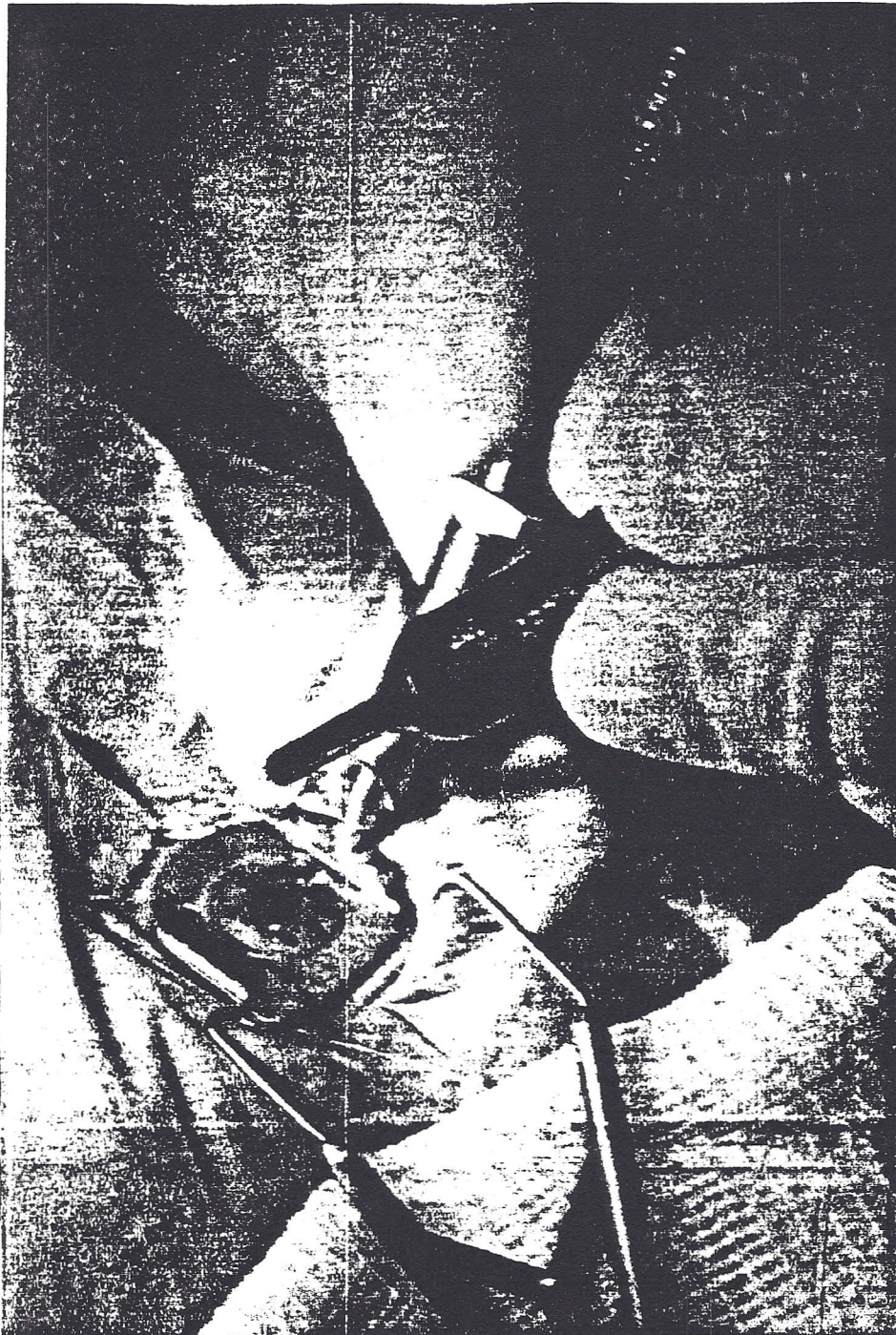


healthyLife

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Seeing is believing

● The decision to have eye surgery isn't easy. You should go into it with your eyes wide open.

BY ALEXANDREA RAVENELLE
Staff Writer

With sterile booties covering his shoes and a matching blue surgical bonnet on his head, Stanley Pigman looks almost peaceful reclining in the surgery chair.

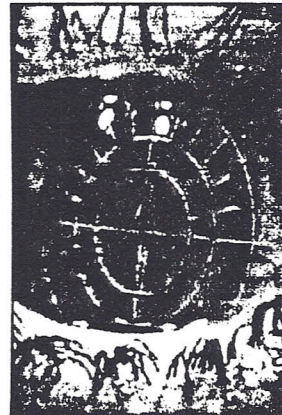
He lies perfectly still, his head taped to the headrest to prevent movement. One eye is taped shut with a bandage. The other eye is kept open with a speculum, the eyelid held away from the incision in his eye. A plastic sheet drapes most of his face.

Only his gripped hands, clasped as if praying, reveal Pigman's tension; his knuckles are white and his fingers purple from the lack of oxygen.

