

The comfort zone

Optician takes note of a new contact lens care range appearing on the UK market

From November last year, a new range of contact lens care products appeared on the market in the UK. Manufactured by Avizor, the range of cleaning, disinfectant and comfort products are being distributed by Sigma Eyewear, a company perhaps better known for frames and practice fittings.

Avizor started in Spain in the 1970s as a pharmaceutical company, but the current company broke away as a separate entity in 1981 to concentrate on contact lenses and care products. Nowadays, Avizor products are sold in over 40 countries and are likely to become more prominent in the UK in the coming years.

The low profile of the product range over here is somewhat surprising as it was the first company to produce an all-in-one soft lens solution in 1985. It also pioneered the use of a microbiologically produced enzyme in its cleaning products to replace the animal-originated enzymes.

In situ cleaning drops

It is now accepted knowledge that the high rate of drop-outs from contact lens wear is down to comfort issues.

It is also accepted that current trends are towards extended wearing times (with new-generation materials allowing perfectly safe oxygen levels to reach the cornea throughout) and therefore increase in-eye lens spoilation. This is also at a time where modern lifestyles tend towards poorer tear protection of the lens and eye, with prolonged detailed visual tasks such as computer use, air conditioning and controlled space environments.

There is also some concern about the intercompatibility of some solutions with some contact lens materials and this is something that will be referred to many times in the coming months – not least in this journal.

One trend likely to appear is the increasing availability of 'in eye' cleaning products. These solutions are aimed primarily at the patient with a longer wearing time and are designed to allow the wearer to instill a drop into the eye during lens wear to allow the normal blink to clean the lens



Figure 1 Avizor on show at a previous year's Mido and (right) Avizor Cleaning Drops

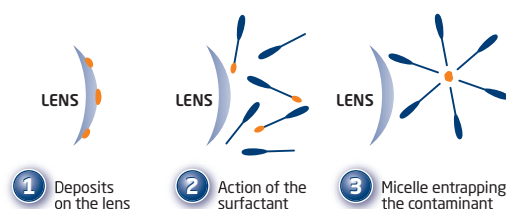


Figure 2

of any deposition thus far built up. Already established in the US, such products are likely to become more commonplace in the UK.

One of the first to appear in the UK is the new Avizor Cleaning Drops (Figure 1). The product is marketed as suitable for silicone hydrogel lens wearers (presumably those with longer wearing times particularly), patients with excessive deposition problems and those with excess lipid in the tears (so likely to deposit more).

The active ingredients are the lubricant PVP 90 (polyvinylpyrrolidone) and poloxamer. Poloxamer is an interesting ingredient. Most of the common uses of poloxamer 407 are related to its surfactant properties. It is widely used in cosmetics for dissolving oily ingredients in water. It can also be found in multi-purpose contact lens cleaning solutions, where it helps remove lipid films from the lens. It can also be found in some mouthwashes.

Its surfactant properties relate to its ability to bind to lipid deposit, remove it and then form a micelle with other poloxamer molecules to allow safe excretion with the tears (Figure 2).

Clinical studies

Clinical studies on the performance of the solutions are as yet sparse, though the company itself has run trials based at the International Center for Optometry in Madrid.

One study looked at the use of the solution among silicone hydrogel (Acuvue Advance) wearers. The study compared two groups of wearers, one with 15 days of wear and use of a multipurpose solution, the other the same but with the additional use of Avizor Cleaning Drops up to four times each day.

Using a prospective, crossover and observer-masked protocol, the study looked at a number of ocular surface parameters (acuity, tear break-up time, bulbar hyperaemia, limbal and tarsal conjunctival congestion, and corneal and conjunctival staining).

The surface condition of the lenses was also analysed following the criteria set in ISO11980. Subjective assessment was gauged by use of a symptom questionnaire.

Results suggested that the Avizor Cleaning Drops in no way affected deleteriously the ocular surface of the lens, and after use, the lenses showed significantly less deposition. Patients noted an improvement in comfort and reported fewer dryness symptoms.

Reductions in blurred vision were also noted subjectively. As a result of the improvements, 68 per cent of users increased their wearing times. ●

● For further information on Avizor Cleaning Drops, contact Sigma Eyewear on 0845 6050 393