



**7th Conjoint Ophthalmology Scientific Conference**  
***Angles and Curves***  
***New Perspectives on Glaucoma and Cornea Management***

15-17 SEPTEMBER 2017  
PULLMAN KUALA LUMPUR BANGSAR

# ABSTRACT BOOK



ORGANISED BY



# **Artwork for the 7<sup>th</sup> Conjoint Ophthalmology Scientific Conference (COSC 2017)**

## **Logo COSC 2017** *(designed by Dr Aliff Irwan Cheong)*

The logo symbolizes:

1. “C” represents as the whole eye, and its fluidic and wave like angle shape, exhibit the conference main theme “*Angles and Curves*”. The inferior tail of the “C” crosses and twist towards the word 2017 represents the conference aim in achieving advancement in Ophthalmology especially in Malaysia.
2. “O” represents the cornea and pupil – exhibit the specialty of interest : Glaucoma & Cornea.
3. “7” signify in RED is a hallmark of conference by COSC 2017.
4. BLUE – Theme color for conference and shown with the year its being held
5. BLACK – Second theme color for conference and shown in the other structure of interest

## **Front Cover Artwork** *(designed by Dr Tan Li Mun)*

1. Image of Cornea and Kuala Lumpur City Centre (KLCC)
  - Signifies the theme of our conjoint "Angles and Curves" and the location of our event held in Kuala Lumpur
2. Image of Pupil and Iris on the background
  - Signifies the other parts of anterior segment of the eye.

## Foreword

The 7<sup>th</sup> Conjoint Ophthalmology Scientific Conference (COSC 2017) was held on 15-17 September 2017 at the Pullman Kuala Lumpur Bangsar, Kuala Lumpur. These Scientific Conferences have been held by the Malaysian Universities Conjoint Committee of Ophthalmology every year since 2011, and the theme for this year's meeting was 'Angles and Curves - New Perspectives on Glaucoma and Cornea Management'. The programme consisted of workshops, lectures and case discussions conducted by expert international and local speakers, and updated participants on latest developments in the two exciting fields.

The other aim of this conference was to be a platform, particularly for ophthalmologists-in-training, to present their research and clinical findings, which is an essential skill needed to develop them into able and well-rounded ophthalmologists. Their submitted abstracts now form this special edition, with our sincere gratitude to JUMMEC for making this possible.

Associate Professor Dr Amir Samsudin  
Organising Committee Chairperson  
COSC 2017

**JOURNAL OF HEALTH AND TRANSLATION MEDICINE** (formerly  
known as Journal of the University of Malaya Medical Centre)  
**JUMMEC**

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## **LIST OF ABSTRACTS FOR FREE PAPERS**

### **ORAL01: EFFICACY AND SAFETY OF KETOROLAC TROMETHAMINE 0.45% FOR TREATMENT OF ANTERIOR SEGMENT INFLAMMATION AND PAIN AFTER PHACOEMULSIFICATION IN DIABETIC PATIENTS**

Ainal Adlin N, Norshamsiah MD, Othmaliza O, Jemaima CH, Safinaz MK

Department of Ophthalmology, Universiti Kebangsaan Malaysia, Jalan Yaacob Latif, 56000 Cheras, Kuala Lumpur, Malaysia.

**Purpose:** To determine the efficacy and safety of Ketorolac Tromethamine 0.45% (Acuvail) in anterior segment inflammation and pain after phacoemulsification in diabetic patients.

**Methods:** This is a prospective, double-blind randomized controlled trial involving 83 diabetic patients going for phacoemulsification with intraocular lens implantation. The diabetic retinopathy status ranged from no diabetic retinopathy (DR) to moderate non-proliferative retinopathy (NPDR). Patients were randomized into Acuvail (n=42) and Dexamethasone 0.1% (Maxidex) group (n=41). Primary outcome measure is cleared ocular inflammation on day 15 post-phacoemulsification. Secondary outcome measure is resolution of ocular pain on day 1 post-phacoemulsification. Safety is determined by the occurrence of adverse events throughout study period.

