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Sir,
Fingerprick autologous blood for dry eyes and persistent epithelial defects

Autologous serum has been used effectively to treat severe dry eye syndrome[1] (DES) and persistent epithelial defects[2] (PED). However, difficulty obtaining funding and delays in production often make it unfeasible for acute cases. The authors report on finger prick autologous blood (FAB)[3] as an alternative treatment option.

Patients cleaned a finger with an alcohol steret. Next, they produced a drop of blood using a diabetic lancet and applied it to their lower fornix. They repeated this technique to apply FAB four times per day to each eye. A different finger was used for each eye to reduce any risk of cross-infection.

Case report

Patient 1: A 64-year-old diabetic man presented with a 1-mm^2 neuropathic PED affecting the right eye (OD) and extensive punctate erosions affecting the left eye (OS). He had experienced DES symptoms for 1 year. He was commenced on intensive lubrication to both eyes for 12 days without improvement (Celluvisc and Hyloforte hourly by day and lacrilube by night). FAB was then commenced and by day 4 there was complete resolution of the PED (OD) and punctate erosions (OS) (Figure 1).

Patient 2: A 51-year-old woman with Sjögrens presented with longstanding bilateral DES. She was on maximal medical therapy and had had bilateral punctal cautery. After 2 months on FAB her ocular comfort index (OCI)[4] improved from 55/72 to 4/72 and her fluorescein staining improved bilaterally (Figure 2).

Patient 3: A 45-year-old man with Sjögrens presented with persistent DES (OS) and reduced visual acuity. He was on hourly lubricants and had punctal plugs. Three days after commencing FAB his OCI remained unchanged but acuity improved from 6/9 to 6/5 OS and punctate staining improved from Oxford grade 4 to 3.

Comment

We conclude that FAB can effectively treat neuropathic PED and DES in primary Sjögrens. Patients tolerated the treatment well without any complications. The effectiveness of FAB is probably by the action of the fresh growth factors[5] found in plasma. Occasional FAB clot formation, reported in the lower fornix by one patient, would probably result in the sustained release of further growth factors.

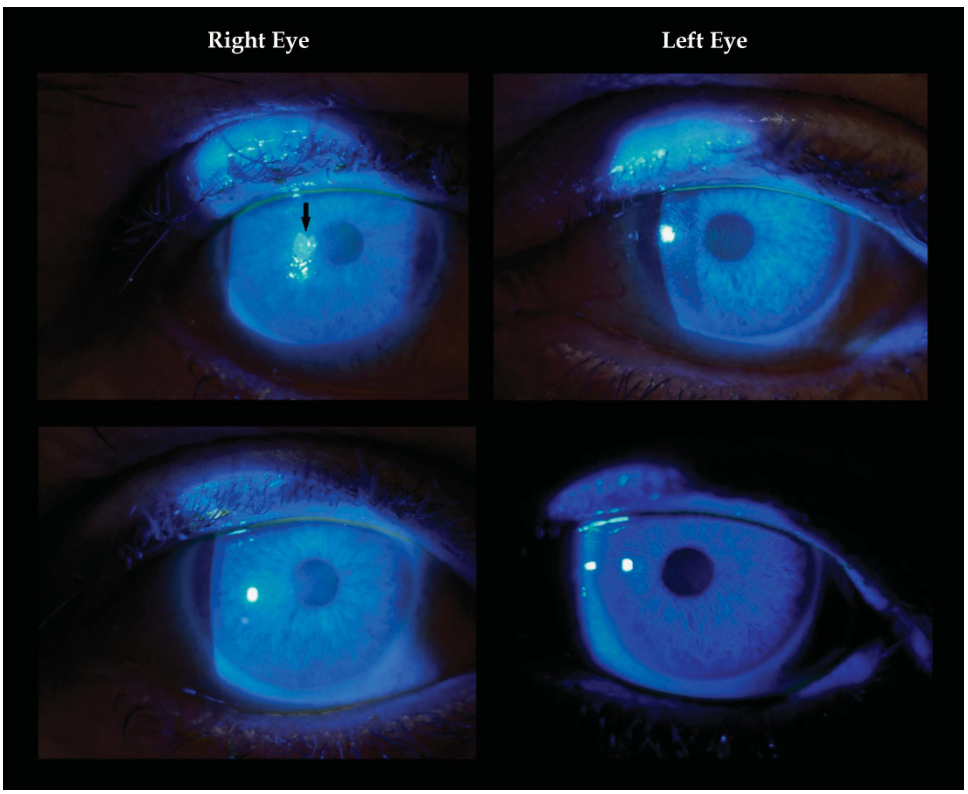

Figure 1 Top: fluorescein-stained PED (arrow) of the right cornea and punctate staining of the left cornea at presentation. Bottom: healed PED of the right cornea and resolution of punctate staining on the left on day 4 of FAB treatment.

