

Jacksonville ophthalmologist Arun Gulani has developed a technique to repair corneal scars

by Charlie Patton



Corneal scarring can be caused by complications from lasik surgery, by infections that develop under contact lenses or by accidents.

In general, the recommended approach to repairing corneal scarring, which can severely impair vision, has been a corneal transplant.

Jacksonville ophthalmologist Arun Gulani of the Gulani Vision Institute doesn't like that approach.

"Transplant means a year of pain and no great vision at the end of it," Gulani said during a recent interview.

Instead, he has been working for the last 25 years to perfect a different approach. He uses a laser to “erase” corneal scars, effectively restoring good vision to the previously damaged eye.

“In a few minutes, using an invisible laser, we can make these people see,” Gulani said. “That’s huge to me ... Jacksonville is the birthplace of this technique.”

Gulani’s reputation for innovative approaches has built him an international reputation. In recent months, he has treated patients from Italy, Norway, Germany, China and Sweden.

Sebastian Hedlund, 25, made the journey from Sweden last month so he could undergo treatment by Gulani, who will be giving the keynote address in April at the meeting of the American Society of Cataract and Refractive Surgery.

Hedlund suffered a workplace accident in February 2016 that scarred the cornea of his left eye. An equipment malfunction resulted in his face getting covered by an alkali mixture that blinded the center of his left eye.

As a result, his vision became quite blurry and he began seeing double images. That made it difficult to do his job, which requires regular 12-hour shifts in front of a computer.

Unable to find anybody in Sweden who offered him an effective treatment, Hedlund began doing online research and came across some articles about Gulani’s scar-erasing technique.

“Everyone seemed so happy with the results,” Hedlund said

So he arranged to come to Jacksonville and undergo Gulani’s scar-erasing treatment.

The day after he was treated, he said the blurry vision and double images were “completely gone right away.”

“I’m not in any pain and there is no redness,” he said. “I’m very happy with the whole thing.”

A week later, he went home with 20/15 vision. His vision had been 20/40 before he came to the U.S.

Not all Gulani’s patients make long journeys to receive treatment.

Noel Keller, 41, lives in Winter Park. Keller is legally blind in his right eye, the result of a childhood accident. In February 2017 he developed a bacterial ulcer in his left eye. As a result, his cornea was scarred and he spent four months blind and on disability.

He tried wearing a scleral lens, a special form of contact lens used by people who have damaged or irregular corneas. But his eye rejected it. Eventually he was fitted with a rigid plastic gas-permeable lens that “gave me pretty good sight,” he said.

“But the sun plays a lot of tricks when you still have the scar,” said Keller, whose profession as a pharmaceutical salesman requires a lot of time spent in an automobile.

Told his only option was a corneal transplant, Keller had little interest in undergoing the surgery.

“There is no guarantee and it’s a lengthy recovery,” he said.

Then one of his doctors told him that he had heard that there was now a procedure to remove corneal scars. He did some online research and discovered that Gulani was using the technique. He found a few patients who has undergone Gulani ’s corneal scar erasing technique and had “really good results.”

Keller admitted being “really nervous” before undergoing the procedure.

But about a week after the procedure, he went home with the vision restored in his left eye.