

LASIK Volume Around the Globe

CRST Europe Editorial Board and Global Advisory Board members share their current outlooks as the economic crisis seems to be receding.

BY JOHN S. M. CHANG, MD;

ARTHUR B. CUMMINGS, MB ChB, FCS(SA), MMed(OPHTH), FRCS(Ed);

H. BURKHARD DICK, MD; ERIC D. DONNENFELD, MD; FRANCESCO DUCH, MD;

RONALD R. KRUEGER, MD; MICHAEL A. LAWLESS, MBBS, FRANZCO, FRACS, FRCOPHTH;

KJELL U. SANDVIG, MD, PhD; AND KARL G. STONECIPHER, MD

JOHN S. M. CHANG, MD

The LASIK volume in our practice in Hong Kong is around 400 to 500 procedures per month, which is a 10% drop compared with before the economic tsunami. In our practice, 99% of cases are performed with the femtosecond laser, also known as Intra-LASIK when the IntraLase femtosecond laser (Abbott Medical Optics Inc., Santa Ana, California) is used. The same trend toward femtosecond flap creation is occurring across Hong Kong, with approximately 90% of LASIK procedures performed using femtosecond-created flaps.

In the past, wavefront-guided laser ablation was the predominant program that most of our surgeons used; however, with the introduction of the aspheric algorithm, wavefront-guided ablation is used less often. The switch from microkeratome and wavefront-guided laser to femtosecond laser and aspheric algorithm is related to the highly myopic population in Hong Kong. In treating high myopia, thinner flaps are made to preserve more stromal tissue and minimize induced spherical aberration. These are the primary goals of the LASIK treatment. Recently, we started using the personalized aspheric program, correcting higher-order aberrations and treating induced spherical aberration. This will most likely be our predominant practice in the future.

John S. M. Chang, MD, is Director of the GHC Refractive Surgery Centre, the Hong Kong Sanatorium and Hospital, Happy Valley, Hong Kong. Dr. Chang is a member of the CRST Europe Global Advisory Board. He states that he has no financial interest in the products or companies mentioned. He may be reached at tel: +852 2835 8885; fax: +852 2835 8887; e-mail: johnchang@hksh.com.



ARTHUR B. CUMMINGS, MB ChB, FCS(SA), MMed(OPHTH), FRCS(Ed)

LASIK numbers took a dive about 18 months ago but have been stable since. It appears that the numbers are increasing again, as inquiries and scheduled procedures are on the rise. I believe that the bottom of the cycle is firmly behind us. People are shopping around more than ever, and commercial chains are offering free evaluations. There is also increased awareness of LASIK, thanks to advertising campaigns for commercial chains.

Intraocular surgery numbers have climbed and are continuing to grow. These are mostly older patients who were less affected by the credit crunch.

Arthur B. Cummings, MB ChB, FCS(SA), MMed (Ophth), FRCS(Ed), practices at the Wellington Eye Clinic & UPMC Beacon Hospital, Dublin, Ireland. Dr. Cummings is a member of the CRST Europe Editorial Board. He states that he has no financial interest in the products or companies mentioned. He may be reached at tel: +353 1 2930470; fax: +353 1 2935978; e-mail: abc@wellingtoneyeclinic.com.



H. BURKHARD DICK, MD

I will cut to the chase and reveal my two secret ingredients for improving LASIK volume in a downturned market: (1) results matter, and (2) a continuous quality improvement program improves results.

Excellent clinical outcomes are essential to the success of any refractive surgery practice, but the best providers do more than simply improve patients' UCVA; they provide a positive patient experience. Patients who are happy with

their visual outcomes and with their experience throughout the entire process refer their friends, family, and colleagues.

Patient satisfaction leads to growth. In these difficult economic times, many practices are experiencing declines of 30% to 70% in refractive surgery procedures, but other practices manage to maintain or even grow their procedural numbers. How do you get to this point? There are several reasons, all related to my secret ingredients.

