Case studies in contact lenses

Part 2 - Ingrowing lash

In the second of our sample contact lens case studies, **Ngaire Franklin** describes how contact lenses helped overcome the symptoms of an ingrowing eyelash that presented in community practice

A male patient was booked in for a contact lens trial (date of birth 13/06/1939). The last eye exam had been in July 2006. He arrived having had major problems with ingrowing eyelashes in the left eye. He had previously undergone two operations to correct entropion with associated trichiasis from the left upper lid.

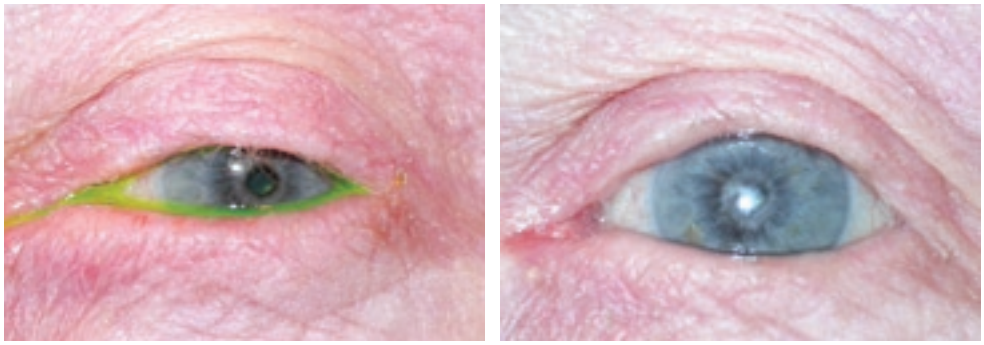
Surgery had initially given relief but unfortunately trichiasis had eventually recurred after each operation. Electrolysis had then been attempted but some lashes were proving resistant to treatment. In response to his very frequent visits to a local eye casualty to have his lashes removed, the hospital had prescribed a bandage lens which he had worn without problems for three months, using ocular lubricants as necessary, and which had given him complete relief. As this bandage lens had proved such a successful way to manage his problem, the suggestion was that this was the way forward.

The patient had made many visits to eye casualty over a period of months. While he was instantly recognised by the clerks who booked all A&E patients in, and was always sent straight through to eye casualty, he had discussed with the hospital the option of being fitted by his community optometrist and it was agreed this was a reasonable option.

His reason for this was not only to reduce the amount of time spent at the local hospital, but also to reduce the cost in terms of fuel and parking.

Medical history

The patient had been diagnosed with Type 2 diabetes in 1996 and had been using insulin for just over 12 months. He considered himself to be in good health with good control of his blood sugar level. Other medication to control cholesterol, blood pressure and pain was also being taken. Retinal photography was performed in September 2007 and no diabetic associated changes had been found.



Involutional entropion caused persistent corneal abrasion

Clinical examination

Refraction
RE +1.75 DS (6/6-)
LE +2.00/-1.00X 90 (6/7.5+) BN (6/6)
Add +2.50 (N5 R&L)
The left eye was not very easy to refract due to epiphora
Keratometry
R 7.95mm al 180, 8.05mm al 90
L approx 8.10 mm very difficult to assess as eye was watering so badly
Horizontal visible iris diameter (HVID) 11mm
Vertical palpebral aperture (VPA) 8mm
Pupils normal illumination 3+mm, low illumination 5mm
Colouring very fair skinned with blue eyes and originally blonde hair with pale lashes
Slit-lamp examination
R cornea clear, meibomian glands slightly blocked CCLRU grade 1, odd flake on lashes
L extensive corneal staining with three short lashes growing inwards from centre of upper lid

A CIBA Vision Night and Day lens (8.60:13.80, +0.25DS) was inserted. This lens gave very obvious and, I must say, quite impressive immediate relief.

Options for correction were discussed and in this practitioner's view, a silicone hydrogel lens licensed for 30 days' continuous wear would be preferred. Such lenses would also correct the refractive error for both eyes and, as the patient was a keen golfer, he felt this was worth trying.

The importance of hygiene and compliance was discussed. The patient was also instructed that in the unlikely event of a painful red eye condition this would need to be checked immediately. Given he was diabetic, there might be a slightly increased chance of infection. He felt that – given his particular problems and that he was being fitted with local HES approval – he should proceed. In this practitioner's view, the risk of infection in the left eye without a lens – given the degree of staining due to abrasion – was probably much greater than wearing a lens continuously.

Instruction

The patient was not particularly keen to learn how to put lenses in and take them out himself, insisting that his wife would be happy to do this instead. She had already removed and replaced the bandage lens at one point, successfully although entirely untutored.

Diagnostic lenses were ordered in and the patient agreed to return with his wife so she could learn how to insert and remove lenses, and so the diagnostic lenses could be assessed. This would also make an aftercare check on the left eye possible, which would have a silicone hydrogel lens worn on a continuous wear basis. Bausch & Lomb PureVision lenses were ordered, as it is the only manufacturer which currently supplies a toric silicone hydrogel option approved for 30 days' continuous wear.
Lenses ordered:
R 8.60:14.00 +1.75
L 8.70:14.00 +2.00/-0.75X90.

