flora, CoNS may occasionally be important ocular pathogens and cause chronic blepharitis, acute conjunctivitis, and suppurrative keratitis.

As stated by Dr Sharma, a bacterial isolate from corneal scrapings or conjunctival/lid swabs is generally considered significant whenever there is (1) growth in one medium with consistent direct microscopic findings, or (2) growth of the same organism on two or more media, or (3) the same organism is grown from repeated specimens. However, a bacterial isolate is consistent with the clinical signs, isolation of the organism even from a single medium can be considered significant. In our study, corneal scrapings for Gram stain were performed only on the patients with suppurative keratitis. In all cases the Gram stain showed the presence of grape-like clusters of Gram positive cocci. Follow up cultures performed about 12 hours after the last dose of medication showed eradication of the infecting organism in all 45 patients. According to our and other authors’ experience (Leventer DB, presented at the AAO Annual Meeting, San Francisco, 1997), thioglycolate broth is an adequate, cost effective culture medium like blood agar or from a surface resulting in a light growth on primary culture; (2) the same organism is grown in more than one medium; or (3) the same organism is grown from repeated specimens. Howevet, Pinna et al, in their article, have not indicated adherence to any such criteria while selecting isolates for their study, though they have suggested that isolation of this group of staphylococci needs special attention with respect to their role in pathogenicity. Generally, S epidermidis and other CoNS along with coagulase negative staphylococci (CoNS) isolated in corneal/external infections. Apart from being a common component of the normal ocular flora, CoNS may occasionally be important ocular pathogens and cause chronic blepharitis, acute conjunctivitis, and suppurrative keratitis.

Antibiotic susceptibility tests were determined by agar disc diffusion (Kirby-Bauer method). The disc diffusion technique requires labelling of bacteria as resistant, sensitive, or intermediate. The authors have not clarified the way the “intermediate” group was dealt with, or was no such group noticed in any of the 55 isolates tested by them? Similarly, the reason for testing susceptibility to penicillin is far from clear since CoNS are known to be resistant to penicillin and penicillin is not commonly used to treat external ocular infections. Moreover, much valuable data could have been obtained by determining the minimum inhibitory concentration of the antibiotics against CoNS.

Savitri Sharma

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Reply

Editors,—We thank Dr Sharma for her interest in our article on the identification and antibiotic susceptibility testing of coagulase negative staphylococci (CoNS) isolated in corneal/external infections. Apart from being a common component of the normal ocular flora, CoNS may occasionally be important ocular pathogens and cause chronic blepharitis, acute conjunctivitis, and suppurrative keratitis.

As stated by Dr Sharma, a bacterial isolate from corneal scrapings or conjunctival/lid swabs is generally considered significant whenever there is (1) growth in one medium with consistent direct microscopic findings, or (2) growth of the same organism on two or more media, or (3) the same organism is grown from repeated specimens. However, a bacterial isolate is consistent with the clinical signs, isolation of the organism even from a single medium can be considered significant. In our study, corneal scrapings for Gram stain were performed only on the patients with suppurative keratitis. In all cases the Gram stain showed the presence of grape-like clusters of Gram positive cocci. Follow up cultures performed about 12 hours after the last dose of medication showed eradication of the infecting organism in all 45 patients. According to our and other authors’ experience (Leventer DB, presented at the AAO Annual Meeting, San Francisco, 1997), thioglycolate broth is an adequate, cost effective, primary culture medium for the detection of aerobic and anaerobic bacteria in external ocular infections, especially when the patients show clear signs and symptoms of infection. Antibiotic susceptibility tests were determined by agar disc diffusion (Kirby-Bauer method), a technique which labels bacteria as “resistant”, “intermediate”, or “sensitive”. Although we focused on the antibiotic “intermediates” isolates (Table 1), our main concern was to draw attention exclusively to the large number of “resistant” strains. Indeed, in Table 2 of the published article we reported the ratio “resistant” isolates/total isolates. Dr Sharma’s criticism on this point is difficult to understand, since in a recent paper she and her co-workers included “resistant” and “intermediate” strains in a single group labelled as resistant, instead of maintaining the distinction between the two groups.

Susceptibility to penicillin was tested because our microbiologists are involved in a study on resistance to β-lactam in CoNS isolated from different sites (blood, eye, etc). As part of this survey, penicillin resistant isolates were also tested for resistance to methicillin (data not shown).

