

Table 1 Demographics and initial and final CNV characteristics

	Mean (SD)	Range
Age (years)	56.41 (12.33)	38–73
Initial VA (letters)	58.56 (10.79)	37–76
Final VA (letters)	49.19 (19.90)	12–78
Initial GLD (microns)	1210.78 (396.88)	650–2425
Final GLD (microns)	1706.15 (847.90)	310–3800
Initial distance to fovea (microns)	387.05 (225.40)	102–975
Final distance to fovea (microns)	194.93 (284.26)	0–1080
No. of treatments	2.11 (0.75)	1–3

VA, visual acuity; GLD, greatest linear dimension

PDT has stabilised the BCVA in 13 patients (48.1%). In 14 patients (51.9%), a visual loss of more than 8 letters was found.

A highly significant correlation exists between the change in visual acuity and the patients' age ($p < 0.001$, < 0.05), the diminution of visual acuity being more probable in older patients.

An increase in the average size of the lesion was observed and the distance of the lesion from the fovea was reduced. Involvement of the fovea was observed in 15 patients (55%) after a 1-year follow-up. A total of 93% of these patients showed a visual loss of more than 8 letters.

No statistically significant relationship was found between the change in visual acuity and the initial size ($p = 0.212$) or the initial distance to fovea ($p = 0.626$).

Patients with poorer visual acuity were treated more times (2.43 vs 1.77).

Comment

A strong statistical relationship was found between the patients' age and the visual

prognosis. Patients who did not experience a moderate or severe visual loss (fig 1A and 1B) were younger (average age: 47.5 years), did not have extension of the lesion towards the fovea and needed less treatment sessions.

On the contrary, patients with moderate or severe visual loss (fig 1C and 1D) were older (average age: 64.6 years), had extension of the lesion towards the fovea and required more treatment sessions.

These findings are similar to those found in the series evaluating PDT in subfoveal CNV secondary to myopia, in which an elderly age is associated with a worse visual prognosis.³ In comparison with the study carried out by Lam *et al.*,⁴ the higher average age in our study can explain why these authors have better results.

In conclusion, PDT may stabilise the visual acuity in non-subfoveal CNV secondary to myopia. However, in a high percentage of elderly patients, this does not prevent the progression of the lesion towards the centre of the fovea, with a significant visual loss. Our study has several limitations; future studies are required.

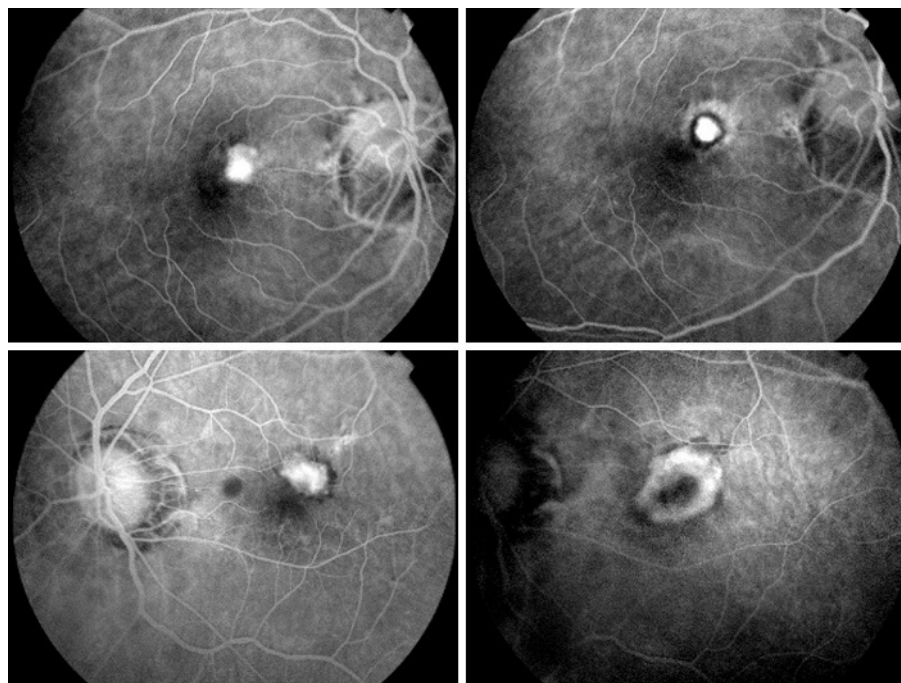


Figure 1 (top left) Case 1, a 37-year-old female before treatment; BCVA, 62 letters. (top right) Case 1, after 1 year and one PDT treatment; closure of CNV; BCVA, 74 letters. (bottom left) Case 2, a 73-year-old female before treatment; BCVA, 60 letters. (bottom right) Case 2, after 1 year and three PDT treatments; enlargement of CNV; BCVA, 42 letters.

