**Glistenings worsen over time but have limited impact on visual acuity, study finds**

Randall J Olson

Dermot McGrath in London

ALTHOUGH glistenings are commonly found in single-piece acrylic IOls, their incidence does not seem to have any major adverse impact on visual acuity or quality of vision except in the more severe cases, according to Randall J Olson, MD.

Reporting data from a three-year study of single-piece acrylic IOls with and without blue-blockers, Dr Olson, professor and chairman, department of ophthalmology, University of Utah, Salt Lake City, said that in this series the glistenings did increase in severity over the three-year follow-up period.

“The real issue that we wanted to address was to discover if glistenings are just a curiosity or is there a genuine concern about them from a clinical standpoint.”

“We concluded that the glistenings did get worse in the single-piece acrylic IOls over the study period. Do they reach a certain point where they are no longer getting worse? I think that this has still not been answered satisfactorily. I think it is likely, however, that it reaches a certain plateau and this is borne out by the lack of long-term complaints. Other published papers have also shown a worsening over time,” he said.

Describing the motivation for his study, Dr Olson explained that glistenings are formations of tiny water vacuoles that present as clear to white sparkling areas within the IOL. They are believed to occur when water fills microscopic openings in the material, becoming visible at the slit lamp, but the average was about 43 glistenings per 1mm squared slice, with no observed pathology, substantially decreased contrast sensitivity was documented. However there were other patients with more than 100 glistenings per 1mm squared slice in which there was no impact at all,” he said.

Looking to the future, Dr Olson suggested that further large-scale controlled studies were needed to shed further light on the issue.

Based on what we have learned in previous studies, it is the unusual glistenings, in other words, the dense and large glistenings, which I think need further analysis. It would probably need about 500 patients or more to get a proper handle on that and also to tell us which IOls in terms of design and material might be more susceptible to the phenomenon,” he said.

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