As the VISX laser shoots small, intense pulses of light at his exposed cornea, smoothing out the surface, it makes a ta-ta-ta sound that seems unusually loud by comparison to the soft music in the background.

When the 10- to 15-minute procedure is over, Pigman's vision has improved drastically, from 20/200 to about 20/30.

Pigman, 39, of High Point travels constantly for his job at a mining company. Until recently, he wore glasses or contacts for everything from reading to driving. When he traveled, he had to carry an assortment of contact cleaning solutions and eyeglasses,



During surgery, an image of the eye is projected on a computer monitor with a cross hair and grid.

increasing the number of items he had to pack.

"It became a nuisance," he said. The decision to go under the laser is not an easy choice, especially because the surgery is considered elective and not covered by insurance companies.

The surgery doesn't always work. When it doesn't, your vision is worse — for life. Problems with the surgery

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PHOTOS BY JERRY WOLFORD/News

Stanley Pigman of High Point undergoes laser surgery at Southeastern Eye Center to improve his vision. The medical staff includes (from left) Carol Trombly, Tom Malosky and Dr. Karl Stowecipher.

EYE

Continued from page D1

were the topic of a symposium at the American Academy of Ophthalmology's meeting last fall in New Orleans.

But most of the time it works, says Philip Buscemi, a Greensboro optometrist and LASIK patient himself. Friends' success stories are a big part of the reason that more people make the choice every year.

In 1998, industry experts estimate that LASIK (laser assisted in-situ keratomileusis) was performed on 400,000 eyes. For 1999, the estimated number of procedures is up to 800,000. By 2000, 1.2 million eyes are expected to undergo surgery, although some experts expect the numbers to go much higher, said Thomas McKay, marketing manager at laser manufacturer VISX in Santa Clara, Calif.

"It's really an amazing procedure," said Buscemi.

The three types of vision impairment are nearsightedness, farsightedness and astigmatism. In nearsightedness, the eyeball is elongated or the cornea is too steep, and light is focused in front of the retina, the light-sensitive area of the eye. Farsighted people have the opposite problem: their eyeball is too short or the cornea is too flat, and light focuses behind the retina. The corneas of people with astigmatism curve more like a football than a sphere, causing multiple focus points on the retina.

LASIK surgery changes the cornea's curvature by smoothing out the surface, flattening the steep cornea of a nearsighted person or removing the football curve of an astigmatism. The surgery also is effective on farsighted people.

The patient takes a Valium and receives antibiotic and anesthetic drops in the eye being worked on but is awake for the entire procedure.

After the eye area is cleaned and centered under the microscope, the doctor attaches a suction ring to the eyeball. The ring guides the surgeon in cutting a small, circular flap in the patient's cornea, roughly the thickness of a contact lens.

The flap is opened and moved to the side, and the laser is centered on the eye. A computer preprogrammed with information on the patient's vision impairment regulates the duration and frequency of the laser pulses, usually six to 10 per second, as it reshapes the cornea.

When the laser work is done, the flap is smoothed back over the cornea, where it is held in place by a natural Super Glue-type substance secreted by the eye.

The procedure costs between \$1,950 and \$2,450 per eye; 90 percent of patients get both eyes done. Results are immediate, although vision may take awhile to stabilize.

There's no guarantee of 20/20 vision, doctors say, and almost everyone eventually will need reading glasses.

But the operation's success rate is admirable. That's true for Dr. Karl Stonecipher of the Southeastern Eye Center, Pigman's surgeon. Three months after surgery, 93 percent of Stonecipher's patients



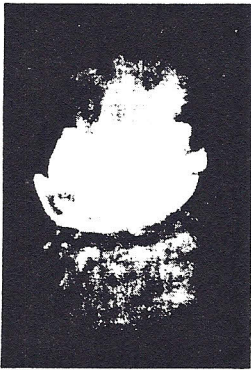
PHOTOS BY JERRY WOLFORD/News & Record

Dr. Karl Stonecipher performs about 150 LASIK surgeries per month, sometimes as many as 20 to 25 eyes per day.

WANT TO KNOW MORE?

The Better Business Bureau and Platypus Productions have produced a video, "Corrective Eye Surgery: Reading Between the Lines." The video should be available in the Greensboro Public Library by the end of July or the middle of August.

Call the Better Business Bureau at (818) 386-5510 to find out about a doctor's business history. Call the American Board of Ophthalmology's Board Certification Line at (800) 776-2378, or check out its Web site at www.certifieddoctor.org to see if he or she is board-certified.



This is a close-up view of a laser blast that is used on the eyes. During surgery, the laser pulses six to 10 times per second as it reshapes the cornea.

have 20/20 vision, and all have at least 20/25 vision, he said.

Vision is easiest to improve and the most successful when the impairment ranges from slight to moderate. Patients who are unable to read even the biggest letters on the eye chart don't fare quite as well, but the improvement over their previous vision is still dramatic. Although only 74 percent have 20/20 vision three months after surgery, 97 percent can see 20/32.

