Intracameral Cefazolin as Prophylaxis Against Endophthalmitis in Cataract Surgery

Pedro Romero et al, J cataract refract surg 2006; 32:438-441

This non controlled retrospective observational study was conducted between January 2001 to December 2004 on all patients undergoing phacoemulsification and hydrogel intraocular lens implantation. The first group of patients (n=3650) did not receive intracameral cefazolin. The second group of patients (n=3618) received 0.1mg of cefazolin diluted in 0.1ml saline to 0.9%. Patients with a history of hypersensitivity to cephalosporins were excluded from both study groups.

The rates of postoperative endophthalmitis was lower in the cases with intracameral cefazolin (0.055%) than those without cefazolin injection (0.63%). Out of the 23(0.63%) endophthalmitis cases in the first group, 9(39.13%) of staphylococcus epidermidis, 4 (17.39%) of Staphylococcus aureus and 2(8.70%) cases of Streptococcus species were cultured. Klebsiella pneumoniae was cultured in (4.35%) There were no toxic effects on the cornea or retina. The authors conclude that intracameral cefazolin in cataract surgery demonstrates prophylactic effect in diminishing the rate of post operative endophthalmitis without toxic effects on cornea or retina.

An ESCRS study conducted by Peter Barry et al has also reported a lower rate of post operative endophthalmitis after intracameral cefuroxime injection and/or perioperative levofloxacin eye drops after phacoemulsification cataract surgery.

Intravitreal Bevacizumab Treatment of Choroidal Neovascularization Secondary to Age Related Macular Degeneration


This is a retrospective study to assess the short term anatomical and visual acuity response after an intravitreal injection of 1.25 mg Bevacizumab in patients with choroidal neovascularization secondary to age related macular degeneration.

Best corrected Snellen visual acuity, optical coherence tomography, ophthalmoscopic examinations were done at baseline and follow up visits over a 3 months period. 266 eyes of 266 patients were included in this study and follow up information for 251(94.4%) were available. The mean age of the patients was 80.3 years, mean baseline visual acuity was 20/184 and 175 (69.7%) had inadequate response to alternate methods of treatment. At one month and two months there was significant improvement in visual acuity (p<0.001) At 3 month follow up data available for 141 patients, mean visual acuity was 20/109(p<0.001) and 54(38.3%) patients had visual acuity improvement. The mean central macular thickness at baseline was
340 microns and decreased to a mean of 213 microns at month 3 (p<0.001). No endophthalmitis, increased intraocular pressure, retinal tear, or retinal detachment occurred. At 1 month, two patients had mild vitritis as did one patient at month two who had a history of recurrent uveitis. The short term results show a favorable outcome though the follow up is too short to make any specific treatment recommendations.

Trabeculectomy with Mitomycin C in Pseudophakic Patients with Open Angle Glaucoma: Outcomes and Risk Factors

Hector Fontana et al., AJO April 2006, Vol. 141

This study was a retrospective cohort study of patients who underwent trabeculectomy with mitomycin-C as an adjunctive. The study was conducted between August 1997 and December 2003. Data was obtained by chart review of 89 consecutive pseudophakic eyes of 73 patients. Patients with primary open angle glaucoma, normal tension glaucoma, pseudoxfolliation, pigmentary glaucoma, previous cases of cataract extraction with with PCIOL implantation were included in this study. All patients were above 40 years. Patients who had undergone previous combined surgery, those who had ACIOL, presence of vitreous in anterior chamber before trabeculectomy, patients with coexisting neurological or retinal diseases were excluded from the study. The indications for surgery were IOP values associated with high probability of glaucoma progression, deterioration of field and disc damage. The same surgeon performed all surgeries. A limbus or fornix based flap was made. Cellulose acetate sponge soaked in 0.3 mg/ml Mitomycin C for 1 to 3 minutes was placed at the scleral flap site. Duration depended on the risk for failure such as previous ocular surgery, location of cataract incision, clear corneal or scleral tunnel, characteristics of conjunctival hyperemia or inflammation. Post operatively all patients were put on corticosteroid drops four times a day for 2 weeks and tapered by 6-8 weeks. Laser suture lysis was needed in cases of too low filtration and too high IOP for target pressure.

Success was based on the following criteria.

Criteria A - Final IOP ≤ 18 mm of Hg, and ≥ 20% reduction of IOP OR reduction of at least 2 medications

Criteria B -Final IOP ≤ 15 mm of Hg and ≥ 25% IOP reduction OR reduction of at least 2 medications

Criteria C -Final IOP ≤ 12mm.HG and ≥ 30% IOP reduction OR reduction of at least 2 medications

For all criteria final IOP should be less than baseline IOP or equal to baseline IOP when baseline IOP is already less than target IOP

89 eyes of 73 patients were included in the study. The mean age was 80.8 ± 8.9 years with a range from 56 to 95 years. There were 26 males and 47 females, 67 white and 3 black and 3 Asian patients. 80 patients had POAG, 2 had NTG, 6 had pseudoxfolliation, 1 patient had pigmentary glaucoma. Mean preoperative IOP was 18.8 ± 8.8 mm of Hg with a range of 9 to 50 mm Hg. Number of preoperative medications was 3.0 ± 1.1 Ranging from 0-5. Limbus based flap was performed in 45 patients and fornix based flap in 44 patients. Laser suture lysis was needed in 30 patients. 11 patients required a second glaucoma procedure. The mean IOP decreased from 18.8 ± 6.6mm Hg to 10.2 ± 5.1 mm Hg at first year 10.0 ± 4.2 mm Hg at the end of 2 years. Average number of preoperative medications decreased from 3.0 ± 1.1 to 0.5 ± 1.0 at first year and 0.5 ± 0.9 at 2 years.

