

Diabetes and Its Impact on the Eye: A Parent's Perspective



My son Michael's D-Day was March 23, 2007. That was the day he was diagnosed with type 1 diabetes. He was eight years old. The diagnosis came as a shock to our family, and after two days of training at Phoenix Children's Hospital, Michael was released with a chronic medical condition he'll have for the rest of his life.

There are two main types of diabetes, type 1 and type 2. In type 1 diabetes (formerly Juvenile) the pancreas does not produce insulin. Type 1 is usually diagnosed in children and young adults and only 5-10% of diabetics have this form of the disease. With the help of insulin therapy and other treatments, even young children like Michael can learn to manage their condition and live long, healthy, happy lives.

Type 2 Diabetes (formerly Adult-Onset) is the most common form of diabetes. Millions of Americans have been diagnosed with it, and many more are unaware they are at risk. African Americans, Latinos, Native Americans and the geriatric population have a higher risk of developing type 2. In type 2 diabetes the cells of the body become resistant to the effects of insulin and the pancreas does not produce enough of the hormone. Poorly controlled blood sugar levels can lead to complications throughout the body, including the kidneys (nephropathy), the nervous system (neuropathy), and the eyes (retinopathy).

Diabetic retinopathy occurs when tiny blood vessels leak blood and fluid into the retina which is the light receptive nerve tissue

lining the back of the eye. This leakage leads to swelling of retinal tissue and clouding of vision. The longer a person has diabetes, the more likely they will develop diabetic retinopathy. If left untreated, diabetic retinopathy can cause blindness.

Diabetic retinopathy can be diagnosed through a comprehensive eye examination. The testing will include evaluation of the retina through a dilated pupil and possibly retinal photography or tomography to document the current status of the retina. All of the physicians at Horizon Eye Specialists are trained to provide dilated retinal examinations for our diabetic patients. Our clinic also has special equipment to monitor diabetic retinopathy such as Optical Coherence Tomography (OCT) and fundus photography.

If you are a diabetic, help prevent or slow the development of diabetic retinopathy by closely monitoring and controlling your blood sugar, taking your prescribed medication, sticking to your diet, exercising regularly, controlling high blood pressure and avoiding alcohol and smoking. All diabetics should have an annual comprehensive eye exam to check for retinopathy.

Not long after my son was diagnosed with type 1 diabetes, a nutritionist asked him, "Michael, are you going to have diabetes for the rest of your life?" He responded "no," and the nutritionist was concerned that he hadn't grasped the gravity of his diagnosis. Her concern was alleviated when Michael quickly stated, "because someday there will be a cure, and maybe I will be the one to find it." Hopefully there is a cure on the horizon...

JEFF GIRARDIN, O.D.



Robert R. McCulloch, M.D.

Daniel B. Feller, M.D.

William K. Christian, M.D.

Harmohina Bhakoo, M.D.

Shirley J. Lambert, O.D.

Jeffrey L. Girardin, O.D.

Kaci Kramer Oldroyd, O.D.

David T. Rockwell, O.D.



Kaci Kramer Oldroyd, O.D.

EYE CARE – LIKE NO OTHER

Doctor Profile

[Meet Dr. Kaci Kramer Oldroyd]

Since joining Horizon Eye Specialists & Lasik Center in 2001, Kaci Kramer Oldroyd, O.D. has become a vital member of our medical staff. Dr. Kramer provides patient care at both our Scottsdale and Northwest offices specializing in family eye care, contact lenses, and pre- and post-operative care for cataract and refractive surgery. She is also experienced in treating patients for glaucoma and macular degeneration.

Dr. Kramer was born and raised in Monticello, Iowa. Dr. Kramer obtained a Bachelor of Science degree in Exercise Science from the University of Iowa in 1996. She then graduated from the Ohio State University College of Optometry and completed a residency in ocular disease at Louis Stokes Veterans Administration Hospital in Canton, Ohio.

Dr. Kramer moved to Phoenix and joined our practice nine years ago. In 2008, she married Ryan Oldroyd, and last November they welcomed the birth of their daughter, Emersyn. In her free time, Dr. Kramer loves to spend time with her family, hike, run and play golf.

Did You Know We Are VSP Providers?

[Vision Service Plan]

If you or a family member have Vision Service Plan (VSP) as part of your benefits, it is important for you to know that all of our doctors are participants in the VSP network. Our practice participates in its vision programs and its Lasik program, which includes savings for Lasik patients with VSP coverage. Call us at 1-800-HORIZON if you have questions about these benefits.

Expanding Our Office Hours

[Extended hours to better accommodate your personal schedule]



In the last 12 months, our practice has expanded our hours of availability for annual eye exams and contact lens exams. Dr. Jeff Girardin, Dr. Kaci Kramer and Dr. David Rockwell have been offering early morning exams beginning at 7am and extending their last appointments of the day to 5pm.

