



Eye Care Insight

Winter/Spring 2008

BAPTIST
EYE
SURGEONS



... A Commitment to Lifestyle

**Our Physicians are Board
Certified by the American
Board of Ophthalmology**

Marc A. Bodenheimer, M.D.

L. Nichols Cook, M.D.

Robert E. Hall, M.D.

Albert K. Holmes, M.D.

Mark Y. Ivens, M.D.

James R. Kimble, M.D.

J. Franklin Murchison, Jr., M.D.

Darin S. Smith, M.D.

William R. Sullivan, M.D.

Two Convenient Locations

Baptist Eye Institute

2020 Kay Street
Knoxville, TN 37920
865-579-3920

Tennessee Valley Eye Center

140 Capital Drive
Knoxville, TN 37922
865-579-3920

Cataract Surgery: The Procedure is Done on an Outpatient Basis in Virtually All Instances

Baptist Eye Surgeons encourage cataract sufferers to find out more about the latest technology for the treatment of cataracts.

Cataract surgery is recommended when vision loss interferes with normal activities such as reading or driving, or if the cataract is preventing the treatment of another problem. "The decision to perform surgery should be based on the patient's own assessment of visual trouble combined with the results of the eye examination and measurement of vision using a standard vision test," says **Dr. Nichols Cook** of Baptist Eye Surgeons.



L. Nichols Cook, MD
Cataract & refractive surgery,
general ophthalmology

Phacoemulsification, a type of surgery in which the lens material is softened with sound waves and removed through a blunt needle, is the most common technique for removing a cataract. It can be compared to making an opening in the front of the candy shell of an M & M, then removing the chocolate. To get to the cataract, a tiny incision less than 1/8 inch is made on the side of the eye. This is usually able to seal itself, and doesn't require a stitch, hence the common name is "no stitch cataract surgery." Sometimes, the cataract is not removed soon enough and becomes too hard to remove this way. In these cases a larger incision is used and the "chocolate" is removed in one piece. After the cloudy material is removed, an artificial lens is implanted in almost all cases to reduce the strength of eye-glasses needed afterwards.

Today, the cataract surgery itself usually takes less than ten minutes, although the patient is usually at the facility for several hours. The procedure is done on an outpatient basis in virtually all instances.

The surgery requires anesthesia around the eye and some patients may receive a mild sedative to help them relax. Afterwards, some people notice a mild, scratchy irritation, but most report no discomfort. Most patients can resume normal activities within a day to a week.

"Occasionally, improvement in vision occurs almost immediately after cataract surgery, but more often, the improvement occurs gradually over several days or weeks," Dr. Cook says. "It's important to note that a lens implant does not guarantee perfect vision. In fact, most people will continue to need glasses to correct either distance or near vision, or both."

Visit our Website:
www.baptisteye.com

Advances in Cataract Surgery

Modern cataract surgery makes use of an amazing array of high-tech equipment and techniques. Gone are the days when cataract surgery required a two-week stay in the hospital, with your head immobilized with sandbags until you healed. Today's cataract surgery is an out-patient procedure that takes a half-hour or less and lets you get back to your normal activity level within a few days.

One of the most dramatic advances in cataract surgery involves anesthesia for the procedure. Long ago, patients were put to sleep for cataract surgery. More recently, patients were given a shot behind the eye before surgery to numb it. But now, the vast majority of cataract surgeries are performed under topical anesthesia, with only a few numbing drops placed on your eye before the start of the procedure. This eliminates both the risks and discomforts of the shot. Also, the shot made the vision blurry for several hours after surgery—with just the numbing drops, some patients notice improved vision within minutes after the surgery is completed.

The technique of cataract removal has also undergone major improvements. Once upon a time, the cataract was removed whole through an incision over a half-inch long. Modern cataract surgery is performed through an incision less than an eighth of an inch long. A small instrument is inserted through this tiny incision, and is used to break the cataract into many small

pieces that are removed without the need for a large incision. There are many advantages to a smaller incision, including a faster recovery time, less need for glasses after surgery, and a smaller risk of infections after surgery. In addition, while the old incisions required many stitches to close up, modern cataract surgery can often be performed without any stitches, or with one stitch at most.

During cataract surgery, the cloudy lens of your eye is removed and replaced with a clear lens implant. In the old days, there were no implants, and patients had to wear thick glasses (“Coke-bottle glasses”) after surgery to see well. Now there are implants that are placed directly into the eye, reducing or eliminating the need for any glasses after surgery. The newest implants (called multifocal implants, or presbyopia-correcting implants) can even provide sharp vision at both distance and up close, reducing or eliminating the need for any kind of glasses, including reading glasses, after

surgery.

Antibiotic advancements also benefit patients undergoing cataract surgery. Cataract surgery is among the most successful operations in all of medicine, but complications can occasionally occur. One of the most severe complications is an infection in the eye called endophthalmitis. To reduce your risk of getting endophthalmitis, your doctor will prescribe antibiotic eye drops to use around the time of your surgery. New antibiotics developed in the past few years are more effective than ever at preventing eye infections during cataract surgery.

Routine cataract surgery is so well tolerated that it has become the most common surgery performed on adults in the United States. As a result of these many high-tech developments in all aspects of cataract surgery, the operation is more successful—and has a faster recovery time—than ever before.



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Why are Eye Exams Important in Diabetes?

Diabetes is a common disease in the United States, and diabetic eye disease is the most common cause of blindness in the US. Regular eye examinations are important in diabetes because diabetic eye disease and the vision loss caused by it are completely preventable.

