Canaloplasty: popularity growing

Canaloplasty with tensioning suture placement is growing in popularity owing to a combination of factors, including a successful training programme, an improved reimbursement picture, and favourable long-term data, said Richard A. Lewis, MD.

Canaloplasty is a nonpenetrating procedure performed under a scleral flap in which a microcatheter (iTrack; iScience) is used with an ophthalmic viscosurgical device (Healon GV; AMO) to viscodilate the canal prior to passing a tensioning suture through the circumference of Schlemm's canal. The procedure is indicated for the treatment of open-angle glaucoma, especially in patients expected to be at high risk for trabeculectomy failure or in those where there is increased concern about further loss of vision, said Dr Lewis, a private practitioner in Sacramento, US.

Recently published clinical results from a prospective study including 168 patients showed that at baseline, mean IOP was 23.9 mmHg with a mean of 1.9 medications used per patient. At 24 months, the mean IOP was reduced by 36% to 15.2 mmHg with patients on an average of 0.6 medications. Although complications occurred, there were no cases of flat or shallow anterior chambers, infections, wound leaks, or choroidal effusion.

So far, 150 surgeons in the United States and 70 surgeons internationally have been trained in the procedure, and more than 1,500 procedures have been performed worldwide.

"This procedure has progressed to a stage where surgeons have begun to innovate beyond the initial technique," Dr Lewis said. "Additional surgical tools will continue to expand microcatheter clinical indications and treatment options for glaucoma surgery, and the power of microcatheter-based drug delivery is a particularly exciting and promising technique for all of ophthalmology."

Surgical marker pen linked to DLK outbreak

Refractive surgeons should be aware of the possibility that a su marker pen (Codman; Johnson & Johnson) could be a cause of d lamellar keratitis (DLK) after LASIK, said Wei-Han Chua, MD.

Dr Chua reported on a cluster of nine cases of DLK that occurr the Singapore National Eye Centre. All eyes had undergone LASI flap relift/repositioning on a single day (July 24, 2007) and DLK o varying grades was noted on the first postoperative day.

To investigate the outbreak, a review was undertaken of all LA procedures performed over the four-day period from July 23 to 2 2007. DLK occurred in nine of 12 eyes that had surgery on July 2 with use of the surgical marker pen and in none of 113 eyes ope on during the other three days when a surgical marker pen from another manufacturer was used to ink the corneal marker. Dr Ch postulated that one or more of the constituents of the ink in the surgical marker pen in question might have incited the inflamm response.

"It can be difficult to identify risk factors or causative agents i even when outbreaks occur. However, because of the use of stri protocols for recording the introduction of all new equipment a consumables used for LASIK procedures, we could determine th introduction of a new brand of surgical markers was the only ch made to the surgical regimen on the day the DLK eyes had their procedures," Dr Chua said.

"To our knowledge, this is the first report of DLK associated w surgical marker. After we communicated our experience, the manufacturer replied that the surgical marker is intended for us on the skin and is not meant to be used on the eyes," he conclu

Infection incidence increasing despite improving diagnoses

The American Society of Cataract and Refractive Surgery (ASCRS) survey results for 2008 pointed out some changing trends in infectious keratitis after LASIK and PRK compared with previous surveys conducted in 2002 and 2005, said Terry Kim, MD.

In 2008, a total of 14 surgeons reported 19 cases of infectious keratitis after LASIK and PRK in 2007. "That represented a larger number of cases compared with previous years, which presented within one week after surgery," Dr Kim commented. He is associate professor ophthalmology, Duke University School of Medicine, Raleigh, US.

Dr Kim also reported that there has been a marked increase in the incidence of atypical mycobacteria causing those infections over the past seven years. However, he noted, the past two surveys have shown an increase in *Staphylococcus* organisms causing those infections after LASIK and PRK. In the 2007 survey, methicillin-resistant *Staphylococcus aureus* (MRSA) emerged as the most common organism causing these infections after LASIK and PRK. Of three MRSA infections that occurred, two developed in healthcare workers.

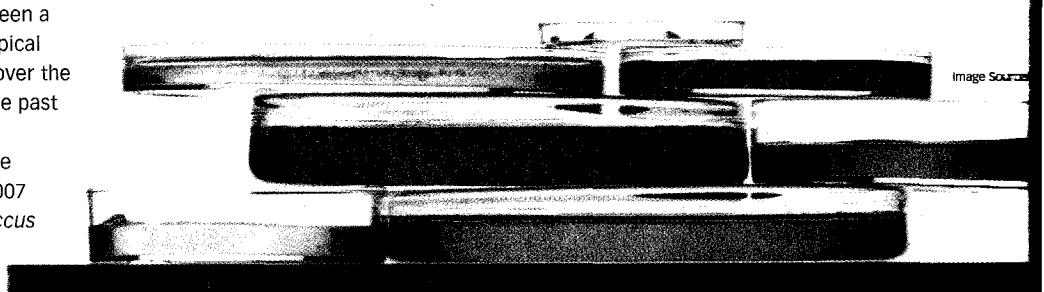
The survey results also showed that no case of atypical mycobacteria infectious keratitis developed in any patient who received a fourth-generation fluoroquinolone as prophylaxis in both the 2005 and 2008 surveys.

Importantly, diagnosis has improved greatly. "The infections are presenting earlier and the visual prognosis is improving," Dr Kim said.

In 2007, 84% of cases of infectious keratitis were diagnosed at the initial presentation in contrast to 2004 when most cases were not diagnosed at the initial presentation, Dr Kim That resulted from the fact that most surge now obtaining scrapings for culturing.

The uncorrected visual acuity results in compare favourably with the previous surv Many patients retained good vision after treatment. Only two patients required keratoplasty in 2007 compared with three and 10 in 2001 and earlier.

More infections were found to occur in association with a microkeratome compar the femtosecond laser, which is likely beca the single-use femtosecond laser cone an trauma to the epithelium.



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