The Kirby-Bauer method is generally recommended for routine antibiotic susceptibility testing of bacteria. On the other hand, this method was also used extensively by Sharma and co-workers in their paper. Determining the minimal inhibitory concentration may provide even more useful information, especially when testing clinically relevant antibiotics such as vancomycin, teicoplanin, and methicillin.

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Laser pointers can cause permanent retinal injury if used inappropriately

Editors,—The authors previously published a brief report in a widely circulated ophthalmic review periodical (Eye News) on the potential risk of permanent injury from the inappropriate use of laser pens. The article had been prompted by two events—firstly, a flood of reported cases in the popular media of the “blinding” effects of laser pens on drivers, soccer goalkeepers, and members of the general public, and, secondly, the referral to our department for clinical assessment of police and fire service personnel who had been exposed to laser pen light. Examination of the clinical cases demonstrated no permanent injury. We were also asked to review data determined for a number of laser pens that had been subjected to analysis by Edinburgh Environmental and Consumer Services Department. Many of these laser pens were mislabelled, either by exhibiting American standard classification (different from European), or simply by being inaccurately classified. Subsequently, a number of laser pens have been sent to us for examination, pending police investigations. Many of these laser pens are class 3B devices according to the European laser classification, and are therefore considered potentially hazardous. None the less, we conclude that the normal blink and aersion response would prevent retinal damage from transient exposure. However, it had also been brought to our attention that the cost of these laser pens, and laser key rings, was such that they were being...
purchased by children. A new version of the traditional, and dangerous children's “game” of “chicken” had developed in relation to these new “toys”, the game of “chicken” being won by the child who could stare directly into the laser beam for the longest period. We conclude, “this makes lasers potentially very dangerous in the hands of children.” Fortunately, trading standards agencies throughout the UK have moved to ban sale of these laser pens and a number of legal cases are pending with regard to their sale. There have also been successful prosecutions brought against individuals who have deliberately used these laser pen devices to cause temporary dazzle and visual disturbance, without permanent retinal damage.

We therefore were particularly interested in the recent BJOP perspective by Professor John Marshall.1 In an otherwise erudite and comprehensive review we were very surprised to read his conclusions, “laser pointers, pens, or key rings if used appropriately are not an eye hazard, and even if used inappropriately will not cause permanent eye damage.” [Our italics] It has long been a physician’s maxim that always and never can rarely be applied to human biology, even if perceived risks are low. Indeed it is the majority of laser pens examined by us at the time had an output of less than 5 mW, it seemed reasonable to conclude in our article that there was the potential for laser damage if these items were used inappropriately.

A recent article by Latrull and Hallisey is therefore of significant importance to any ophthalmologist dealing with clinical cases relating to laser pen exposure. In this reported case a 34 year old Hispanic male of 8–10 inches from the eye, for 30–60 seconds. The laser device in question had a maximum power rating of 5 mW at a wavelength of 670 nm. Although the subject maintained position during the focal disturbance of his central scotoma. The right eye of this 34 year old was entirely healthy on intravenous fluorescein angiography, but the left eye demonstrated a window defect on angiography is also indicative of anxiety rather than being related to any retinal damage mechanism. The finding of a window defect on window defect is also inappropriate in that if a suprathreshold exposure had been sustained then a leak would have been apparent, not a window defect. Finally, the authors discuss the possibility that this individual may have been at high risk as a result of racial pigmentation. Again this is erroneous, because although a marginally higher risk would have been conferred by melanin for thermal insult, greater pigmentation would have lowered the risk in relation to a greater than 10 second photochemical mechanism. Given the inability of a 5 mW system to generate thermal transients of sufficient magnitude to induce retinal damage, and in the absence of an empirical biophysical study, their case does not support their conclusions.

In their final paragraph, McGhee et al argue that the risks of permanent retinal injury are remote, but they state that “there can never be zero risk”. In all safety criteria documents the aim is to reduce risk to an insignificant level, I reiterate that current US safety standards satisfy these criteria. I also reiterate that, notwithstanding the report of Latrull and Hallisey, to date there is no evidence of irreversible retinal damage sustained from viewing laser pointers.