For criteria –A, Success Rate at 1st & 2nd year were 87%+-/- 4% & 67%+-/-4%

Criteria- B, 83%+-/-5% & 58%+-/-8%

Criteria- C, 76%+-/-5% & 50+-/- 7%

The authors conclude that increasing age, use of a limbus based flap and performance of laser suture lysis were factors that were associated with a smaller risk of failure. Trabeculectomy + Mitomycin C in pseudophakic eyes provides acceptable long-term success rates in pseudophakic patients with low incidence of complications.
Eyelid Tumors – Clinical Diagnosis and Surgical Treatment


It is a lucid book that would help an ophthalmologist to diagnose eyelid tumors in the clinical setting and beautifully illustrates and guides the surgeon to remove the tumors as well as repair the defect. Despite being a short and precise handy book, it gives a comprehensive and complete overview of all lid tumors both benign and malignant, as well as a description of other related lid lesions. The histopathology of tumors, frozen and Moh’s techniques are described well.

The book is very handy, readable, photographs are excellent. The benign lesions are also covered well with photographs that will leave a lasting impression on the reader’s mind.

The surgical anatomy, general principles of eyelid reconstruction are well elucidated, helpful not only for the oculoplastic surgeon but also for every postgraduate to ensure clear understanding of the complex lid anatomy.

Description of radiosurgery is unique and make for an interesting read.

The management of lesions is tackled depending on the tumor location and size. Depending on the site, there is a section each on surgical resection followed by reconstruction of the lid defects according to the site of the lesions – upper lid, lower lid, medial canthus and lateral canthus. All this is explained beautifully with illustrations. There is separate chapter on repair of lesions not involving eyelid margin, as well reconstructions of medial and lateral canthi.

The surgical technique is clearly illustrated, with good photographs, and so a reader can apply the knowledge in managing patients.

The entire clinical panorama of lid tumors both benign and malignant unfolds clearly without going into the details of etiopathogenesis, demography or pathology.

Strabismus Simplified

1st edition 3rd reprint

By Pradeep Sharma, Modern Publishers, 2004, 236 pages, indexed with 404 illustrations

Strabismology has been the lesser understood, forever so confusing subspecialty of Ophthalmology, with only few stalwarts who understand it, teach it and practice it appropriately. Everyday ophthalmology practice commonly deals with problems of binocular vision and ocular motility that challenges our knowledge on this subject which is akin to mathematics. This is the maiden book on strabismus by an Indian author. It is an excellent book, makes understanding of the subject lucid and interesting. His book is easy to understand in contrast to the standard books on Strabismology that end up confusing the beginner.
The text is, as the name suggests simple to read and understand. It starts with basic anatomy and physiology of ocular muscles. Then it explains the various phenomena that occur in strabismus and the methods to assess them, followed by assessment of such a patient. After building this background the book proceeds to explain the various types of strabismus. It has a separate chapter each on A-V phenomena, paralytic and restrictive squint. Nystagmus, an even more mind-boggling subject is very concisely represented making it’s understanding easier. The book includes a chapter each, on medical and surgical management of strabismus and lastly on its complications.

A separate chapter is written on the various instruments used in squint assessment. This would be of great help to a beginner and to an optometrist to familiarise and optimally use these orthoptic appliances.

The whole arrangement of the book is such that it makes the topic interesting, and the reading enjoyable. The suggested references at the end of each chapter can guide the strabismic enthusiast for further quest of knowledge.

The tables, diagrammatic and photographic illustrations, enhance understanding of the complex subject. The glossary is a useful addendum to the book that helps for quick reference with basic definitions related to ocular motility disorders. Having it indexed is an advantage although it seems to be slightly insufficient and can be improved upon.

It is a very good book for beginners. A beginner who has read this book would find reading other squint books much easier.

Incidentally also worth mentioning is the fact that two third of the author’s royalty from this book goes to CRY [Child Relief and You]

This book is small, handy and easy for quick reference especially in the outpatient clinic. It is so modestly priced that it can be a handy reference for all.

Dr. Pradeep Sharma’s excellence in teaching can be taken advantage of by the means of this book by ophthalmologists far and wide.

Book reviewed by Dr. Meenakshi Dhar, Dr. H. Sujithra, Dr. Abhijeet Khake, Amrita Institute of Medical Sciences and Research Centre, Cochin