First, consider incorporating tools to facilitate continuous quality improvement, such as electronic patient experience questionnaires (PEQ) that track patient satisfaction, measure and analyze data, and evaluate and improve performance. Information derived from PEQs provides better understanding of patients' perceptions. More important, patient feedback relating to all clinic staff including receptionists, optometrists, and surgeons can be used to improve staff performance. Second, high-quality technology is central to good clinical outcomes, and good clinical outcomes are an important element of patient satisfaction. We live in an exciting time, because there have been significant advances in refractive surgery technology over the past several years. The femtosecond laser is revolutionizing corneal surgery procedures including LASIK. This technology offers patients a safer treatment than older LASIK flap technologies, improves outcomes, and enhances the patient experience.

Third, real-time analysis of results, such as patient satisfaction and flap technology, could not be done without a robust electronic medical records (EMR) system—a key element in continuous quality improvement. Our EMR system also allows accurate tracking of patient demographics over time. A 2009 Optical Express study of more than 200,000 patients highlighted that the average patient age decreased over a period of 24 months. This information allows targeted marketing and advertisement.

The secret ingredient to success, continually improving results, should be assessed based on standard clinical outcomes as well as the patient experience. Improving both will help lead to your success.

H. Burkhard Dick, MD, is the Chairman of the University Eye Hospital, Bochum, Germany. Professor Dick is a member of the CRST Europe Editorial Board. He states that he has consulted to, served on the speakers' board, or received research funding from the following: AcuFocus, ARC Laser, Bausch + Lomb, Abbott Medical Optics Inc., Alcon Laboratories, Inc., Allergan, Aquesys, Calhoun Vision, Domilens, Glaukos, Hoya Surgical, Morcher, Neovista, Novartis Pharma, Ophtec, Optos, Oculus, Rayner Intraocular Lenses Ltd., SMO, Transcenor, Optical Express, and Carl Zeis Meditec. He may be reached at tel: +49 234 299 3101; e-mail: burkhard.dick@kk-bochum.de.



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– H. Burkhard Dick, MD

ERIC D. DONNENFELD, MD

In New York, we are seeing a slow and steady return of LASIK volume. This follows a 1.5-year steady decline. We are not only seeing an approximate 10% increase in LASIK volume, but we are seeing the return of younger patients with lower levels of refractive error.

For the past year, the majority of cases we saw were complex with high levels of myopia, hyperopia, and/or astigmatism. We now see more routine cases. Additionally, LASIK candidates are booking their surgery rapidly rather than waiting months to schedule. Overall, I am optimistic about the return of refractive surgery in the United States.

Eric D. Donnenfeld, MD, is a trustee of Dartmouth Medical School in Hanover, New Hampshire, and a partner in Ophthalmic Consultants of Long Island in Rockville Centre, New York. He is a member of the CRST Europe Global Advisory Board and states that he is a consultant to Abbott Medical Optics Inc., Alcon Laboratories, Inc., Bausch + Lomb, and WaveTec Vision. Dr. Donnenfeld may be reached at tel: +1 516 766 2519; e-mail: eddoph@aol.com.



FRANCESC DUCH, MD

I am in charge of the department of refractive surgery in a private multidisciplinary ophthalmic center in Barcelona, Spain. My unit includes three specialized optometrists and three ophthalmologists who cover all clinical activity, including two laser and one intraocular surgery session per week. Each year, we perform between 1,500 and 2,000 laser procedures including LASIK, LASEK, and other customized treatments; 100 clear lens surgeries; and 100 phakic IOL implantations with the Visian ICL (STAAR Surgical, Monrovia, California). I also perform approximately 75 cataract surgeries, 10 to 15 intrastromal corneal ring procedures for keratoconus, and one or two corneal grafts per year. (I used to do more corneal surgery before I organized the refractive surgery unit).

Our refractive surgery activity has decreased slightly because of the current economic crisis. Laser surgery has diminished by 30% in the past 3 years, but we are now in a plateau phase with a slow recovery tendency. I also have a

private general ophthalmology practice focusing on cornea, cataract, and refractive surgery. I have seen these same trends in my private practice, but at a lower volume of patients. In both sites, the type of surgery that has mainly increased in the last 2 to 3 years is clear lens surgery with multifocal IOLs.