JOHN MARSHALL
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NOTICES

External eye infections
The latest issue of Community Eye Health (no 30) discusses external infections of the eye. Included are papers on conjunctivitis, corneal ulcer, and transmission and control of infection. For further information please contact Community Eye Health, International Centre for Eye Health, Institute of Ophthalmology, 11–43 Bath Street, London EC1V 9EL. (Tel: (+44) 171 608 6909/6910/6923; fax: (+44) 171 250 3207; email: eyeresource@ucl.ac.uk) Annual subscription £25. Free to workers in developing countries.
Residents’ Foreign Exchange Programme
Any resident interested in spending a period of up to one month in departments of ophthalmology in the Netherlands, Finland, Ireland, Germany, Denmark, France, Austria, or Portugal should apply to: Mr Robert Acheson, Secretary of the Foreign Exchange Committee, European Board of Ophthalmology, Institute of Ophthalmology, University College Dublin, 60 Eccles Street, Dublin 7, Ireland.

16th Congress of the International Society for Geographical and Epidemiological Ophthalmology (ISGEO) 2000
The 16th Congress of the ISGEO will be held at the Instituto D’Ophthalmologie Tropicale De L’Afrique (IOTA) in Bamako, Mali on 21–22 February 2000. Further details: Dr Paul Courtright, ISGEO Secretary, BC Centre for Epidemiologic & International Ophthalmology, University of British Columbia, St Paul’s Hospital, 1081 Burrard Street, Vancouver, BC V6Z 1Y6, Canada (email: pcourtright@spaulshosp.bc.ca; website: www.interchange.ubc.ca/bccio/isgeo).

Office of Continuing Medical Education
The Baylor College of Medicine, Cullen Eye Institute, Department of Ophthalmology is presenting a course entitled “The Cullen course 2000—clinical advances in ophthalmology for the practising ophthalmologist” at the Houstonian Hotel and Conference Center, 111 North Post Oak Road, Houston, Texas from 3–5 March 2000. Further details: Carol J Soroka, Conference Coordinator, Office of Continuing Medical Education, Baylor College of Medicine, One Baylor Plaza S104, Houston, TX 77030, USA. (Tel: 713 798-5600.)

Leonhard Klein Foundation
The Leonhard Klein Foundation in the Donors’ Association for the Promotion of Sciences and Humanities in Germany is to bestow the Leonhard Klein Award 2000 of DM 30 000 for innovative work in the development and application of microsurgical instruments and microsurgical operating techniques. Deadline for applications is 31 March 2000. Further details: Stifterverband fur die Deutsche Wissenschaft e V, Herrn Peter Beck, Postfach 164460, D-45224 Essen, Germany.

American Institute of Ultrasound in Medicine
The American Institute of Ultrasound in Medicine will hold the 44th annual conven- tion in San Francisco, California on 2–5 April 2000. Further details: AIUM Professional Development Department, 14750 Sweitzer Lane, Suite 100, Laurel, MD 20707-5906 (tel: 800-638-5353; fax: 301-498-4100; email: com_eiuu.AIUM.org; website: www.aium.org).

XXII Tuebingen Detachment Course
The XXII Tuebingen Detachment Course, retinal and vitreous surgery, will be held in the congress centre Incheba, Bratislava, Slovak Republic 6–7 April 2000 preceding the congress on retinal detachment of the Slovak Ophthalmological Society 8–9 April 2000. Further details: Professor Peter Strmen 81369 Bratislava, Mikliciwayzicova 13 (tel/fax: 00421-7-52964641; email: strmen@faneba.sk).

VIIth Mediterranean Ophthalmological Society
The combined meeting of the VIIth Mediterranean Ophthalmological Society and the VIIth Michaelson Symposium on Ocular Circulatio- n and Neovascularisation will be held in Jerusalem on 21–26 May 2000. Further details: Secretariat, c/o Unitours Israel Ltd, PO Box 3190, 61031 Tel Aviv, Israel (tel: +972-3-5200460; fax: +972-3-5239099; email: meetings@unitours.co.il).

The VIIth Michaelson medal and award will be delivered on 24 May 2000 in Jerusalem. The medal and award ($15 000 monetary prize) are sponsored by the Israel Academy of Sciences and Humanities and by the Hadassah Hebrew University Hospital and Medical School of Jerusalem, Israel. Nominations are sought from the ophthalmic community at large. Suggestions and reasons for choice and CV highlights should be sent to Professor David BenEzra, Secretary for the International Nominating Committee, Pediatric Ophthalmology Unit, Hadassah Hebrew University Hospital, PO Box 12000, Jerusalem 91120, Israel.

