Recent Developments in the Vision Care Industry

Heidelberg Acquires OCT Company

Heidelberg Engineering reported it had acquired the assets of the 4Optics company of Lübeck, Germany. The acquisition gives Heidelberg its first commercial experience with optical coherence tomography technology. The acquisition provides a variety of O.C.T. products, including a non-contact pachymeter and an anterior chamber imaging device. Applications include assessment of pre- and post-surgical LASIK, implantable contact lenses, glaucoma diagnostics and monitoring and glaucoma treatments. Heidelberg Engineering's products include the HRT-II diagnostic confocal scanning laser, the HA-2A angiography platform and 10-Pac handheld pachymeter.

CE Mark for Nidek System

Nidek has received the CE mark for its Optical Path Difference Customized Apheric Treatment (OPOCAT) algorithm for its NEI S-5000 excimer laser system. The algorithm, designed to optimize the correction of myopia and myopia with astigmatism with aberrations of the entire optical system, uses a proprietary ablation algorithm based on topography and wavefront data generated by the NIDEK OD-Scan. The clinical data submitted to gain CE mark approval showed excellent clinical outcomes with 97 percent of patients having an uncorrected visual acuity of 20/20 or better.

Staar ships new model Collamer IOL

Staar Surgical has begun shipping its newly redesigned Three-Piece Collamer lens, model CQ-2012, along with the O.N.Y., a new injection system. The redesigned Collamer lens is a foldable intracocular lens that includes polymeide loops, allowing the lens to self-centre. It incorporates a continuous contact edge, which the company says should reduce the potential for posterior capsule opacification. Staar’s patented Collamer is a highly biocompatible material with properties that reduce glare and other optical aberrations. The new O.N.Y. injector and cartridge system was designed to increase surgeons’ acceptance of the redesigned lens. The beleaguered company hopes that sales of this new system will begin to have a positive financial impact on in the fourth quarter of this year.

Schwind: 500 and counting

Schwind recently installed its 500th excimer laser for refractive corneal surgery at the ProVitas Augenklinik in Essen, Germany. The latest laser is the 6th generation of technology since the first Schwind laser was installed in Korea in 1992. The 501l laser will go to a client in Jordan.

Early results with Epi-LASIK

Epi-LASIK is a new surface ablation surgical technique currently in clinical trials with this approach. There is sufficient rationale to continue clinical trials with this approach. Some patients showed benefit immediately after treatment, which has persisted. The researchers conclude that there is sufficient rationale to continue clinical trials with this approach.

Pesticides and retinal disease

Individuals exposed to some fungicides and other pesticides may be at increased risk of retinal degeneration and other eye disorders. The association was found between pesticide use and other eye disorders. The association was even higher among women with cardiovascular disease or diabetes.

Retinal Development

The different types of cells that make up the retina in vertebrate animals develop in a certain sequence. A new study highlights how one signaling molecule helps to direct when the different kinds of retina cells develop. In the retinas of mice, “growth and differentiation factor 11” or GDF11 controls when progenitor cells can be produced. Different kinds of retina cells develop. In the retinas of mice, “growth and differentiation factor 11” or GDF11 controls when progenitors can become different kinds of retina cells. The researchers report this finding confirms previous work demonstrating that in the retinas of mice, “growth and differentiation factor 11” or GDF11 affects proliferation of progenitor cells. While GDF11 negatively regulates neuron number in both the retina and the olfactory epithelium, different mechanisms are involved in the two different brain tissues.

Pinkeye self-limiting in many cases

Most children with infectious conjunctivitis do not need treatment with an antibiotic, a large UK study suggests. Diagnosis of the condition is usually straightforward but doctors find difficulty in differentiating a viral cause from a bacterial cause. Studies of practice by pharmacists to prescribe antibiotic eye drops, although evidence to support this decision is scarce. Oxoid researchers conducted a randomized trial to investigate the effectiveness of an antibiotic treatment when compared with a placebo. Over 300 children were recruited onto the study from 12 medical practices in Oxfordshire UK, from 2001 to 2004. Half were assigned to chloramphenicol eye drops—the most commonly used antibiotic for conjunctivitis in the UK—and half to placebo eye drops. The investigators found no significant difference in the cure rate after seven days. 86% of the children were clinically cured in the antibiotic group compared with 83% in the placebo group. Even in children who had a viral infection, the clinical cure rate did not differ significantly between the antibiotic (85%) and the placebo groups (80%). The researchers suggest parents should be encouraged to treat children themselves without medical consultation, unless their child develops unusual symptoms or the symptoms persist for more than a week. The UK’s Medicines and Healthcare products Regulatory Agency recently announced that chloramphenicol eye drops should be available over-the-counter. It will be the first antibiotic to be sold by pharmacists without a prescription in the UK.

Pinkeye self-limiting in many cases

Most children with infectious conjunctivitis do not need treatment with an antibiotic, a large UK study suggests. Diagnosis of the condition is usually straightforward but doctors find difficulty in differentiating a viral cause from a bacterial cause. Studies of practice by pharmacists to prescribe antibiotic eye drops, although evidence to support this decision is scarce. Oxoid researchers conducted a randomized trial to investigate the effectiveness of an antibiotic treatment when compared with a placebo. Over 300 children were recruited onto the study from 12 medical practices in Oxfordshire UK, from 2001 to 2004. Half were assigned to chloramphenicol eye drops—the most commonly used antibiotic for conjunctivitis in the UK—and half to placebo eye drops. The investigators found no significant difference in the cure rate after seven days. 86% of the children were clinically cured in the antibiotic group compared with 83% in the placebo group. Even in children who had a viral infection, the clinical cure rate did not differ significantly between the antibiotic (85%) and the placebo groups (80%). The researchers suggest parents should be encouraged to treat children themselves without medical consultation, unless their child develops unusual symptoms or the symptoms persist for more than a week. The UK’s Medicines and Healthcare products Regulatory Agency recently announced that chloramphenicol eye drops should be available over-the-counter. It will be the first antibiotic to be sold by pharmacists without a prescription in the UK.