**Results:** Sixty-three patients completed the study, 31 from Acuvail group and 32 patients from Maxidex group. Demographic characteristics were comparable in both groups for age, race, gender and DR grade. There was no significant difference in the number of patients achieving cleared ocular inflammation by day 5 post-phacoemulsification in Acuvail group (n=5 patients) and Maxidex group (n=8 patients) (p= 0.384). Both groups showed increased proportion of patients with clearance of ocular inflammation by day 15 post-phacoemulsification, 54.83% in Acuvail and 75% in Maxidex group, respectively (p= 0.093). Resolution of pain on day 1 post phacoemulsification is seen in 67.7% in Acuvail and 62.5% in Maxidex group, respectively (p=0.663). The most common adverse event was itchiness, reported by 3 patients (9.7%) from Acuvail group and none in Maxidex group (p= 0.071).

**Conclusion:** Efficacy and safety of Acuvail is comparable to Maxidex in clearing anterior segment ocular inflammation post-phacoemulsification in diabetic patients.

**Keywords:** Ketorolac tromethamine 0.45%, phacoemulsification, anterior segment inflammation, diabetic

## **ORAL02: PHACOEMULSIFICATION: HOW IT AFFECTS IOP IN POST-TRABECULECTOMY EYE**

J.C. Chong<sup>1,2</sup>, P.Y. Ong<sup>2</sup>, K. Haireen<sup>2</sup>, S.S. Teh<sup>2</sup>

1. Department of Ophthalmology, UNIVERSITY MALAYA, Kuala Lumpur, Malaysia
2. Department of Ophthalmology, HOSPITAL SELAYANG, Selangor, Malaysia

**Background:** Phacoemulsification on a post-trabeculectomy eye has been reported to cause trabeculectomy bleb failure. A retrospective cohort study was conducted to look into the outcome of patients who received similar treatment in Hospital Selayang.

**Method:** Seventeen eyes from fifteen patients has undergone uncomplicated phacoemulsification (accompanied by 5FU injection) between January 2013 to December 2016 on a post-trabeculectomy (with MMC) eye.

**Results:** Three out of fifteen cases are secondary glaucoma while other twelve are primary glaucoma. All phacoemulsification are done at least 6 months after trabeculectomy (mean 13.8 months SD 4.7 months). All patients receive an injection of 5-fluorouracil at the end of phacoemulsification. Ten out of seventeen (58.8%) operated eyes required no anti-glaucoma before and after phacoemulsification. Five out of seventeen (29.4%) eyes require one or more anti-glaucoma drops to control intraocular pressure by 1 year after phacoemulsification, compared to before phacoemulsification. However, there are also two out of seventeen (11.8%) operated eyes which initially require anti-glaucoma drops no longer need any following phacoemulsification. In all the seventeen eyes, however, regardless whether on anti-glaucoma or not, there is not statistically (Wilcoxon Signed Rank Test) significant change in intraocular pressure.

**Conclusion:** The current practice in Hospital Selayang on cataract removal for post trabeculectomy patients, including at least 6-months waiting period accompanied by at least one 5-fluorouracil injection has shown to be effective in preventing bleb failure after cataract removal. Our results are comparable to the result of previous studies done elsewhere.

### **ORAL03: KERATITIS IN MELAKA GENERAL HOSPITAL : CLINICAL AND MICROBIAL STUDY**

Nur Hafizah A, Safeeyah Jameelah MY, Norfadzillah AJ, Raja Norliza RO

**Objective:** To discuss the etiology, predisposing factors, microbial profile and clinical outcome of keratitis.

**Method:** Retrospective study of 61 patients (64 eyes) who was admitted for keratitis in Melaka General Hospital over one-year period from January 2016 until December 2016. 6 patients were excluded due to inability to trace the medical records. This study discusses the etiology, predisposing factors, microbial profile and clinical outcome of this condition.

**Result:** Smoking and contact lens wear was the major risk factors (27%,n=15 and 25%, n=14). 58%(n=7) of fungal keratitis secondary to ocular trauma was associated with organic matter. 50% (n=5) of pre-existing ocular disease was secondary to bullous keratopathy.9% (n=5) of patients were on steroid on presentation. 42% (n=23) patients had hypopyon at initial presentation. 7% (n=4) of patients presented with perforated keratitis and 2% (n=1) of patients presented with exogenous endophthalmitis. The culture positive result from corneal scrapping was low at 24% (n=14). The commonest organism isolated was *Pseudomonas aeruginosa* (n=8). 45% (n=26) had improvement, 33% (n=19) had no improvement and 22% (n=13) had worsening of unaided visual acuity.90%n=48) responded to medical therapy and 10% (n=6) with 1 patient required corneal glue and bandage contact lens, 2 required amniotic membrane patch and 3 patients required eviscerations. 7% (n=4) of patients were referred to corneal centre with 3 patients may require penetrating keratoplasty soon.