These extended hours have proven so successful, that these doctors recently added more annual eye exams and contact lens exams to their Saturday morning schedules, when they are covering weekend care. If you or your family members prefer these exam times, please let our scheduling staff know when calling to schedule your appointment.

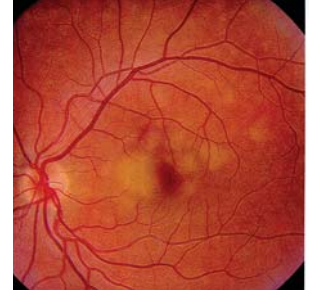
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www.HorizonLaserVision.com offers detailed and easy to navigate information

New Technology

[Provides you the highest caliber service available]

We are pleased to have added three new testing technologies to our main Scottsdale office. Last December, we added a fundus camera that allows our doctors to review pictures of the inside of the eye. Use of this specialized camera is especially important for Harmohina Bhakoo, M.D., our glaucoma specialist. The pictures taken by this camera can better diagnose an eye disease and monitor its progression.



Last December, we also added an Orbscan machine to use during pre-op testing for both Lasik and cataract surgery. This Orbscan machine obtains a topographical map of the surface of the cornea, thereby enabling us to diagnose or detect any abnormalities of the eye.

In March, a Cirrus OCT machine was installed at the Scottsdale office. Since 2005 our practice has utilized OCT technology for cataract, glaucoma and retinal evaluations. By upgrading to a Cirrus OCT, our doctors can capture a more vivid diagnostic image of the macula and optic nerve. “The main benefit of upgrading to the Cirrus OCT is the high definition image quality”, says Dr. Robert McCulloch, “It is like the difference between watching the movie Avatar in a 3D IMAX theatre versus a regular movie theatre. The quality is just fine in the regular theatre, but WOW you can see so much more detail at the IMAX.” Our current OCT machine has been relocated to our Northwest office, which will provide patients in that office additional testing options close to home.

Specialized Surgeries

[Services we find important in meeting our practice’s mission]



Although we are known for success with Lasik and cataract surgery, our surgeons provide other important specialized surgeries to our community – DSEK, Trabeculectomy, Pterygium Surgery and Trebectome. Over the next four newsletters, we will be profiling one of these surgeries. We will begin with DSEK surgery.

As a fellowship-trained cornea specialist, Dr. McCulloch performs corneal transplant surgery. A corneal transplant may be necessary in order to restore vision, if the cornea becomes significantly damaged as a result of physical trauma, infection or certain diseases (keratitis, ocular herpes, shingles and keratoconus being the most common). When this damage keeps a patient from working or significantly hampers their ability to live their life as they see fit, then corneal transplant surgery may be the best, and sometimes only option.

Descemet’s Stripping Endothelial Keratoplasty (DSEK) is one of the best techniques for corneal transplant surgery. The aim of DSEK is to replace only the innermost layer of the cornea, rather than the entire thickness of the cornea. DSEK involves peeling only the diseased endothelial layer from the back of the patient’s cornea, leaving 95% of the healthy cornea untouched. The back layer of a healthy donor cornea is then placed inside the eye through a small incision and positioned with an air bubble to replace the diseased layer that was removed.

Advantages of DSEK as compared to standard corneal transplantation are:

- The eye is left much stronger and more resistant to injury;
- Visual recovery is significantly faster and better;
- DSEK offers patients better visual recovery and a less protracted clinical course than standard corneal transplantation.



HORIZON EYE SPECIALISTS
& LASIK CENTER

(602) HORIZON ● www.HorizonLaserVision.com



DR. CHRISTIAN AND DR. BHAKOO ARE NOW SEEING PATIENTS AT OUR NEW GILBERT OFFICE LOCATION. WE WELCOME NEW PATIENTS!

SCOTTSDALE

18325 N. Allied Way,
Suite 100
Phoenix, AZ 85054

NORTHWEST

18301 N. 79th Ave,
Suite H-192
Glendale, AZ 85308

DOWNTOWN

3030 N. 3rd Street,
Suite 1250
Phoenix, AZ 85012

GOODYEAR

2580 N. Litchfield Road
Goodyear, AZ 85395

GILBERT

1712 E. Boston Street
Gilbert, AZ 85295

Message from Daniel B. Feller, M.D.

[Horizon Eye Specialists is committed to extraordinary patient service]



One of the most common complaints heard about visiting the doctor is, “I had to wait three months for an appointment!” At Horizon Eye Specialists, we are committed to making sure that all of our patients have easy access to our doctors at the most convenient times and locations. Whether you need to be seen for a routine vision examination or a complex cataract, glaucoma or diabetic evaluation, we assure you our scheduling staff will set appointments that work best within your personal schedule. Additionally, you will never be told “if this is an emergency, please hang up and dial 911.” We reserve a number of visits each day to care for patients with urgent problems.

Horizon Eye Specialists is committed to extraordinary patient service, thereby making accessibility to our doctors a priority to best meet your needs.

DANIEL B. FELLER
M.D./Medical Director