

Argus Leader
<http://www.argusleader.com>

An eye surgery to focus on.

There's no pain and as of now, no cost. Experimental inlay procedure can correct vision.

There just might be a perfect surgery. One with no IV, no sutures and no blood. And best of all: No cost.

By Dorene Weinstein
dweinste@argusleader.com
Published: March 19, 2007 1:55 A.M.

There just might be a perfect surgery. One with no IV, no sutures and no blood. And best of all: No cost.

Officially called a procedure rather than a surgery, the AcuFocus Corneal Inlay is an FDA monitored experimental implant designed specifically to help patients who need reading glasses.

The inlay goes over the pupil under a flap made in the cornea, improving eyesight for closeup work, such as reading.

"Every other method we have blurs distance vision. This is the first procedure that doesn't compromise distance vision," says Dr. Vance Thompson, a Sioux Falls doctor. He is conducting his 28th clinical trial of innovative procedures devoted to improving vision using laser and implant technology. This is the second phase of the experiment using this inlay technology.

The first patients were done a year ago. An FDA trial typically consists of three phases before the FDA approves the procedure for public use.

This time around, Thompson is looking for 40 volunteers to try out the inlay. Volunteers must meet pre-set guidelines and commit to follow-up appointments after the surgery.

This procedure is not available to the general public. It is unknown how much the surgery will cost after its approval by the FDA in three to five years, Thompson says.

What a rigmarole

Crystal Gislason suffers the curse of the aging eye. "I started wearing glasses five years ago," says Gislason, 50. "I noticed it at the store. We have three registers at work, and I was constantly having to make sure my glasses were around."

As we get older the ability of the lens to focus begins to diminish. The condition is called presbyopia and happens to everyone. About 90 million baby boomers already have presbyopia or will develop it in the next 10 years making reading glasses essential for everyday tasks.

Gislason has a selection of reading glasses, but they weren't comfortable to wear all the time and distorted her distance vision. She tripped on steps when she wore them all the time, and "left glasses at restaurants," when she didn't.

What a hassle.

She originally came to Sanford Clinic Vance Thompson Vision because she was interested in having a different eye surgery. When staff asked her to participate in the study, she jumped at the chance.

The Procedure

Soothing music is piped overhead in a yellow room as two nurses prepare the area for the procedure.

The room feels chilly. "The laser machine likes a cool room," says Jan Becker, registered nurse.

Gislason is lying on her back wearing her street clothes covered with a thick grey blanket. Her left eye is patched over. The valium has relaxed her, but she's awake and able to follow directions. A topical anesthetic is put in her right eye.

Gislason from Gary will be the second person in the state to receive the AcuFocus Corneal Inlay to correct her vision.

A TV monitor, microscope and the IntraLASE flap maker crowd the room along with observers and medical personnel.

Thompson dons sterile gloves and talks her through the procedure offering frequent updates. "You'll feel pressure and your vision is going to dim out but I don't want you to worry," he says.

Looking through the microscope, Thompson measures and marks the pupil, moves the flap-maker into position and quickly makes a laser incision, a flap, on the cornea.

"Flap thickness is 202 (microns)" calls Gloria Top, registered nurse, assisting in the procedure. "A human hair is 70 microns," she says to observers.

Thompson irrigates the eye thoroughly. "You have a perfect flap. Everything's going beautifully," he says. He mops up the excess moisture and deftly places the inlay under the flap, smoothing the cornea in place.

The flap does not need stitches because the sticky surface of the cornea makes it adhere, Thompson says.

The procedure is over in less than 20 minutes.

Gislason will use antibiotic drops and wear a patch on her eye for the first 24 hours and then just at night for two weeks.

Her up-close vision will be blurry during the early healing process but will improve every week for up to a year as her eye heals and both eyes learn to work together, Thompson says.

Then Gislason plans to throw out her readers, flaunt her spectacle-less face to her friends and go shopping.

"I'm going to buy more sunglasses."

Steve Eleeson knows how she feels.

"I can read," says the 52-year-old Brandon man, who had 12 pair of reading glasses before the surgery. He participated in the first phase of the FDA monitored inlay experiment a year ago. "Waiting to have the procedure done, I couldn't read the magazines in the waiting room."

But the morning after the surgery he had 20/25 vision.

"I had the Argus Leader laying on the counter while I was making breakfast, and I realized I was reading it."

He hasn't stopped rejoicing. Knowing that your vision is only going to worsen with age affects your self-esteem, he says. "If you forget your readers, you almost feel handicapped."

The inlay has eliminated that problem. He went back to work the same day and "nobody knew I'd had it done."

And if something should go wrong the inlay can be removed.

Another bonus?

"There was no pain. Absolutely none," he says. "You keep waiting for the numbing drops to wear off, waiting for the pain. But it doesn't happen."