**Conclusion:** Keratitis is a potentially sight-threatening condition. Public education regarding proper contact lens hygiene, importance of protective goggle during working, and danger of steroid may help decrease visual morbidity.

## **ORAL04: SPECTRUM OF MICROBIAL KERATITIS IN MIRI HOSPITAL, SARAWAK FROM 2010 TO 2016**

Khor Hui Gim<sup>1</sup>, MD, Irene Cho<sup>1</sup>, MD, Chieng Lee Ling<sup>1</sup>, M.MED (Ophthal),  
<sup>1</sup>Department of Ophthalmology Miri Hospital

**Objectives:** To report the predisposing factors, microorganisms and antibiotics sensitivity associated with microbial keratitis and the treatment outcome in Miri Hospital.

**Methodology:** This is a retrospective study on patients presented with microbial keratitis in Miri Hospital over 7-year period from 1<sup>st</sup> January 2010 till 31<sup>st</sup> December 2016. Demographic data, predisposing factors, culture and sensitivity results and treatment outcomes were studied.

**Results:** There was a total of 221cases treated as microbial keratitis with the peak age group of 21 to 30-year-old. The predisposing factors were trauma (49.3%), improper contact lens usage (29.1%), ocular surface diseases (5.9%), ocular surgeries (0.9%), drugs (1.8%) and unknown factors (19.0%). Occupational injury among oil palm plantation workers was the leading cause in the trauma group (28.8%). Corneal scrapping was performed in 189cases, in which 61.4% of them had yield positive cultures. Among them, 49.1% were of bacteria origin, 46.6% fungal, and 4.3% both. The most encountered gram negative bacteria were *Pseudomonas aeruginosa* and were highly sensitive towards ceftazidime and gentamicin. 192cases (86.9%) were treated with topical medical therapy, while 29cases (13.1%) required further surgical intervention.

**Conclusion:** The commonest predisposing factors for microbial keratitis were trauma and contact lens usage. Culture and sensitivity from corneal scrapping were essential in treatment guidance. More than a third of culture negative microbial keratitis was noted in our study. There was fortunately no increase in resistance observed for the commonly used antibiotics. Due to vicinity of oil palm estates, we reported an alarming high rates of poor outcome fungal keratitis in our centre.

**Keywords:** culture, microbial keratitis, predisposing factors

## **ORAL05: COMPARISON OF VISUAL RECOVERY DURATION AND REHABILITATION BETWEEN PRK AND LASIK**

Ahmad-Nurfahmi A.A, Kamal MK.

Ophthalmology Department, International Islamic University Malaysia, 54200 Kuantan, Pahang.

**Purpose:** To compare visual recovery duration between Photorefractive Keratectomy (PRK) and Laser In-situ Keratomileusis (LASIK) patients that achieved the target outcome.

**Methodology:** A retrospective comparative study of 174 eyes of 174 patients with 107 patients had PRK and 71 had LASIK. Preoperative, intraoperative and visual rehabilitation data were reviewed. Both groups were age-match and had final uncorrected vision of 20/20 at six months post operatively. Each group mean vision recovery duration were recorded and evaluated.

**Result:** The mean visual recovery duration was 5.56 weeks in PRK and 2.92 weeks in LASIK and was statistically significant ( $t=2.872$ ,  $p<0.005$ ). Multivariate analysis showed that Schirmer's test, mean preoperative pachymetry, treatment zone size and ablation depth were found to be the cofounding factors (CF). However, exclusion of the CF analysis revealed the difference between PRK and LASK in the adjusted mean visual recovery duration showed that it was not statistically significant ( $F= 7.539$ ,  $p >0.05$ ).

**Conclusion:** Visual recovery duration between PRK and LASIK is comparable when preoperative data is matched. However, Schirmer's test, preoperative mean pachymetry, large treatment zone size and deeper laser ablation may lengthen the visual recovery in PRK patients.