The patient returned three weeks later with his wife. The collection check showed a quiet, white eye and the lens surface was clean. The ingrowing

lashes were a little longer but the hospital thought that this was a good thing as they felt it might be easier to attempt electrolysis on longer lashes that were more visible. Slit-lamp examination showed the lens to move freely (0.4mm horizontally 0.5mm vertically) on blinking. The push-up test showed the lens to release easily and move back smoothly at medium speed. The lens was clean with no deposits noted. Checking the cornea after lens removal required the patient to hold the lid up to try to prevent staining caused by lashes. No other stain was noted, no microcysts or vacuoles, and the limbal arcades showed no signs of engorgement or encroachment onto the cornea.

The patient's wife was instructed how to insert and remove lenses. We used some low-powered silicone hydrogel lenses from the practice diagnostic bank initially and started with the right eye (having already put a lens in the left eye to prevent blepharospasm exacerbated by trichiasis). The patient's wife achieved this, despite her husband not being the easiest patient, given quite a narrow VPA and the distorted left lid. Optifree Express was supplied along with a case to use should the lenses need to be removed and cleaned. She was instructed in these procedures.

The diagnostic lenses were inserted. The lenses centred on the corneas and moved easily (0.5mm X H 0.5mm X V). The left lens tended to swing 10 degrees anti-clockwise.

VA RE 6/6, LE 6/9 managed 6/6- when lens rotated clockwise 10 degrees. With his own varifocals pushed down the nose, N5 was achieved comfortably (R, L and binocularly). The patient left in comfort wearing both lenses with an aftercare appointment booked for two weeks.

Two-week aftercare

At the aftercare check two weeks later, the patient reported that the left eye had become slightly red and uncomfortable a few days previously. He had removed the lens to clean and soak it for a few hours. As a consequence the eye had felt much better.

Acuity was R 6/6 over Rx plano; L 6/7.5 over Rx plano lens not rotating. Lenses moving 0.4 X H and X V. Push-up test released easily with medium fast recovery. A few 'greasy' blobs were visible on each lens.

Slit lamp showed a few dots of superficial stain on the right, the limbal arcades quiet, no microcysts or vacuoles noted. L inferior corneal stain, slight inferior limbal swelling. Limbal arcades slightly dilated. No infiltrates were noted.

The patient was advised to remove the left lens and clean daily and to return immediately if no improvement or symptoms became worse. He was also aware that he should attend eye casualty if the eye becomes painful, sticky and photophobic. The aim was to review in one week. He was very keen to continue with the lenses and joined the planned replacement scheme.

The patient had to cancel his appointment but a discussion on the phone revealed his left eye had settled down with the cleaning regime and was now white and comfortable. An appointment was booked for four weeks.

Four-week appointment

At this appointment the patient reported no problems, and the lenses were due for replacement as it was the beginning of the month. Ocular lubricants were used as necessary. He found he often needed them when waking, but has worn the lenses continuously apart from the change at the start of month.

Acuities were R 6/6, L 6/7.5. No rotation of L lens. Over refraction showed plano for both eyes. The fit was as recorded previously. The lenses had a few slight greasy patches on surface.

Slit-lamp examination without lenses; R no stain, arcades quiet, no microcysts or vacuoles noted. The practitioner noted some lashes at the outer edge of the upper right lid were tending to grow inwards. The patient felt they had not caused any problems so far. Hopefully, the right lid will not follow the left.

Unfortunately this practitioner forgot to check the left eye first or ask the patient to hold the lid up slightly. Consequently, the cornea looked as if a small child had scribbled on it, with extensive foreign body tracking caused by somewhat longer lashes abrading the cornea. Limbal arcades were quiet. After irrigating both eyes thoroughly with saline, a new pair of lenses was inserted, restoring comfort. The patient said he was pleased with this outcome and that he was no longer suffering discomfort. Not having to visit the local hospital regularly was also a good outcome. A six-month review – or sooner if problems arose – was recommended.

Comment

Fitting a diabetic patient who is unable to handle the lenses himself with continuous wear lenses might be considered a task that should not be undertaken, particularly in a high street practice. However, the outcome was a satisfied patient who is really benefiting from this mode of contact lens wear.

● **Ngaire Franklin** practises in Gloucester

Competition

Have you managed any contact lens problems in an unusual or original way? Have you a contact lens success of which you are particularly proud? The problem might range from dry eye, or presbyopia to a complex refractive error or medical management – anything where you have used your skills to effect a successful outcome, we want to hear from you.

Over the coming months *Optician* will be publishing more case studies showing how a problem has been solved. Next month we look at a case of dry-eye management and the following month the correction of a very high ametropia. It is envisaged that each of the winning entries be submitted as part submission towards the BCLA Fellowship and merit 10 points towards the 50-point target. Sample case studies may be viewed under the 'Fellowship' section of bcla.org.uk and these may be useful as a guide to what is required for our competition.

If you have such a case study we invite you to submit it to us. The five best will be short-listed and published while the overall winner will be presented with an all-expenses paid trip to the BCLA Clinical Conference courtesy of CIBA Vision.

Competition rules

- A case study will be defined as a description of a contact lens presentation where successful wear required some innovative or original clinical intervention
- Each case should be submitted by email to william.harvey@rbi.co.uk
- Images are preferred but not essential and should be attached in as high a resolution as possible
- Every entry will be forwarded to our judging panel of leading contact lens practitioners and more than one entry may be sent by any participant
- The closing date for submissions is September 30 2008
- Patient confidentiality should be maintained throughout
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