Evolution of age-related cataract surgery

Italo Giuffre
Catholic University of Rome, Italy

Cataract surgery is one of the most intriguing subjects in ophthalmology. Time and time ago, people started to face a reduction of visual function associated to opacification of the lens, mostly in elderly people. In the past, but even in the last century in Eastern Europe, people tried to solve this surgical problem by “reclinatio” that is pushing traumatically the opacified lens into the vitreous chamber. Of course there was a moderate improvement of the visual function but at the risk of endophthalmitis and/or vitreitis. More recently, in the past century, the “intracapsular” cataract extraction was developed, associated with the use of contact lens and/or scleral-fixed intraocular lens (IOL) to improve the visual function of the patient. In the last 30 years, there was a fast evolution of the cataract surgery, including the "extracapsular" extraction, preserving the posterior capsule of the lens and positioning the IOL into the bag till the femto-laser assisted cataract surgery (FLACS). This technique uses the femtolaser to create the side-port, the arcuate incisions to reduce the astigmatism and, mainly, to make softer, the hardest nucleus of the cataract. The most modern cataract surgery techniques include: SMILE (small incision lenticule extraction) about lens extraction and microincision cataract surgery (MICS) with very small side-ports and micro-instruments. The evolution of the cataract extraction technique focuses mostly on some main topics as follows: to help cataract surgeons reduce the risk of intraoperative and postoperative side-effects, such as posterior capsule rupture and/or endophthalmitis, to reduce postop astigmatism, to improve and make faster visual recovery after the surgical procedure.

Biography

Italo Giuffre is a Consultant at the Department of Ophthalmology, Catholic University of Rome (Italy) since 2009 and Lecturer at the Orthoptics School in Bozen (Italy. He graduated as Medical Doctor cum laude from the University of Rome Tor Vergata in 1988. In 1992, he postgraduated cum laude in Ophthalmology from Sapienza University. He completed a Vitreo-retinal Fellowship at Antwerp Ophthalmology Department from 1995–1996, he was Lecturer of Genetic Eye Diseases at the Postgraduate Course of Ophthalmology at the University of Rome Tor Vergata. In 2001, he received his PhD in Neuropaediatrics and Malformative Diseases from Sapienza University. His publications include one book about genetics of eye diseases, five chapters in international books about ibopamine, apoptosis and tumorigenesis and genetics of glaucoma and over 90 articles in peer-reviewed journals. He served as Medical Officer in the Italian Army (1990–1991) and he is a Captain since 2000. He worked at the Ophthalmological Department at L’Aquila University from 1992 to 2009. Since then he has been serving as Consultant at the Glaucoma Service and Hereditary Eye Diseases Service at the Catholic University of Rome (Italy).

italogiuffre@libero.it