**Keywords:** PRK, LASIK, Visual recovery duration.



## **ORAL06: ANGLES, CURVES AND SLOPES: A MODIFIED TRABECULECTOMY TECHNIQUE**

Dr Syed Shoeb Ahmad, MS

**Objectives:** Ahmad's Modified Trabeculectomy Technique (AMTT) aims to utilize subtle modifications to the classical trabeculectomy technique in order to achieve better quality filtering blebs leading to lesser complications. The major objective of this study was to assess the effectiveness of AMTT in achieving posterior flow with no significant complications such as wound leaks or exuberant anterior blebs. The secondary objective was to lower intra-ocular pressure sufficiently to prevent further progression of visual field loss. AMTT is possible in open or closed angles, with a flat learning curve and providing a steep slope of success with regard to its objectives. The study was presented as a poster at the World Glaucoma Congress in 2015 and has been accepted for publication in the Asian Journal of Ophthalmology.

**Methods:** A prospective interventional case series where patients with glaucoma, having uncontrolled IOP despite maximal tolerable medical treatment, were subjected to AMTT. This procedure involves creation of a sclerostomy "spout", tight suturing of the scleral flap anteriorly and leaving a cuff of conjunctiva.

**Results:** 34 patients underwent this surgery. 4 patients had wound leaks in the first week. 3 patients had a flat bleb around 3 months after surgery.

There was a significant difference in the preoperative and postoperative median IOPs ( $z$ -stats=3.928;  $p$ -value <0.001). The postoperative IOP (median=12) was significantly lower than the pre-operative IOP (median=28; IQR=9).

**Conclusions:** AMTT is an easily adaptable modified trabeculectomy technique.

## **LIST OF ABSTRACTS FOR POSTERS**

### **POS01 ORBITAL BURKITT'S LYMPHOMA**

Adzleen M (MB.BCh.BAO), Nor Akmal B (MS Ophthal UKM), Jamalía R (MS Ophthal UM)

**Purpose :** To illustrate a rare case of orbital Burkitt's lymphoma in a 12 years old child and its management.

**Method :** Case report

**Result :** A young boy presented with painless swelling of bilateral eyes since 4 days with sudden loss of vision. There was history of fever, severe frontal headache and numbness of bilateral hands and for one week duration. Examination revealed bilateral eyes proptosis, injected conjunctiva and dilated pupil. Intraocular pressure was raised and CT scans revealed aggressive soft tissue masses in both orbits and maxilla with intracranial extension, dural involvement and bony erosion. He underwent nasal mucosal and maxillary incisional biopsy. HPE result consistent with non-Hodgkin lymphoma and bone marrow aspirates in keeping with Burkitt's lymphoma. His condition improved significantly with intravenous vincristine, cyclophosphamide and oral prednisolone and subsequent CT scan of the brain, orbit and paranasal sinus showed resolution of primary mass.

**Conclusion :** With early diagnosis and treatment, orbital Burkitt's lymphoma is a treatable condition.

**Keywords :** Burkitt's lymphoma, orbit, proptosis

## **POS02 SPONTANEOUS REATTACHMENT OF RHEGMATOGENOUS RETINAL DETACHMENT (SRRRD) WITH SCHWARTZ-MATSUO SYNDROME.**

Nazihatul Fikriah AH<sup>1,2</sup>, Yip CW<sup>2</sup>, Wan Hazabbah WH<sup>1</sup>

<sup>1</sup>Department of Ophthalmology, School of Medical Sciences, Health Campus Universiti Sains Malaysia, 16150 Kubang Kerian, Kelantan, Malaysia.

<sup>2</sup>Ophthalmology Clinic, 94 Armed Forces Hospital, Terendak Camp, 76200 Melaka.

**Objective:** To report a case of spontaneous reattachment of a rhegmatogenous retinal detachment with high intraocular pressure.

**Method:** Case report

**Summary:** A 56 year old pseudophakic presented with sudden onset of painless loss of vision of RE with flashes of light. His visual acuity was very poor. Fundus examination showed total retinal detachment with macular off and retinal break noted at 10 o'clock of the peripheral retina. His IOP was 4mmHg. On pre-operative day, it was noted that the cornea was hazy with IOP of 54mmHg. IOP lowering treatment was promptly given. Fundus examination showed resolved retinal detachment with localised choroidal detachment. Barricade laser given. His vision returned to 6/24 with normalised IOP and subsequently was taper of from IOP lowering drugs.

**Conclusion:** SRRRD and high IOP in RRD are both rare conditions. Prompt treatment needed to prevent optic nerve compression.

