Editorial Advisors:
Matthew Jensen, MBA
Sioux Falls, South Dakota
James D. Dawes
Sarasota, Florida

Premium Practice Today is a monthly feature section in CRST providing articles and resources to assist surgeons and their staff in the pursuit of premium practice development to facilitate exceptional experiences for patients and business success.
It is no surprise that life-saving surgeries get more attention and applause than quality of life-saving surgeries. Premium practice surgeons who have been at it for a while do not need applause to tell them that quality of life-saving procedures allow patients to participate in life in ways that simply would not be possible without a vision-saving intervention.

Some of the country’s leading ophthalmic surgeons spoke to “Premium Practice Today” about patients who went on to do remarkable things after ophthalmic surgery, from winning Olympic medals, to piloting aircrafts well into their 80s, to living at home rather than in an institution.

**LIFE-CHANGING SURGERIES**

Richard Lindstrom, MD, of Minnesota Eye Consultants (www.mneye.com/minnesota/richards-education.htm) has 40 years’ worth of ground-breaking and life-changing surgeries under his belt—too many extraordinary examples from which to choose, he says. “Memorable patients include several Olympic and professional athletes, including gold medal skiers, all-star baseball players, all-pro football players, professional golfers, and the like who performed at the highest level after LASIK surgery,” he relates. “In regard to treating patients with corneal disease and cataract, my trips with Orbis to Sri Lanka and Myanmar and non-Orbis trips to Honduras and North Vietnam stand out” for the surgeries that enabled people to return to or start a normal and/or productive life, he says. “In Minneapolis, as a corneal surgeon,” he adds, “I have treated many children, especially those with Peters anomaly and congenital cataracts, and these surgeries were often life changing.”

Dr. Lindstrom does not have to—or want to—crow, but his experience and reputation speak for themselves. “Ophthalmology is a very rewarding field of practice, as our treatments can often be life enhancing or even life changing,” he says. “A 24-year-old patient with Down syndrome was my first Down syndrome patient. He is now in college.”

—Matthew Jensen, MBA, editorial advisor
syndrome, keratoconus, and cataract was eventually institutionalized for care after having lived at home with loved ones for his entire life. With [his] development of reduced vision in both eyes to the counting fingers level, the family could no longer manage his care, with tasks as simple as feeding and personal hygiene.” Then, Dr. Lindstrom performed penetrating keratoplasty combined with cataract surgery, which enabled the patient to return home to his family. An Nd:YAG laser capsulotomy was performed in the first year after surgery, and 1 year out, his visual acuity measured approximately 20/40. The second eye was amblyopic from strabismus and anisometropia and was not treated. Dr. Lindstrom explains that he recently saw the patient again, 21 years after surgery at age 45, with a clear graft. “He and his family had big smiles, and he remains functional with 20/50 vision,” the surgeon says.

Another rewarding experience, says Dr. Lindstrom, involved treating an 18-year-old slalom skier on the USA Olympic Development team. Contact lens intolerance was interfering with her skiing. “Bilateral LASIK transformed her attitude and performance, resulting in gold medal success in the Olympics and extraordinary World Cup performances over the next decade,” he says.

A patient of Stephen Coleman, MD, director of Coleman Vision in Albuquerque, New Mexico (www.colemanvision.com), on whom he performed a life-changing procedure went on to gain this country’s attention for her athletic achievement. “My laser suite is located at 5,000 feet in a state with endless sunshine,” he says. “A great majority of my patients have LASIK because they want to pursue intense outdoor activities, such as world-class cycling, mountain climbing, and skiing in the Rocky Mountains. As a result, I answer a lot of questions regarding high altitude and how it may affect vision in a person who has had LASIK.” Kim Gattone presented at Coleman Vision several months after experiencing photokeratitis while wearing soft contact lenses during her attempt at summiting Mount Everest. Just 3,105 feet short of the summit, she had to be led down the mountain. “As I talked with her and examined her eyes, it was clear that she was a master at preparation and had been diligent about wearing ultraviolet protection during her ascent, Dr. Coleman says. “She and I were both convinced that her failed attempt was a contact lens complication due to extreme hypoxia.”