Juan Reche-Frutos, Cristina Calvo-González,
Juan Donate-López, Julián García-Feijó,
M Wasfy, F Saenz-Frances, C Fernandez-Perez,
J Garcia-Sanchez
Hospital Universitario Clínico San Carlos, Madrid,
Spain

Correspondence to: Juan Reche-Frutos, Calle profesor martin lagos s/n 28040 Madrid, Spain; rechejuan@yahoo.es

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Preseptal cellulitis caused by community acquired methicillin resistant *Staphylococcus aureus* (CAMRSA)

Infections with methicillin resistant *Staphylococcus aureus* (MRSA) usually occur in individuals with well established risk factors such as a recent hospital admission, multiple antibiotic treatment, or chronic illness. We report on repeated ocular presentations of preseptal community acquired MRSA cellulitis in a previously healthy 20 year old male student.

Case report

A 20 year old student presented to the eye department with a five day history of left periorbital swelling associated with a crusted lesion on the temporal border of his left eyebrow and preseptal cellulitis. Past medical history was remarkable for the appearance of similar skin lesions six weeks previously on the right calf, and mild eczema. Similar lesions were found on the patient's neck, back, and right calf. The latter lesion was discharging and swabbed for culture and sensitivities (fig 1). Initial treatment with oral flucloxacillin failed to resolve the cellulitis and he was admitted 36 hours later. Examination revealed a tense swelling of his left upper lid, with periorbital erythema and oedema (fig 2). Formal Snellen visual acuity was 6/5. There were no post-septal signs. The patient was apyrexial and had a moderate neutrophil leucocytosis. He was started on intravenous benzyl penicillin and flucloxacillin with little clinical improvement. Two days after admission, conjunctival and calf swabs cultured MRSA, resistant only to fucidic acid and flucloxacillin, suggestive of a community acquired (CAMRSA) strain. He volunteered that a member of his football team had



Figure 1 Calf lesion swabbed on day 1 of presentation (white arrow).



Figure 2 Left preseptal cellulitis with associated crusting lesion.

similar skin lesions six weeks earlier, which settled spontaneously. Treatment was changed to oral linezolid and vancomycin eye drops. The periorbital erythema, oedema, and conjunctival injection improved gradually over the next three days. After two weeks of inpatient antibiotic treatment the patient was discharged on a further one week course of oral linezolid.

The patient re-presented with identical symptoms on two separate occasions one week after conclusion of the initial course, and again six weeks later. Nasal, groin, and conjunctival swabs from the left eye grew the same strain of community acquired MRSA. He was put on a 14 day course of vancomycin eye drops, oral linezolid, and oral rifampicin, again with a rapid clinical response. He also underwent an MRSA decolonisation regimen and dermatological evaluation of his eczema, with subsequent emollient treatment. His family members had no history of skin infections and were swabbed to investigate the recurrent nature of this infection but none was found to carry MRSA. Subsequent screening swabs from the patient have been negative to date.

Comment

Infections with MRSA tend to affect individuals with established risk factors and the involved strains have typical sensitivities. The MRSA isolate from this patient was resistant to flucloxacillin and fucidic acid but sensitive to ciprofloxacin and erythromycin. This unusual sensitivity pattern is similar to those of previously published Irish non-ophthalmic CAMRSA.¹ The atypical sensitivities and the history suggested a CAMRSA infection, so specimens were sent to the National MRSA Reference Laboratory for further testing. Polymerase chain reaction for the Panton-Valentine leukocidin cytotoxin gene commonly found in CAMRSA was positive. The antibiogram-resistogram type (AR) was unfamiliar, but similar to multilocus sequence (MLST) 80, which is the most commonly found genotype of CAMRSA in Europe.