**Keywords:** SRRRD, Shwartz-Matsuo Syndrome.

## **POS03 AQUEOUS MISDIRECTION FOLLOWING VITRECTOMY WITH SILICONE OIL INJECTION: A CASE REPORT.**

Nur Shahirah Amir Hamzah, Mae-Lynn Catherine Bastion, Norshamsiah Md Din  
UKM Medical Center, Kuala Lumpur, Malaysia

**Background:** Aqueous misdirection is a form of secondary angle closure that presents with elevated intraocular pressure and shallowing anterior chamber with patent iridotomy. We report a case of aqueous misdirection following vitrectomy with silicone oil injection which was managed by placement of glaucoma drainage device through pars planar.

**Case presentation:** A 27-year-old gentleman with underlying Marfans syndrome presented with left eye dislocated crystalline lens with retinal detachment. Intraocular pressure (IOP) was elevated even before operation. He underwent emergency lensectomy, vitrectomy with silicone oil injection. However, subsequently he developed left eye high IOP with flat anterior chamber despite patent iridotomy. Removal of silicone oil was done but IOP rebounded again on maximum anti-glaucoma. Subsequently he underwent pars planar Baerveldt tube insertion to control IOP.

**Conclusion:** Aqueous misdirection syndrome may be observed following pars plana vitrectomy. By inserting GDD through pars planar approach, it helps break the cycle of aqueous misdirection.

**Keywords:** aqueous misdirection, pars planar, tube surgery

## **POS04 A POSSIBLE CASE OF CHARLES BONNET SYNDROME**

Bannu Jayallan.MD<sup>1</sup>, Mehul Kumar.MB BCh BAO<sup>2</sup>, Ng Boon Seng.MPM<sup>3</sup>

<sup>1</sup>Ophthalmology Unit, Hospital Nukleus Labuan

<sup>2</sup>Department of Psychiatry, Hospital Besar Melaka

<sup>3</sup>Department of Psychiatry, Hospital Nukleus Labuan

**Introduction:** Charles Bonnet Syndrome is defined by a triad of complex visual hallucinations, ocular pathology causing visual deterioration, and normal cognitive status. Here in, we present a case of a 45 years old female whom complaint of low vision and visual hallucination.

**Method:** Case Report.

**Result:** A 45 year old female with underlying schizophrenia in remission since 1994 on treatment and bilateral eye pigmentary retinopathy since 2009, started to complain of being able to see snakes and crocodiles throughout her visual field in 2016. The visual acuity on both eye was 2/60 and repeated visual assessment showed probably a variant of bilateral retinitis pigmentosa. Her CT brain, EEG and cognitive function were normal. Thus, the diagnosis of Charles Bonnet Syndrome was established.

**Conclusion:** Charles Bonnet Syndrome should be a differential diagnosis in visually impaired patients presenting with visual hallucinations. Older antipsychotics (thioridazine and chlorpromazine) have ocular side effects.

**Keywords:** Charles Bonnet Syndrome, Visual hallucination

## **POS05 ATYPICAL PRESENTATION OF DERMOID CYST**

Salwa T, Anhar HS, Ng KK, Raja Norliza RO, Norfadzillah AJ

**Objective:** To report an atypical case of dermoid cyst

**Method:** Case report

**Result:** Dermoid cyst typically located superotemporally in the orbit and presents during childhood. Those present later in life tend to have deeper origin thus challenging. We report a case of a 40-year old gentleman presented with slow growing left superomedial orbital mass for 8 years. It was rapidly increasing in size for 8 months and associated with left rhinorrhea. Examination showed a left superomedial orbital mass measuring 2cm x 2cm. No sign of infection. It was associated with mild left hypotropia and exotropia. Other examinations were normal. CT scan of orbit showed left extraconal lesion with fluid-fat level and left pansinusitis. Excision biopsy revealed a pus containing cyst. The lesion was confirmed dermoid cyst on histopathology and negative on swab culture and sensitivity.

**Conclusion:** Atypical presentation dermoids are uncommon. An appropriate surgical approach with diagnostic and therapeutic aim offers good outcome.

**Keyword:** Atypical, Dermoid cyst

## **POS06 A SINISTER CASE OF RIGHT EYE PROPTOSIS.**

Wardati Hanisah bt Jami<sup>1</sup>, Ku Chui Yong<sup>1</sup>, Akmal Haliza bt Zamli<sup>1</sup>

<sup>1</sup>Department of Ophthalmology, Hospital Tengku Ampuan Afzan, Kuantan Pahang.

