

# **Recent trends in management of complications of cataract surgery**

**Essay submitted for partial fulfilment of  
the master degree in ophthalmology**

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# LIST OF ABBREVIATIONS

AC	Anterior chamber
ACCS	Anterior capsule contraction syndrome
ASCRS	American Society of cataract and refractive surgery
As-OCT	Anterior segment – Optical coherence tomography
BPH	Benign prostatic hyperplasia
C <sub>3</sub> F <sub>8</sub>	Perfluoropropane (gas)
CBS	Capsular block syndrome
CCC	Continuous-tear curvilinear capsulorrhexis
CCIs	Clear corneal incisions
CICS	Corneal incision cataract surgery
CME	Cystoid macular edema
CNS	Coagulase – negative staphylococcus
CXL	Collagen Cross – Linking
DMD	Descemet’s membrane detachment
DSEK	Descemet – stripping endothelial keratoplasty
ECCE	Extracapsular cataract extraction
EGF	Endothelial growth factor
ESCRS	European society of cataract and Refractive surgery
EVS	Endophthalmitis vitrectomy study
FGF	Hepatocyte growth factor
FU	Fluorouracil
GV	Gentian violet
HGF	Fibroblast growth factor
HLE	Human lens epithelial line
I/A	Irrigation / Aspiration
ICCE	Intracapsular cataract extraction
IFIS	Intraoperative Floppy Iris syndrome
IL	Interleukin
IOL	Intraocular lens

IOP	Intraocular pressure
LEC	Lend epithelial cell
LIDRS	Lens – iris diaphragm retropulsion syndrome
MICS	Microincision cataract surgery
MMP	Matrix metalloproteinases
MRSA	Methicillin resistant staph. aureus.
Nd : YAG	Neodymium : Y ttrium – aluminium – garnet
NSAIDs	Nonsteroidal Anti-inflammatory drugs
OCT	Optical coherence tomography
OVD	Ophthalmic viscosurgical devices
PC	Posterior chamber
PCCC	Posterior CCC
PCO	Posterior capsule opacification
PCR	Posterior capsular rupture
PE	Phacoemulsification
PMMA	Poly methyl methacrylate
POAG	Primary open angle glaucoma
POD1	Postoperative day 1.
PRD	Pseudophakic retinal detachment
PX for PEX	Pseudoexfoliation
RD	Retinal detachment
RTA	Retinal Thickness Analyzer
SAIDs	Steroidal anti-inflammatory drugs
SF	Scleral – Fixated
SF <sub>6</sub>	Sulfur hexa fluoride (gas)
SFKS	Src family kinases
SIA	Surgical induced Astigmatism
SICS	Small incision cataract surgery
SMA	Smooth muscle actin
SPARC	Secreted protein acidic and rich in cystine
TASS	Toxic anterior segment syndrome
TECDS	Toxic endothelial cell destruction syndrome
TGFB	Transforming growth factor beta
UVA	Ultraviolet-A

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## CHAPTER 1

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# INTRAOPERATIVE COMPLICATIONS

### **1-1 Wound Construction complications**

Cataract incisions fall into two categories : sclerocorneal incisions (Fig. 1.3), including tangential and frown; and clear corneal incisions (Fig. 1.1), including near-clear incisions (Fig.1.2). The incisions problems are similar in both sclerocorneal and clear corneal incisions.