CAMRSA with ophthalmic manifestations is rare. Rutar reported ophthalmic sequelae consisting of orbital cellulitis, endogenous endophthalmitis, panophthalmitis, lid abscesses, and septic venous thrombosis in a North American population with no evidence of recurrent disease.² Known risk factors for transmission of CAMRSA include end stage renal disease, recent hospital admission, an outpatient visit, nursing home admission, antibiotic exposure, chronic illness, and close contact with a person with risk factors including health care contacts.³ Our patient did not

have any of these, but did have contact with a fellow football player with similar pustular skin lesions.

Kazakova *et al* reported an outbreak of CAMRSA among professional football players.⁴ Infection was associated with turf abrasion sites and a high body mass index. Huijsdens reported an outbreak of ST80 CAMRSA infection in members of a Dutch soccer team.⁵ The recurrent nature of sport associated CAMRSA has also been documented previously.^{4,5} Management of this patient's eczema may have been an important factor in the prevention of subsequent infections. Physical contact with infectious lesions, skin damage that facilitates bacterial entry, and sharing of infected equipment, clothing, or personal items may all result in the transmission of MRSA infection in athletes. Our patient fits into this group.

Our knowledge this is the first report of a European patient with an ocular manifestation of CAMRSA from a population of young healthy athletes with no established risk factors. Physicians must be aware of the increasing incidence of CAMRSA infections and the new clinical challenges these cases will present.

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Sofia Charalampidou, Paul Connell

Ophthalmology Department, Mater Misericordiae University Hospital, Dublin, Ireland

Jerome Fennell, Maureen Lynch

Microbiology Department, Mater Misericordiae University Hospital, Dublin, Ireland

Robert Acheson

Ophthalmology Department, Mater Misericordiae University Hospital, Dublin, Ireland

Correspondence to: Dr Sofia Charalampidou, Ophthalmology Department, Mater Misericordiae University Hospital, Eccles Street, Dublin 7, Ireland; sonia_charalampidou@yahoo.co.uk

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HIV and hepatitis B/C infections in patients donating blood for use as autologous serum eye drops

During recent years eye drops from autologous serum have become increasingly popular for treating ocular surface disorders such as persistent corneal epithelial defects and severe forms of dry eye.^{1–4} Although very successful, one potential disadvantage of this approach—especially because the drops are used in a domestic setting—is the possibility of transmission of viral infections by the erroneous application of the eye drops to the wrong recipient. In a diagnostic laboratory, one single droplet of serum has been reported to have transmitted HIV to a laboratory technician.⁵ However, serological testing of patients who donate autologous serum is not generally established and there has been no report published so far analysing the rate of unknown viral infections in potential donors of autologous serum eye drops.^{1–4}

Case report

We report the results of HIV and hepatitis-B/C serology testing in patients donating blood for the production of autologous serum eye drops at our centre. During the period August 2005 to November 2006, 88 patients with persistent corneal epithelial defects or severe forms of dry eye were referred to the department of transfusion medicine to donate autologous serum (156 visits, between one and 12 visits per individual patient). Table 1 shows the result of 88 patients tested for HIV, HBV, and HCV infection by serology in comparison with new blood donors in Germany in 2004.⁶ In our patients, positive results in screening tests were confirmed according to the procedures which are established for blood donors—that is, HIV immunoblot and HIV RNA NAT, HBsAg neutralisation assay and HBV DNA NAT, HCV immunoblot, and HCV RNA NAT.⁶ In summary, 2.3% of all patients showed previously unknown viral infections with hepatitis B or C virus. The finding of a comparably high rate of infections in our small number of autologous donors of serum eye drops is surprising, but in line with our previous report on patients undergoing preoperative autologous blood donation (PABD), where we found a rate of about 20% of patients with positive markers for HIV, HCV, HBV (including anti-HBc) or syphilis infection.⁷ In addition to the confirmed infections shown in table 1, we found that one of our patients was positive for anti-HIV (HIV RNA NAT negative, HIV immunoblot inconclusive), one patient had antibodies against *Treponema pallidum*, and three patients were positive for anti-HBc, resulting in an overall rate of 8% of