“Her surgery, in my estimation, carried little risk,” he continues. “She was a very healthy, moderate myope and fit right into my perception of the role that LASIK should predominately play for surgeons. Ms. Gattone’s LASIK went extremely well. She saw great right from the start. Years later, when she reached the summit, we received a signed picture in the mail. With a nod toward a deep understanding of teamwork, she thanked not only me but my sister—who handles all nonclinical aspects of the day-to-day operations of our practice—as well as our entire staff.”

Dr. Coleman remarks, “When I first saw an excimer laser correct a person’s vision, I thought it was heroic. Over the years, however, I’ve come to believe that the laser is just another example of innovative technology that has the potential to place a person in a position that allows them to be heroic. In Ms. Gattone’s case, for example, while it was nice to have played a small role in her eventually reaching the summit of Mount Everest, the hard work and heavy lifting were done by her, and as such, it is she who deserves all of the credit for this accomplishment.”

MINIMALLY INVASIVE LIFE CHANGER

Some of the patients who have benefited the most from the surgical interventions of Kenneth Rosenthal, MD, of Rosenthal Eye Surgery in Great Neck New York, and New York City (www.eyesurgery.org) have received a CustomFlex artificial iris prosthesis (HumanOptics) for the treatment of defects. One patient was a young man who first presented at age 16. “Nathaniel Schull had congenital aniridia and was referred by his ophthalmologist for consideration of repair of his iris or implantation of an iris prosthesis,” recalls Dr. Rosenthal. “He played piano and wrote songs and aspired to be a musician but was unable to see the music and had to memorize everything. When he performed, he had to wear dark sunglasses, because
he couldn’t tolerate the stage lights, but even in normal indoor lighting, he had to wear darkly tinted lenses, which further cut down his vision.”

Mr. Schull’s visual acuity had never been better than 20/100. “His vision actually got worse by the time he saw me at age 17,” says Dr. Rosenthal. “By then, he had bilateral cataracts as well. At that point, we performed bilateral cataract surgery with iris prosthetic implants.”

Dr. Rosenthal treated this patient before the FDA clinical trial of the CustomFlex began (it is currently ongoing), so he filed for and was granted an investigational device exemption. “One of the positive things about these iris prosthetic devices is that they are foldable, and we can use a cartridge to implant them through a 2.5-mm incision,” Dr. Rosenthal remarks. “This is significant, because aniridic patients have poor stem cells in their limbus, and the devices that we previously used would have been too invasive for this patient. Fortunately, he came to me at a time when I was able to help him. My colleagues and I did what is essentially a minimally invasive procedure on one eye and then later on the second and got results that drastically changed this young person’s life.” Mr. Schull now has a visual acuity of 20/30 in both eyes, and he has gone on to be a musician and live a “normal” life.

Mr. Schull is currently a college student, and he is able to see and read music and is pursuing his dream of being a musician. Dr. Rosenthal says that Mr. Schull “can drive with the help of spectacles, and he’s really come out of his shell and has a social life now that he isn’t as encumbered by vision problems.” For more about Mr. Schull, watch these videos on YouTube:

- www.youtube.com/watch?v=nGuk9EZFmTY
- www.youtube.com/watch?v=B4TvbKKyW4
- www.youtube.com/watch?v=Xhj fO87vBo

Patients with aniridia have to supply a model when they have a prosthetic iris implanted. “We can customize the coloration of the artificial iris, so we usually take a photograph of the fellow eye,” says Dr. Rosenthal says. “Nathaniel was born without irides, so he brought his best friend. We gave him green eyes that perfectly match his friend’s, and they look completely natural. Just from an appearance point of view, these prosthetics can make a huge difference in a patient’s life. Before the surgery he was inhibited socially, he was inhibited emotionally, and he was inhibited visually in terms of his day-to-day activities. Now, he functions like a normal 19-year-old. He’s become like a regular person for the first time in his life.”