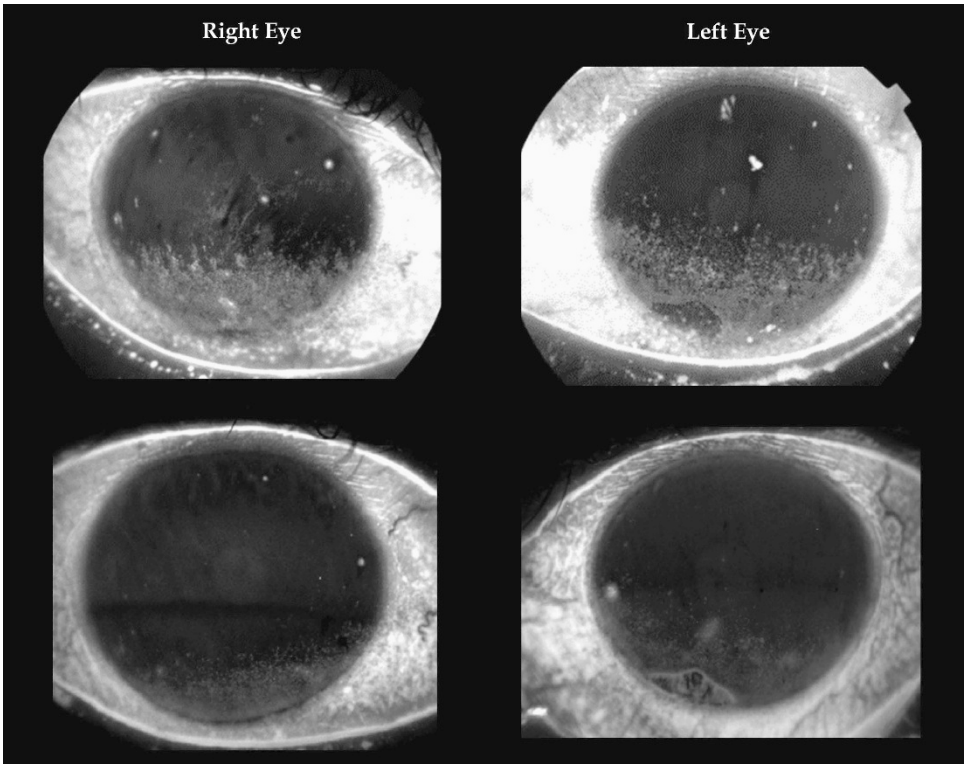

Figure 2 Corneal fluorescein staining (white) using fluorescein filters at presentation (above) and after 2 months of QDS FAB therapy (below).

Conflict of interest

The authors declare no conflict of interest.

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J Wawrzynski[1], H Mukherjee[2], J Moore[3], J Smith[1], I Reekie[4], A Patel[5], B Kumar[6], C Illingworth[7], S Shah[8], D Tole[9] and A Sharma[1]

[1]Eye Clinic, Moorfields at Bedford Hospital, Bedford, UK
[2]Eye Clinic, King's College Hospital NHS Foundation Trust, London, UK
[3]Royal Victoria Hospital, Belfast, UK
[4]Eye Clinic, North Middlesex Hospital, London, UK
[5]Eye Clinic, Heart of England NHS Foundation Trust, Birmingham, UK
[6]Eye Clinic, Milton Keynes Hospital, Milton Keynes, UK
[7]Eye Clinic, Norfolk and Norwich University Hospital, Norwich, UK
[8]Sandwell and West Birmingham Hospitals NHS Trust, Birmingham, UK
[9]University Hospitals Bristol NHS Foundation Trust, Bristol, UK
E-mail: James.Wawrzynski@cantab.net

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Sir,
Do we screen very premature babies too early for retinopathy of prematurity?

Retinopathy of prematurity (ROP) is a disorder of retinal vascular development in preterm infants. ROP accounts for approximately 3% of all cases of severe visual impairment and blindness in childhood in the UK.[1] Early diagnosis and treatment can largely prevent visual loss caused by ROP. Screening examinations are known to cause significant discomfort and distress.[2,3]