**Introduction:** Primary ductal adenocarcinoma arising in the structures of the lacrimal apparatus is extremely rare.

**Objective:** To describe a case of ductal adenocarcinoma of lacrimal sac in a patient with neurofibromatosis(NF) with an initial clinical and radiological diagnosis of plexiform neurofibroma. The importance of histopathologic examination is highlighted.

**Method:** Case report.

**Result:** A 56 year old man with a background NF type 1 presented with progressive proptosis associated with diplopia. Magnetic resonance imaging revealed right medial extraconal mass. Biopsy and histopathologic examinations confirmed a primary ductal adenocarcinoma of the lacrimal sac . He required an extended orbital exenteration and adjuvant radiotherapy.

**Conclusion:** Proptosis is a common presentation of a benign or malignant orbital tumor. A thorough history, clinical, radiological and histopathologic examination is deemed necessary to avoid misdiagnosis and to ensure appropriate management of the patient.

## **POS07 CASE REPORT OF OCULAR SIDE EFFECTS IN CHLORPROMAZINE TOXICITY**

Lam CS<sup>1</sup>, Umi Kalthum MN<sup>1</sup>, Bastion MLC<sup>1</sup>

<sup>1</sup> Department of Ophthalmology, Universiti Kebangsaan Malaysia Medical Center, Kuala Lumpur, Malaysia

**Objectives:** To report a case of chlorpromazine toxicity on cornea and lens.

**Method:** Case report

**Result:** A 55-year-old gentleman, who is a known case of schizophrenia, presented with bilateral eye progressive blurring of vision since pass 1 year, not associated with any eye redness, eye pain or eye discharge. He denied of any ocular trauma or ocular surgery. Upon examination, visual acuity of left eye was 6/18, N8 and right eye was 6/24, N36. There were diffuse corneal endothelial pigment depositions with stellate cataract bilaterally. Other examinations were unremarkable. He is a known case of schizophrenia since 20 years ago and has been treated with chlorpromazine since diagnosis. The chlorpromazine was stopped after the diagnosis; however, the condition was irreversible. Patient was not keen for any surgical intervention.

**Conclusion:** Chlorpromazine is the first-generation anti-psychotic, primary used to treat schizophrenia. Unwanted ocular side effects may result from prolonged use of chlorpromazine.

**Keywords:** Schizophrenia, chlorpromazine, ocular adverse effects



## **POS08 ADVANCED PROLIFERATIVE RETINOPATHY PRESENTING IN A CHILD WITH CHRONIC MYELOID LEUKEMIA**

Lim Chuan Chun<sup>1</sup>, Yong Geng Yi<sup>1</sup>, Norlina Mohd Ramli<sup>1</sup>, Mano Shunmugam<sup>2</sup>

1 Department Of Ophthalmology, University Of Malaya

2 Hospital Pantai Kuala Lumpur

**Introduction:** Chronic Myeloid Leukemia (CML) is known to cause ischaemic retinopathy. This manifests as venous dilation and tortuosity, perivascular sheathing, retinal hemorrhages, microaneurysms, cotton-wool spots and even neovascularisation. The retina is the most commonly involved intraocular structure in CML. Detection of early stage disease would enable vision saving treatment to be commenced. However, reduced awareness of this potentially blinding complication of CML may result in poor outcome.

**Purpose:** To report a case of young CML patient in accelerated phase, presenting with bilateral painless sudden visual loss.

**Method:** Case Report

**Result:** A 13 year old Malay girl, newly diagnosed as CML who underwent 10 cycles of chemotherapy, presented with both eye sudden onset visual loss for 1 week prior to presentation. At presentation, both eye vision was hand movement. Funduscopy showed bilateral vitreous hemorrhage and perivascular sheathing at peripheral retina. Pars plana vitrectomy (PPV) was performed on the eye with more extensive vitreous hemorrhage. Despite prompt surgical intervention, the patient had already developed ischaemic retina resulting in poor visual prognosis.

**Conclusion:** Awareness of potentially blinding complications of CML and prompt referral upon diagnosis is warranted for early detection and treatment of leukemic retinopathy.