Francesc Duch, MD, practices at the Institute Catala de Cirurgia Refractiva, Barcelona, Spain. Dr. Duch is a member of the CRST Europe Editorial Board. He states that he has no financial interest in the products or companies mentioned. He may be reached at tel: +34 93 418 99 29; e-mail: duch@icrcat.com.



RONALD R. KRUEGER, MD

At the Cole Eye Institute of the Cleveland Clinic, LASIK volumes have been steadily improving over the past year. In fact, during the first half of 2010, our volume of primary paying customers is up 21% from the first half of 2009, a total of 666 eyes in 6 months.

In a recent analysis of trends and outcomes over the past year, 73% of eyes that I treated underwent LASIK; the remaining eyes had PRK. Among the LASIK eyes, 88% received a myopic correction, with more than 50% in the category of moderate myopia (-3.00 to -6.00 D). Additionally, 25% of the LASIK eyes were treated for a monovision target, which would suggest that approximately 50% of patients elected to have monovision. All eyes were treated with an optimized ablation profile using the Allegretto Wave EyeQ laser (WaveLight AG, Erlangen, Germany), with 92% achieving 20/20 and 98% achieving 20/25 UCVA at 3 months postop among the mild, moderate, and high myopic eyes targeted for emmetropia.

There was no statistical increase in spherical aberration for all myopic eyes treated with the optimized profile of the Allegretto Wave Eye-Q; however, the customized profile of the laser we previously used, the LADAR4000 Custom Cornea laser (Alcon Laboratories, Inc., Fort Worth, Texas), showed a statistical increase in spherical aberration for eyes with errors greater than -3.00 D. This confirms the increasing trend and benefit toward the use of optimized ablation profiles among US surgeons, and this trend may continue as the market grows in the future.

Ronald R. Krueger, MD, is Medical Director of the Department of Refractive Surgery, Cole Eye Institute, Cleveland Clinic Foundation, Cleveland. Dr. Krueger is a member of the CRST Europe Global Advisory Board and states that he has received travel support, consulting fees, and



research funds from Alcon Laboratories, Inc. He may be reached at tel: +1 216 444 8158; e-mail: krueger@ccf.org.

MICHAEL A. LAWLESS, MBBS, FRANZCO, FRACS, FRCOPHTH

Our local group practice in Sydney, Australia, has seen combined LASIK and surface ablation volume decline from 3,392 procedures for the fiscal year ending in June 2008 to 2,610 for the fiscal year ending in June 2009—a 23% decline. For the current fiscal year, I would estimate a decline of approximately 12% from the previous year.

Perhaps these numbers do not tell the whole story. Preoperative assessments and consultations for refractive surgery candidates have declined by only 8% per year for the past 2 years. Fewer patients proceed to surgery, but a significant minority of these patients opt for refractive lensectomy or phakic IOL surgery rather than LASIK or surface ablation. My figures reflect this, with steady annual surgical volumes that include refractive surgeries of all types, both intraocular and corneal laser.

The group's laser volume decline has been affected by the general economic downturn and, although Australia has been relatively spared compared with the United States and parts of Europe, we have still felt the impact. As always, there are regional influences. Competitive discount-price laser is offered by some alternative providers, and external and internal marketing factors may play a role in these figures.

In summary, however, the general decline in LASIK is easing, and individual premium providers offering a full range of refractive options tend to be affected less than those offering only LASIK.

Michael A. Lawless, MBBS, FRANZCO, FRACS, FRCOphth, is an Ophthalmic Surgeon and Medical Director, Vision Eye Institute, Chatswood, Australia. Dr. Lawless states that he has no financial interest in the products or companies mentioned. He may be reached at tel: +61 2 9424 9999; fax: +61 2 9410 3000; e-mail: mlawless@vgaustralia.com.

KJELL U. SANDVIG, MD, PhD

I noticed a small decrease in the refractive volume of my practice in 2009, but I am now enjoying a similar 10% increase so far this year, which seems to be the experience of my colleagues as well.