5th International Vitreoretinal Meeting–IV 2000
The 5th International Vitreoretinal Meeting–IV 2000 will be held in Parma, Italy, on 26–27 May 2000. The main topics will include “Hypotony and glaucoma in vitre- oretinal surgery”, “Internal limiting membrane surgery”, “Macula oedema”, “Open globe injuries”, and “News in retinal pigment epithelium”. Further details: Dr C. Cantu, MA De Giovanni, or S Tedesco, Scientific Secre- tariat, Institute of Ophthalmology, University of Parma, Via Gramsci 14, 43100 Parma, Italy (tel: +39 0521 259106; fax: +39 0521 292358; email: nuzzc@iprimiv.unicc.unipr.it).

International Strabismological Association
The International Strabismological Associ- ation (ISA) has established fellowships for training in strabismus and paediatric ophthal- mology, supported by S3 10 000 each. Further details: Secretary/Treasurer ISA, Derek T Sprunger, MD, Indiana University School of Medicine, 702 Rotary Circle, Indianapolis, Indiana 46202-5175, USA. The last day of application is 15 June 2000 (tel: 317 274-1214; fax: 317 274-1111).

XXIV Nordic Congress of Ophthalmology
The XXXIV Nordic Congress of Ophthalmology will be held in Reykjavik, Iceland, 18–21 June 2000. This meeting celebrates the 100 year anniversary of the Nordic Ophthal- mology Conference. Further details: Iceland Incentives Inc, Hamarborg 1–3, Is- Kopavogur, Iceland (tel: +354 554 1400; fax: +354 554 1472; email: incentive@lm.is).

13th Annual Meeting of German Ophthalmic Surgeons
The 13th annual meeting of German Ophthal- mic Surgeons will be held on 13–18 June 2000 at the Meistersingerhalle, Nuremberg, Germany. Further details: MCN Medizinische Congress-organisation Nuremberg AG, Zerrazehhofstrasse 29, D-90478 Nuremberg, Germany (tel: +49-911-3931621; fax: +49-911-3931620; email: doeflinger@mcn-nuremberg.de).

Joachim Kuhlmann Fellowship for Ophthalmologists 2000
The Joachim Kuhlmann AIDS Foundation, Essen, Germany, is sponsoring two fellow- ships per year for ophthalmologists at a well known institute, who want to train in GMV retinitis and other HIV related ophthalmologi- cal diseases. The fellowships are valued at $US5000 each. Deadline for application is 31 July. Detailed applications, including CV and publication list, should be sent to the Joachim Kuhlmann AIDS Foundation, Bismarck- strasse 55, 45128 Essen, Germany (tel: 0201 87910-87; fax: 0201 87910-99; email: jkstiftung@t-online.de).

DR-2000, International Forum on Diabetic Retinopathy
The International Forum on Diabetic Retin- opathy will take place on 7–9 September 2000 at the Palazzo Reale, Naples, Italy. Further details: Francesco Bandello, Congress Secre- tariat, MGR Congressi, Via Servito Tullio, 4, 20123 Milano, Italy (tel: 39 02 430071; fax: 39 02 48008471; email: dr2000@mgr.it).

12th Afro-Asian Congress of Ophthalmology
The 12th Afro-Asian Congress of Ophthal- mology (Official Congress for the Afro-Asian Council of Ophthalmology) will be held on 11–15 November 2000 in Guangzhou (Cant- on), China. The theme is “Advances of oph- thalmology and the 21st century”. Further details: Professor Lezheng Wu, Zhongshan Eye Center, SUMS, New Building, Room 919, 54 Xianlie Nan Road, Guangzhou 510060, PR China (tel: +86-20-8760 2402; fax: +86-20-8777 3570; email: lwuicv@gzsums.edu.cn).

Singapore National Eye Centre 10th Anniversary International Congress
The Singapore National Eye Centre 10th Anniversary International Congress will be held in conjunction with 3rd World Eye Surgeons Society International Meeting on 2–4 December 2000 at the Shangri-La Hotel, Singapore. Further details: The Organising Secretariat, 11Th Hospital Avenue, Singa- pore 168751 (tel: (65) 2277255; fax: (65) 2277290; internet: www.snec.com.sg).

The Hong Kong Ophthalmological Symposium 00
The Hong Kong Ophthalmological Symposi- um 00 will be held 4–5 December 2000, in Hong Kong, China. Further information: Miss Vicki Wong, Room 802, 8/F Hong Kong Academy of Medicine, 99 Wong Chuk Hang Road, Aberdeen, Hong Kong (tel: (852) 2761 9128; fax: (852) 2715 0089; email: ccohk@netvigator.com).