

Pearls from 1000 robotic femtosecond bladeless laser-assisted cataract procedures

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Abstract

Introduction: Robotic Femtosecond Bladeless Laser Cataract Surgery is the newest and most controversial procedure in the world's most common surgical procedure cataract surgery with intraocular lens implantation. First performed in England in 1949 by Sir Harold Ridley, the technology for both removing the cataractous lens and implanting a corrective intraocular replacement lens has reached new heights of precision and success with the introduction of the femtosecond laser, approved by the FDA for use in patients (2011). The purpose of this study is to describe the experience of one surgeon who has performed over 1000 robotic femtosecond bladeless laser-assisted cataract procedures and review common pearls that have led to excellent outcomes. Femtosecond laser-helped waterfall medical procedure (FLACS) speaks to a potential change in outlook in waterfall medical procedure, however it isn't without discussion. Promoters of the innovation envoy FLACS as an upheaval that guarantees predominant results and an improved wellbeing profile for patients. Then again, spoilers highlight the enormous money related costs included and guarantee that comparative outcomes are feasible with ordinary little entry point phacoemulsification. This survey gives a decent and complete record of the improvement of FLACS since its beginning. It clarifies the physiology and mechanics basic the innovation, and basically audits the results and ramifications of beginning investigations.

Background: The advantages and impediments of utilizing femtosecond laser exactness to make corneal entry points, front capsulotomy, and focal point discontinuity are investigated, regarding the primary stages, which presently offer FLACS. Financial contemplations are talked about, notwithstanding the reasonable items related with the usage of FLACS in a social insurance setting. The impact on careful preparing and abilities is thought of and conceivable future utilizations of the innovation presented. While in its outset, FLACS sets out the energizing chance of another degree of exactness in waterfall medical procedure. Femtosecond laser-helped waterfall medical procedure (FLACS) speaks to a potential change in perspective in waterfall medical procedure, however has likewise produced extensive discussion. Backers of the innovation propose that the utilization of femtosecond laser accuracy will convey prevalent results, an improved wellbeing profile for patients and make ready for additional advances in the field. Then again, spoilers highlight the enormous money related costs included and

guarantee that comparable outcomes are reachable with traditional little entry point phacoemulsification.

Method:- 1000 patient procedures were reviewed to determine common complications and findings that would improve outcomes compared to early Femtosecond Laser-assisted Cataract Surgeries (FLACS). Common complications included: difficulty docking the laser on Asian patients and those with small eyelid fissures, incomplete anterior capsulotomy with early interface attachments, posterior capsule blow-out, decentered Lens capsulotomy and small pupil and Floppy Iris Syndrome. The main references to waterfall medical procedure were made by the researcher Aulus Celcius in 29 AD. Around 200 AD, the Indian doctor Sushruta depicted the surgery of framing, outlining an activity whereby the eye was punctured utilizing a 'grain molded tipped bar like instrument held with the center, record, and thumb fingers.' In the eighteenth century, waterfall medical procedure arrived at Europe, however it was not until the 1948, through Harold Ridley and the idea of intraocular focal point implantation allowing quick visual restoration, that goliath strides in careful method were made. In 1967, when Charles Kelman presented phacoemulsification, the requirement for a long postoperative remain in emergency clinic decreased, yet this was not embraced generally in the United Kingdom until the 1990s.

Results: Whilst some conservative ophthalmologists have criticized Femtosecond Laser-assisted Cataract Surgery (FLACS) as an overhyped gimmick, its usefulness in patients with dense, mature and hyper-mature (Morgagnian) cataracts and in assuring the accurate centration of newer multi-focal intraocular lens implants is unquestioned in the authors opinion. Robotic Femtosecond Bladeless Laser-assisted Cataract Surgery is here to stay and will be the future of the most common surgical procedure performed throughout the world. A nonappearance of randomisation and blinding has influenced most investigations performed to date. Despite the fact that this acquaints a danger of inclination with the outcomes, this is moderated by the way that most creators have arrived at comparative resolutions. It ought to likewise be noticed that these early examinations, by definition, are influenced by the wonder of the expectation to absorb information. Better outcomes are probably going to be accounted for as specialists climb the bend and refine the method.

Biography: John S Jarstad is an Associate Professor and Director of Cataract and Refractive (LASIK) surgery at

Extended Abstract

University of Missouri School of Medicine Department of Ophthalmology. He is a Graduate of Brigham Young University (Provo, Utah), MD from University of Washington (Seattle), and completed his Internship, Residency and Clinical Fellowship in Ophthalmology at Mayo Clinic (Rochester, Minnesota). He was a Medical Student Research Fellow at National Institutes of Health (Bethesda, Maryland). He has lectured and taught cataract surgery at University of Washington in Seattle and as visiting professor in Indonesia, Austria, the Philippines, North Korea, Vietnam, Cambodia, Zimbabwe, Egypt, Angola, Nigeria, Madagascar and England, where he was elected to the Royal Society of Medicine in 2006. He was named by Consumer Research Council one of “America’s Top Ophthalmologists” and by Newsweek magazine as one of 15 Top Laser Eye Surgeons in the USA. He has performed over 1000 robotic femtosecond bladeless laser cataract procedures since 2012. He is the author of 60 publications or presentations and one book.

*This work is partly presented at 6th International Conference and Exhibition on Anesthesia and Surgery
September 07-09, 2017 | London, UK*