

Congratulations: You have cataracts

Local eye surgeon, Arun C. Gulani, M.D., M.S., says cataracts are an opportunity to see better than you ever have before — for the rest of your life.

Arun C. Gulani, M.D., M.S.
Special to The Recorder

A cataract is the clouding of our natural lens within the eye. Very much like the graying of our hair, a cataract most commonly is an age related change and not a disease.

Just like the lens in a camera, you are born with a clear and soft natural lens which over time and with age becomes cloudy and hard—which is now called a cataract.

Since this cataract was a lens to begin with, it needs to be replaced by an artificial lens implant (intra ocular lens implant or IOL)

Although they have been known through centuries of human existence, we still do not have a cure for cataracts besides surgically removing them.

Modern day cataract surgery is performed as an outpatient procedure using the "No Needles", "No Patch" and "No Stitch" technique with computer programmed High Speed Ultrasound along with Diamond edge, micro-instruments.

The cataract, once removed, is replaced with an artificial lens implant (IOL) that is inserted into the space of the original cataract and it stays in the eye for the rest of your life. You do not feel this new lens. In most cases you are back in action the very next day and can plan for your second eye surgery in about one to two weeks.

Raising the bar in a new era

Even though millions of cataract surgeries are performed throughout the world every year and it is called a "routine procedure," no cataract surgery should be routine.

Cataract surgery is an endeavor to help patients see what they have been missing and also an opportunity to plan for the best vision they can have, for the rest of their life.

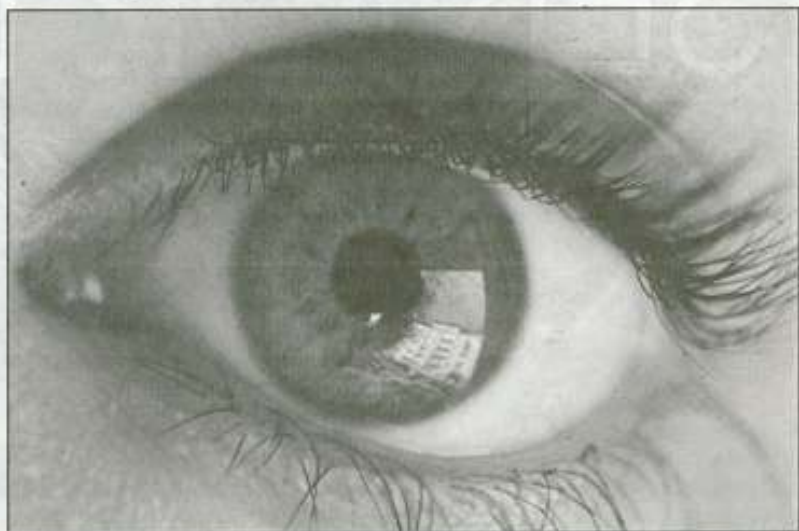
With such an outlook, eye doctors are encouraged to classify every cataract patient into four categories and then individually plan to address all of their correctable visual issues using custom designed cataract surgery with New Generation Lens Implants and/or staged Lasik Laser Vision Surgery.

Gulani "Cataract Category Classification":

- I. Cataracts with Associated Refractive errors (i.e. Nearsightedness, Farsightedness, Astigmatism)
- II. Cataracts with Previous Eye Surgery (i.e. RK, Lasik, etc)
- III. Cataracts with Associated Pathology (i.e. Fuchs Corneal disease, Corneal scar, Keratoconus, etc)
- IV. Enhancing Previous Cataract Surgery (i.e. Reading glasses correction, haloes, glare, etc)

Custom Cataract Surgery & New Technology Lens Implants (IOLs)

Exciting advances in IOL designs now give patients the option to choose between a Monofocal, Toric (Astigmatism correcting), Multifocal(Progressive) and Accommodating Presbyopia-Correcting IOLs (like bifocal/multifocal/progressive glasses) which provide a range of vision at near and distance, thereby allowing a person to perform most of their daily activities with reduced or no



dependence on glasses.

Now, if you combine the analogy of a camera to a cataract patient, most cataract patients do wear some glasses or contact lenses for associated nearsightedness or farsightedness and/or astigmatism. Of course, they all have presbyopia since they are usually more than 40 years old.

To analyze this futuristic concept, take for example a Category I cataract patient wearing bifocal glasses for farsightedness, astigmatism and presbyopia (reading glasses). We thus see 4 visual factors affected here: cataract (cloudy vision), farsightedness, astigmatism and presbyopia.

The fact that this patient has a medically significant cataract is confirmed. An eye surgeon should take this opportunity and correct all of this patient's visual problems through that one necessary surgery: cataract surgery.

Custom planning for customized vision

When designing a Customized Cataract surgery plan, your eye doctor needs to perform a wide range of diagnostic tests to determine two major aspects of the plan: the surgical plan and the technology plan.

A surgical technique will be chosen based on cataract densitometry analysis (kind of cataract). An incision or entry site and size will be determined based on 3D corneal topography (shape of your cornea). The surgeon will also make calculations for the lens implant power, size and orientation based on IOL Master V, A-Scan analysis, OCT, Optical simulator and Scheimpflug Virtual Imaging.

For the technology plan, the surgeon will determine the type of lens implant (monofocal, toric, accommodating, dual, etc). He or she will also determine the type of advanced Lasik laser vision surgery as staged combination. The surgeon should utilize diamond astigmatic keratotomy (AK) incisions so your cor-

a perfectly spherical basketball shape.

Additionally, combined knowledge of the technologies as well as the optics of the eye will allow measurement of higher order aberrations along with secondary refractive errors and optical zones with corneal asphericity (factors that affect vision beyond the three common refractive errors, i.e. nearsighted, farsighted and astigmatism).

Armed with all this information, your doctor can then dedicate a plan personalized for each patient aiming for your best vision for the rest of your life.

Getting back to the above patient example with 4 visual issues: such a patient can elect to have cataract surgery using a multifocal (progressive) lens implant that can correct 3 out of 4 visual issues (1, 2 & 4), resulting in only one visual issue remaining which is Astigmatism(3). This being a function of the football shaped cornea, it can be addressed with advanced Lasik surgery as planned a month after cataract surgery.

Thus this patient who could have landed as a "routine" case with "routine" cataract surgery now has a customized plan for their individual eye and vision goals.

Future trends:

Laser cataract surgery using nano-precision lasers for surgery and lens implants that can be fine tuned after surgery (instead of needing exchange) and also become a shade darker in sunlight (just like photocell sunglasses) is a reality.

So do not fret about being diagnosed with cataracts. Smile and ask your eye doctor if you can now have the vision you always desired with freedom to see at all distances and read without glasses—for the rest of your life.

Dr. Gulani is a world renowned eye surgeon and Lasik specialist. Former Chief of the Cornea service and Asst. Professor at University of Florida, School of Medicine; he is Founding Director of the Gulani Vision Institute.



Arun C. Gulani, M.D., M.S.

Joypeace3 Art & Design

You're never too old to Create, AND to have fun while doing it!!

FREE CANVAS WITH FIRST LESSON!

Personalized Painting Lessons for Seniors
Supplies can be provided if needed
In your home or my studio • References Available
Acrylic or Oil

Contact Ellen Jones

(904) 838-7317 • ellenjonesjp3@gmail.com

www.Joypeace3art.com