By comparison, you only need 20/40 vision to drive a car without corrective lenses. Most patients have 20/40 vision by the time they

leave the office.

"Ninety percent of the patient population (with mild to moderate vision impairment) will see 20/20 or better," said Stonecipher. "Does everybody achieve what they want? No."

Complications from the procedure are grouped in three categories: temporary, nonsight threatening and sight threatening.

Temporary complications, usually gone within six to eight weeks, include the sensation of an eyelash in the eye, seeing glare or starbursts and fluctuating vision.

Nonsight threatening complications include overcorrecting the individual's vision (changing nearsightedness into farsightedness) or undercorrecting the vision. Some patients regress; their vision is corrected but then reverts to a state of impairment.

Potential sight-threatening complications are rare but do exist. Although Stonecipher has never had a patient go blind or experience an infection because of the procedure, about one person out of every 2,000 to 5,000 nationwide develops a serious infection.

"It's there. It's a risk," he said. "You can have somebody go blind after any (eye) surgery, whether it's LASIK or removing a mole from your eyelid."

Patients also can experience flap complications (0.25 percent) or slipped flaps (0.3 percent). Epithelial ingrowth, when skin grows under the flap, also can occur, though rarely (0.25 percent).

The overwhelming majority of complications can be treated.

Although the average complication rate nationally ranges from 2 percent to 4 percent, Stonecipher says his rate of complications is just 0.7 percent.

Stonecipher performs approximately 150 LASIK surgeries per month, sometimes as many as 20 to 25 eyes per day, three times a week.

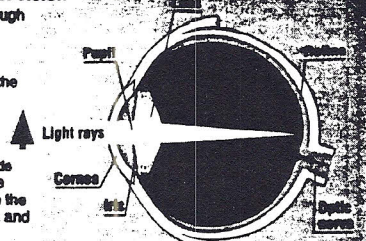
Most individuals are candidates for the surgery unless they have serious cornea problems. The procedure is not suggested for people younger than age 18 because their eyes are still developing and changing.

As with any surgery, the doctor-patient relationship is very important. Stonecipher suggests that prospective patients consider not just the doctor's qualifications, but also his or her bedside manner and

LASIK Surgery

The mechanics of vision

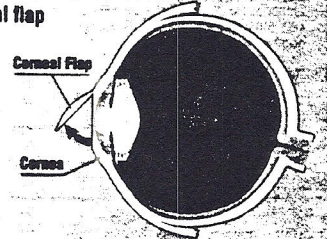
Light rays pass through the cornea (the transparent covering of the eye) through the lens to the retina at the back of the eye. The image is then sent to the brain. How well you see depends on how precisely the image is focused on the retina by the cornea and lens.



How LASIK surgery works

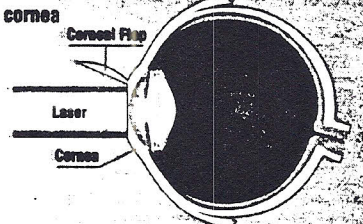
Raising the corneal flap

After the eye is anesthetized, the LASIK surgeon uses a motorized blade on the surface of the cornea to create a hinged flap, which is gently lifted up.



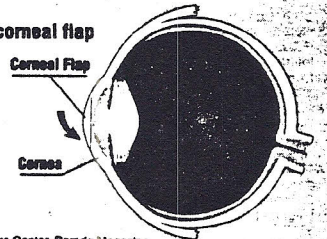
Reshaping the cornea

A computer-controlled laser is used to "sculpt" the underlying cornea.



Repositioning the corneal flap

The flap is then returned to its original position, and healing begins. Most patients go home within an hour. Most notice improved vision almost immediately.



Source: Southeastern Eye Care Center, Parade Magazine

DOUG COX/News & Record

the patient's comfort factor. "The best advice I could give a patient is to be comfortable with your surgeon and surroundings. Find someone you like and who you think has done a lot or who's experienced," Stonecipher said. "You want to make sure he's not just thinking of you as another number."

Laser surgery recently has been approved for farsightedness, but the procedure has not yet been approved by the FDA for advertising. Doctors can perform the operation in house but cannot advertise miraculous healings or tell patients they definitely will be "glasses-free" afterward. No training or mandatory certification process is required for doctors, so a patient's selection of a reputable doctor with a proven success record is crucial. Although everyone who opts for

the surgery does so to improve his or her vision, many patients undergo it for "quality of life" reasons.

His motorcycle hobby helped Brian Walker, 30, make the decision to trade his glasses and contacts for LASIK eye surgery.

"Four years from now I will have spent more on that than this," he said, comparing the expenses of his corrective lenses with the price of the surgery.

And when the surgery was over and his eyes had rested and healed enough, the Sophia man knew exactly what he wanted to do first.

"Ride my motorcycle," he said. "That's why I'm doing it, so I can ride my motorcycle and get rid of the prescription lenses in my goggles."

The Associated Press contributed to this report.