It is difficult to determine the true total refractive surgery volumes in Norway, but an educated guess estimates that the number of excimer laser surgeries is between 15,000 and 20,000 per year for a population of approximately 5 million. The total number of excimer laser sys-

tems is about 25, half of which are located in practices in Oslo, the most densely populated area of Norway.

Anterior surface ablation is still popular in Norway, accounting for approximately 25% of the excimer laser surgery market. The volume of surface ablation procedures we perform is probably increasing. Some clinics, such as my own, have converted completely to anterior surface ablation; we stopped doing LASIK 5 years ago. Other centers perform transepithelial PRK or LASEK. Of those doing LASIK, probably less than 50% are using femtosecond lasers for making the flap.

Kjell U. Sandvig, MD, PhD, practices at Oslo Eye Center, Norway. Dr. Sandvig states that he is a paid lecturer for Alcon Laboratories, Inc., but has no financial interest in the products or companies mentioned. He is a member of the CRST Europe Editorial Board. Dr. Sandvig may be reached at tel: +47 22 93 12 60; fax +47 22 93 12 70; e-mail: kusandvig@yahoo.no.

KARL G. STONECIPHER, MD

Laser vision correction volumes are on the decline if we look year on year in my region, but there are a lot of issues revolving around the decline. First, I have always

followed the US Consumer Confidence Index (CCI) as a barometer for surgical volume, but this information has been confusing lately. Our practice had pretty level year-on-year volumes in the early months of 2010, but the CCI was at an all-time low. In May, we had a marked decline in volume but the CCI rose more than 5 points from April to May. So our typical barometers are not helping.

Second, unemployment and global uncertainty are affecting our current volumes. In the region where I live and in the surrounding states, the unemployment rate averages 11%. With uncertainty about employment, patients are less likely to spend money on elective procedures. Third, the recent European economic crisis and its global repercussions have affected laser vision correction volumes. Last, I think the refractive market is changing. One sign for my centers has been an almost 10-year decline in the average age of laser vision correction patients. Many of our older (traditional) patients are choosing premium IOL options instead of laser vision correction. Alcon Laboratories, Inc., has recently reported increased sales of premium lenses, and Market Scope has reported similar trends.

About 2 years ago, we started to gear our advertising



toward the younger group of individuals, known as the millennial generation (also known as gen Y, generation next, net generation, and echo boomers). More of these patients are coming through the door, but not enough to offset the decline of the aging patient population. In that respect, one fact is clear: Traditional print and radio advertisements are not reaching the younger generation, which is more aware of social media.

Our previous advertising of technology versus technology or physician against physician has to cease. We all must promote the lifestyle-changing events related to laser vision correction to grow the market. I think we can return to the higher volumes of 2000 and 2001 if we highlight the safety of the procedure, the outcomes of today's technology, and the benefits in day-to-day activities for the individual patient.

One upbeat comment from all of the aforementioned is that those of us who do cataract surgery are becoming busier in that market. With the technological advances in premium IOLs, femtosecond cataract surgery, and intraoperative wavefront aberrometry, improvement in outcomes continues, and that means happy patients. Happy patients refer more patients.

A suggestion for those cataract surgeons who are

not converting their practices to refractive cataract surgery practices: The time to transition is now. It is a challenge, but it is not impossible to achieve. As we change the concept of our practices, they become conducive both to the refractive surgery patient and the refractive cataract patient. I am seeing a lot of internal referrals of the children of parents I operated on previously. That is good on the laser vision correction side of the equation.

One final thought in these tough times: If a patient wants laser vision correction, he will find an avenue to make that happen. During the Great Depression, the No. 1 item sold was lipstick. Go figure. ■

Karl G. Stonecipher, MD, is Director of Refractive Surgery at The Laser Center in Greensboro, North Carolina. Dr. Stonecipher is a member of the CRST Europe Global Advisory Board. He states that he has consulted, served on the speakers' board, or received travel or research funding from these companies: Abbott Medical Optics Inc., Alcon Laboratories, Inc., Allergan, Inc., Inspire; LifeGuard, Nidek, Vistakon, and WaveLight. He may be reached at tel: +1 336 288 8823; e-mail: stonenc@aol.com.



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