Dr. Rosenthal says he truly appreciates playing a role in improving this young person’s quality of life. “This is the stuff that gets me out of bed in the morning,” he comments. “This was such a spectacular outcome, and frankly, this is exactly what I set my professional life to be about: helping people who have difficult eye problems see better. My practice focuses on complex surgery, so when I see patents like this who sought a solution for a long time, it is particularly gratifying to finally be able to offer them something that can help them succeed in their goals.”

Two other patients Dr. Rosenthal recalls were pilots who also happened to be in their 80s. The first gentleman earned his living as an engineer but gained personal satisfaction from being a commercial pilot. “He came to see me after having complicated bilateral cataract surgery that resulted in intraoperative floppy iris syndrome,” Dr. Rosenthal says. “The damage to the iris was so bad that he had blinding sensitivity to light to the point where he needed sunglasses just to walk around his house. He was the first person we enrolled in the FDA iris prosthetic implant study. Since he had his surgery, he is able to conduct his life normally, does not wear sunglasses indoors, wears normal sunglasses outdoors, is able to drive at night, and most significantly—despite his advanced age and previous vision limitations—he has regained his commercial pilot’s license and is even able to fly his plane.”

The other pilot had cataracts and was one of the first patients in the country to receive the Crystalens (Bausch + Lomb). “He was a career US Navy pilot,” recalls

Kenneth Rosenthal, MD, with Nathaniel Schull after artificial iris implant surgery.
Dr. Rosenthal. “Even after his retirement, he was flying well into his 80s, when he developed cataracts that ultimately grounded him. He wanted to be able to see the instrument panel up close but also to be able to see well at a distance to be able to fly and land the plane. The cataract surgery was unremarkable and successful, and he achieved spectacle independence. What was really interesting is that it turned out that this patient was one of the original Tuskegee Airmen from World War II, and I had the privilege of performing the surgery that enabled him to fly again.”

TEAMWORK

When Brian Boxer Wachler, MD, of the Boxer Wachler Vision Institute in Beverly Hills, California, thinks about a patient whose life was dramatically changed by his surgical intervention, Steven Holcomb is one such person.

Mr. Holcomb was one of the top bobsleds in the world and the leader of the four-man US Olympic bobsled team. In the prime of his athletic career, he was diagnosed with keratoconus. The condition was so advanced and progressed so rapidly that he was considered legally blind. He retired in 2007 after consulting 12 surgeons and hearing that a corneal transplant was his only option. Mr. Holcomb’s team doctor recommended that he visit Dr. Boxer Wachler in hopes of an alternative.

After undergoing transepithelial corneal collagen cross-linking (C3-R) and the placement of an implantable contact lens, Mr. Holcomb saw so well that he was able to return to the sport of bobsledding in 2008. He won the World Bobsled Championships in 2009. He then won the first US Olympic gold at the 2010 Winter Olympics in Vancouver—the first such Olympic medal in 62 years. He then led his team to two more medals in the 2014 Olympics—another first in 50 years. “I was at the Sochi Olympics to support Steven where he won bronze medals in the two-man bobsled and four-man bobsled,” says Dr. Boxer Wachler. “Steven now is the most decorated bobsled in American history. I was just one member of his amazing team and am humbled to have been able to help.”

Dr. Boxer Wachler has officially changed the name of his transepithelial C3-R technique to the Holcomb C3-R. It is the first medical procedure named for an Olympic athlete. Mr. Holcomb’s comeback journey is chronicled in his book, But Now I See (www.amazon.com/But-Now-See-Journey-Blindness/dp/1937856003).

Dr. Boxer Wachler is happy to have helped Mr. Holcomb but points out that the C3-R technique helps people in all walks of life attain an improved quality of life (www.keratoconusinserts.com/patient.htm).

Remarkable patients, of course, are interspersed among hundreds of thousands of routine cases, but as Dr. Lindstrom puts it, “each individual story is special and memorable.”

Brian Boxer Wachler, MD, may be reached at (310) 860-1900.

Richard Lindstrom, MD, may be reached at (950) 567-6051; rllindstrom@mneye.com.

Kenneth Rosenthal, MD, may be reached at (516) 466-8989; kr@eyesurgery.org. He acknowledged no financial interest in the product or company he mentions.