In diabetes, high sugar levels in the blood damage blood vessels throughout the entire body. Damage to blood vessels in the kidneys can cause kidney failure requiring dialysis. Damage to blood vessels in nerves can cause neuropathy. Your eye also has many blood vessels in it, and diabetes can also damage those blood vessels. In particular, high blood glucose levels cause damage to the blood vessels in the retina of the eye. The retina lines the back of your eye like wallpaper, and is like the film in a camera—it detects the light entering your eye and turns it into pictures for your brain to see. When the retina's blood vessels are damaged, the retina stops working properly, and sight can be lost.

After being exposed to high sugar levels for a long time, the blood vessels in the retina develop some weak spots. These weak spots often pooch out like bubbles along the blood vessels, and these are called microaneurysms. Sometimes the microaneurysms rupture, and blood spills into the retina to form small dot hemorrhages. Your retina will eventually clear the blood away, but some debris is often left behind—these clumps of debris are called hard exudates. Altogether, these changes—microaneurysms, dot hemorrhages, and hard exudates—are called background diabetic eye disease. Most people with diabetes get these small changes in their eyes after

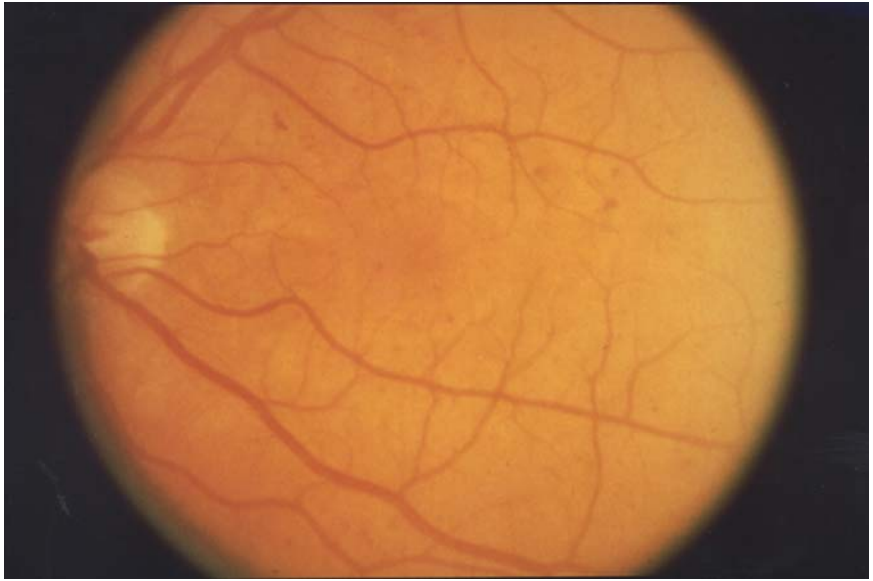


Photo Credit: National Eye Institute, National Institutes of Health.

Background diabetic retinopathy (pictured above) is a sign that your retina's blood vessels are sick. If enough of the blood vessels rupture, the retina may not receive enough blood to keep it healthy.

having diabetes for 10 years or more. Background diabetic eye disease does not usually cause significant vision loss unless the swelling occurs in the very center part of the retina, called the macula. If you have swelling here, it is called diabetic macular swelling, and it is a common cause of vision loss among diabetic patients.

Background diabetic retinopathy is a sign that your retina's blood vessels are sick. If enough of the blood vessels rupture, the retina may not receive enough blood to keep it healthy. In this case, the retina will try to grow new blood vessels to replace the sick ones. Unfortunately, these new blood vessels usually grow in the wrong places. They are fragile, and they break easily, sometimes spilling enough blood to fill up the eye. When these new blood vessels begin to grow, it is called proliferative diabetic eye disease.

Proliferative diabetic eye disease is less common than background diabetic eye disease, but is much more likely to take away some or all of your vision.

If it is caught early—before your vision is damaged—proliferative diabetic eye disease can be treated with laser therapy to save your vision. Once the vision is lost, it is very hard to get it back.

Background and early proliferative diabetic retinopathy have no symptoms. The only way to know if you have these changes—and need laser therapy to save your sight—is to visit your eye doctor regularly. People with diabetes should have their eyes examined at least once a year to make sure they do not have early damage that threatens their vision.

Meet the Baptist Eye Surgeons Team of Physicians

EXCELLENCE IN EYE CARE

All members of the Baptist Eye Surgeons physician team are board certified by the American Board of Ophthalmology.



Marc A. Bodenheimer, MD
*Cataract & refractive surgery,
corneal & external disease,
general ophthalmology*



L. Nichols Cook, MD
*Cataract & refractive surgery,
general ophthalmology*



Robert E. Hall, MD
*Cataract & refractive surgery,
general ophthalmology*



Albert K. Holmes, MD
*Cataract & refractive surgery,
cosmetic & general ophthalmology*



Mark Y. Ivens, MD
*Cataract & refractive surgery,
general ophthalmology*



James R. Kimble, MD
*Cataract, refractive & glaucoma
surgery, general ophthalmology*



J. Franklin Murchison, Jr., MD
*Cataract & refractive surgery,
corneal & external disease,
general ophthalmology*



Darin S. Smith, MD
*Cataract & refractive surgery,
general ophthalmology*



William R. Sullivan, MD
General ophthalmology

Baptist Eye Surgeons: Office Locations

Baptist Eye Surgeons at the Baptist Eye Institute
2020 Kay Street • Knoxville, TN 37920
Phone: 865-579-3920 • Fax: 865-579-3963

Baptist Eye Surgeons at the Tennessee Valley Eye Center
140 Capital Drive • Knoxville, TN 37922
Phone: 865-579-3920 • Fax: 865-579-3963