

# **Keeping up with the Joneses**

As well known in the contact lens world for fronting the rock band The Lost Faculties as for the number of references in his many 200 publications, Professor Lyndon Jones recently added 'BCLA Pioneers Lecturer' to his CV. Optician reports

hen Lyndon Jones and his wife Debbie left their south London practice for the University of Waterloo,

Canada in 1998, the first silicone hydrogel contact lenses were yet to be launched. After more than a decade in development, these new materials were expected to solve many of the problems of hydrogel lens wear.

Twelve years on, Professor Jones is the newly appointed director of the Centre for Contact Lens Research at Waterloo, where Debbie has just stepped down from a six-year stint as clinic director and is currently head of paediatrics and special needs.

CCLR researchers have conducted many of the major studies into the clinical performance of silicone hydrogel lenses, the properties of lens materials and their interactions with lens care products, and the name 'Jones' features on many of them. In fact Jones L has published more than 200 papers and given over 550 invited lectures at conferences worldwide.

Late last year, Professor Jones returned to the UK to deliver the 7th BCLA Pioneers Lecture at the Royal



answered auestions from the audience on a variety of CL topics

> Society of Medicine in London. More than 250 BCLA members attended a half day of lectures, followed by the evening lecture, all provided free of charge courtesy of seven industry sponsors.

The programme was compiled by Pioneers organiser Nigel Burnett Hodd, who co-hosted the event with Professor Jones.

## Asking the right questions

'The best definition of an expert is someone who knows more and more about less and less,' said Jones, opening

a session called 'Ask Lyndon' in which the audience could pose questions on any contact lens topic. He went on to disprove that theory by tackling all the topics put to him.

The first question was: 'Should clinicians refuse to fit extended wear lenses if the risks are too great?' It was more than 20 years since a study showed that 60 per cent of patients wanted to wear their contact lenses continuously without removal. A straw poll of the audience suggested similar support for the concept, with the important proviso '...if lenses were safe'.

CCLR data showed that 40-60 per cent of patients at some time slept with their lenses on, and as many as 75 per cent napped in them during the day. 'Whether we're prescribing or condoning it or not, most patients sleep in their lenses,' said Jones.

But patients rarely volunteered this information when asked 'Do you sleep in your lenses?', which had led him to change his question to: 'How often do you sleep in your lenses?, eliciting a much higher and more accurate response. In fact asking the right questions turned out to be a strong theme, returned to throughout the day.

There were good arguments for fitting extended wear lenses to some patients in some circumstances, provided they were informed of the risks. We should be comfortable fitting these lenses, he said, as long as it was understood that the risk had not changed with SiHs, although



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infections were less severe and cleared up more quickly.

The next question was: 'Should we be referring red eye to the GP or should these patients go to the pharmacy for chloramphenicol?' Jones used two cases from CCLR studies to illustrate his answer and asked the audience to make a differential diagnosis between microbial keratitis (MK), a true corneal infection, and contact lens-induced peripheral ulcer which was a sterile infiltrative event.

With MK, signs to look for were lid oedema and anterior chamber activity. The degree of pain, regularity of the lesion and any reduction in acuity were among other important features. 'Beware the unilateral red eye,' he warned, since most of the serious cases were unilateral conditions.

For Professor Jones, optometrists were more than capable of diagnosing and managing these patients. GPs did not want to manage them. 'But if in doubt, treat as if it were MK, since it's far better to get it wrong that way than the other way,' he said.

Attention then turned to solutioninduced corneal staining (SICS), with a question from the audience: 'Does the solution in blister packs induce SICS?' There was increasing interest in 'playing around' with packaging solutions, what leaked out from the lenses or the blister pack itself, in order to enhance comfort and especially comfort on insertion, he said.

One delegate had a patient who experienced three days of staining and discomfort each time they inserted a new SiH lens. Jones's advice was to try changing to a different manufacturer's lens or get the patient to soak new lenses overnight rather than inserting directly from the blister.

Next came the question: 'Can we believe claims made by manufacturers especially when they are marketing a new product?' 'No rub' indications, and claims for providing 'all-day comfort' and 'super vision' were just some of the examples discussed.

Professor Jones pointed out there were controls over product marketing and advertising. Industry puts a lot of time and effort into producing data on which claims were made. 'But often what the rep says to you may not necessarily be exactly what is claimed in the packaging.' His advice was to bear this in mind and find out whether products worked in practice.

## **Comfortable contact lenses:** a realistic dream for 2020?

The global contact lens market is



More than **250 BCLA** members attended event

predicted to exceed US\$11.5bn by 2015 but only an estimated 0.4 per cent of the world's population who could wear contact lenses are choosing **the Pioneers** them as a vision correction option. Growth has been hampered by the number one problem with contact lenses: comfort.

> Somewhere between a fifth and a quarter of users permanently discontinue contact lens wear and the primary reason is discomfort. So is there any chance of developing truly comfortable contact lenses in the next 10 years? Professor Jones explained that SiH materials had 'annihilated' hypoxia such that effects like microcysts and polymegethism now had to be taught from textbooks rather than by observation. About half of young conventional hydrogel lens wearers showed abnormal signs and symptoms at routine aftercare but when refitted with SiHs just over half were problem-free after only two weeks' wear. 'We already have better materials than we're currently using,' he said.

Practitioners often asked patients 'How many hours do you wear your lenses?' But the killer question was 'How many hours are they comfortable for?' Those patients who experienced discomfort for the final two hours of the day were the most likely to drop out.

Enhanced daily disposables had also improved comfort at the end of the day but, for Professor Jones, there was still some way to go. In the latest CCLR study of SiH and daily disposable lens wearers, about half said they would like better comfort for about 2-3 hours at the end of the day.

Solutions incorporating novel wetting agents with prolonged

persistence or enhanced affinity for inherently hydrophobic SiH surfaces were in prospect, as well as better methods of assessing in-eye wettability. The role of 'rub and rinse' was also going to become much more important, he said.

The often neglected factor in patient comfort was the patients themselves. Lid disease was one of the major problems overlooked in contact lens wearers and lid hygiene measures could make a real difference to comfort. Lid notching and frothing of the tear film were the more subtle signs to look out for.

Warm compresses, lid scrubs and lubricants were among the available therapies, soon to be supplemented by new drugs for managing posterior blepharitis. The new LipiFlow device, developed by a previous Pioneers Lecturer Dr Don Korb, was currently under investigation for treating meibomian gland dysfunction.

Examining the role of nutrition was another approach to dry eye among contact lens wearers and non-wearers that showed some promise. And interesting developments were in store in drug delivery systems, including a lens delivering an anti-allergy agent which would soon be available.

Professor Iones concluded that comfortable contact lenses were a very realistic prospect for 2020. Until then, practitioners should try new materials, remember that patients might not know how satisfied they could be, and be aware that the patient might be the problem too.

The message was that practitioners already had the capability to enhance patients' contact lens wearing experience not just by prescribing the right products but also by asking the right questions and acting on the answers

#### Early pioneers

The Pioneers events also included a series of short presentations on topics as diverse as hand washing and OCT, and contact lens historians Richard Pearson and Tim Bowden paid tribute to the early pioneers of contact lenses.

Marking the 70th anniversary of the Battle of Britain, Pearson saluted the pioneering pilots who wore contact lenses, sometimes without official approval, in order to serve their country. It was a fitting tribute to the positive benefits of contact lenses, which are often forgotten amid discussion of problems and complications.

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