Protect Your Eyes from Diabetes

Learning you have diabetes can leave you feeling overwhelmed and confused about where to turn first. Uncontrolled high blood sugar can result in a number of health complications, not the least of which is vision loss. In fact, diabetes is the leading cause of blindness in the United States among adults age 20-74.

“There is a lot to think about when you are diagnosed with diabetes, but one of the most important things you can do right away is get to your eye doctor who can assess whether any damage has occurred in the eyes,” says OCB Ophthalmologist Miriam Englander, MD.

When blood sugar levels are too high for extended periods of time, blood vessels that supply the eye’s retina can become damaged, a condition known as diabetic retinopathy, Dr. Englander explains. Over time, these blood vessels become damaged and can swell, leak, and may eventually close off completely, prompting the growth of abnormal blood vessels.

“Although these changes occur over time with diabetes, there are cases in which people have had diabetes for years and have not been diagnosed or in some cases, we discover undiagnosed diabetes during an eye exam, because we can see the damage to the eyes,” says Dr. Englander.

Early detection and early intervention are the keys to reducing the long term risk of vision loss.

Retina Specialist Miriam Englander, MD, sees patients in Boston, Plymouth, Sandwich and West Yarmouth.

(Continued inside)
“If diabetic retinopathy reaches a threshold that requires treatment, it is extremely important to follow up with a retina specialist on a regular basis,” says OCB Ophthalmologist Torsten Wiegand, MD, PhD. “We are fortunate to have superb treatment options available including medical, laser, as well as surgical therapies, but these approaches must be seen as a continued and long-term effort to prevent deterioration of eyesight.”

Dr. Wiegand says that a host of complications such as vision loss that occur with diabetes can be controlled by taking a single integrated approach that combines a healthy diet, exercise, appropriate medications and regular follow up with your team of doctors including visiting your eye doctor for a dilated eye exam at least once a year.

“A report issued in August by the Centers for Disease Control and Prevention found that nearly 1 in 5 contact lens related eye infections resulted in long-term serious damage to the eyes that was preventable with proper care. The CDC recommends the following:

- Don’t sleep in contact lenses. This increases the chance of an eye infection by 6 to 8 times.
- Don’t top off, or add new contact lens solution to old solution that has been sitting in the case. Adding new solution to used solution can lower germ-killing power.
- Replace your contact lenses as often as recommended by your eye doctor. People who do not do so have more complications than those who follow the recommendations.

“If your life does not need to slow down if you have diabetes,” says Retina Specialist Torsten Wiegand, MD, PhD, who sees patients in Boston, Cambridge, Framingham and Waltham.
New Treatment Improves Outlook for Keratoconus

Patients with keratoconus have a new treatment option that potentially eliminates the need for surgery. The Food and Drug Administration has approved corneal collagen crosslinking, a procedure that was studied at OCB for several years.

Crosslinking dramatically improves the prognosis for patients with keratoconus, a condition that progressively thins out the cornea, causing it to change shape and bulge out, distorting vision, says Cornea Specialist Michael B. Raizman, MD, Principal Investigator for the OCB study site.

“Before crosslinking there were really no good treatments for patients except for corneal transplant for those whose vision loss becomes severe,” says Dr. Raizman.

The condition affects 170,000 people in the United States, and typically emerges during early teenage years to young adulthood and grows progressively worse.

The cornea is normally round and dome-like. In people with keratoconus, the cornea has a weak structure. The cause of the weakness is not known but the cornea develops a cone-like bulge, which leads to blurring and distortion of vision. Traditional management of keratoconus involves a combination of wearing glasses and rigid contact lenses that must be fitted and changed as the condition progresses.

With crosslinking, eye drops containing a riboflavin (vitamin B-2) solution are applied to the cornea. An ultraviolet light activates the crosslinking process increasing the bonds that strengthen the collagen fibers, preventing the cornea from bulging. The treatment essentially halts the progression of the disease, and in some cases, may improve it.

Crosslinking is not yet covered by most insurance plans. OCB is working with keratoconus patients to ensure that all who would benefit from crosslinking will have access to the treatment. To that end, OCB is offering payment plans and other options for patients who cannot afford the procedure.

“Now that we have this procedure available, we want to be able to catch patients at the earliest stages of the disease while they still have good vision. That way, we may prevent the need for surgery or in some cases, even the need for contact lenses,” says Dr. Raizman.

Dr. Heier serves as NEOS President

OCB Congratulates Jeffrey S. Heier, MD who in June was elected to serve a one-year term as President of the New England Ophthalmological Society (NEOS). Dr. Heier is a retina specialist and leading researcher into treatment for macular degeneration. He is also Co-President of OCB. NEOS, founded in 1884, is a non-profit organization with more than 700 members that is dedicated to the study and advancement of ophthalmology.

Dr. Heier is pictured here (6th from right) with the NEOS Executive Board. Also pictured is OCB Ophthalmologist Laura Fine, MD (8th from right).

Welcome Dr. Joseph


Leading Research

OCB eye doctors are actively involved in research that is advancing the medical and surgical care of a wide range of eye conditions. To follow their published research and presentations, visit www.eyeboston.com and click on “In the News.”