**Keywords:** Chronic Myeloid Leukemia (CML), proliferative retinopathy, pars plana vitrectomy (PPV)

## **POS09 AN UNUSUAL CASE OF CYTOMEGALOVIRUS RETINITIS IN AN INFANT**

CL Ee, LM Tan, A Samsudin (University Malaya)

**Purpose:** To report a case of cytomegalovirus (CMV) retinitis in an infant.

**Methods:** Case report.

**Results:** A baby girl born as a first twin at 29 weeks was referred for routine retinopathy of prematurity (ROP) screening. Fundus examination revealed retinitis at the macula and peripapillary area with absence of haemorrhages. Her cranial ultrasound showed microcephaly with ventriculomegaly, and she tested positive for blood TORCH screen, CMV DNA and urine CMV. The mother tested negative for active CMV infection and Human Immunodeficiency Virus. We diagnosed her as bilateral CMV retinitis. She was treated with intravitreal ganciclovir in both eyes. Intravenous ganciclovir was commenced later due to the blood count abnormalities secondary to sepsis. Unfortunately, her condition deteriorated and she passed away due to sepsis. The second twin was also tested positive for CMV, but expired earlier before eye examination was done.

**Conclusions:** CMV retinitis can occur in any immunosuppressed patient of any age group, including infants.

**Keywords:** Cytomegalovirus Retinitis, Infant, Immunosuppression

## **POS10 MIKULICZ DISEASE OF LACRIMAL GLAND -- A RARE OCCURENCE**

Khaw Chyong Tze 1, Wong Chi Lun 1  
Ophthalmology Department, Hospital Kulim, Kedah

**Objectives:** To report a case of IgG4-related Mikulicz disease(MD) involving lacrimal and salivary glands

**Methods:** Case report

**Results:** A 58-year-old female with no underlying medical illness, presented with bilateral painless upper lid swelling for 6months which progressively enlarged. It was associated with neck swelling for 1 year but she reported no sicca or any constitutional symptoms. There were bilateral, enlarged lacrimal, submandibular glands and also parotid gland. Ocular examination was normal with no exophthalmos and extraocular movement was full. Tears assessment was within normal range. Computed tomography reported bilateral chronic dacryocystitis and sialadenitis, with parotid and cervical lymphadenopathy. Submandibular glands biopsy revealed lymphoplasmacytic infiltration with storiform fibrosis, with IgG4 plasma cells >50%, and no malignancy features. Haematological tests confirmed elevated levels of IgG4 but negative ANA. Treatment with oral corticosteroids over 6 months resulted in resolution of gland swelling.

**Conclusions:** Mikulicz Disease(MD) is characterized by bilateral, painless, symmetrical enlargement of lacrimal, parotid and submandibular glands of unknown origin but with good response to glucocorticoids. Recent reports from Japan has proven MD differs from Sjogren Syndrome, and is a possible systemic IgG4-related plasmacytic disease.

**Keywords:** IgG4, Mikulicz disease, Kulim

## **POS11 CENTRAL RETINAL VEIN OCCLUSION (CRVO): EXUDATIVE RETINAL DETACHMENT, OEDEMA AND A HOLE**

Aimy Mastura ZY, Bastion MLC, Mushawiahti M, Amin A, Norshamsiah MD

Ophthalmology Department, Pusat Perubatan Universiti Kebangsaan Malaysia

**Aim:** To demonstrate an unusual presentation of CRVO in a young patient with exudative retinal detachment and macular oedema that developed into a full thickness macular hole.

**Method:** Retrospective case review for poster presentation

**Results:** A 39-year-old Indian lady with underlying history of diabetes mellitus, hypertension and dyslipidaemia presented with five months' history of left eye worsening vision which never improved. Her best corrected vision was 6/9 OD and 1/60 OS. There was a left relative afferent pupillary defect with no rubeosis iridis. Left eye fundus examination revealed dilated, tortuous retinal vein with extensive hemorrhages, macular oedema with shallow exudative retinal detachment inferiorly. FFA showed delayed in arteriovenous transit time with capillary and venous dilation, areas of leakages on the macular and about seven disc areas of capillary fallout. She was given intravitreal Ranibizumab 0.5mg and laser panretinal photocoagulation to the left eye. At one month follow up, OCT showed a full thickness macular hole with large subretinal fluid seen and a slight improvement in macular oedema. Exudative retinal detachment resolved and OCT showed a spontaneous closure of the full thickness macular hole after the fourth dose of intravitreal Ranibizumab. However, the macular oedema with large subretinal fluid remained persistent. Her vision OS worsened to counting finger.

**Conclusion:** Ischaemic CRVO in a young patient may be complicated with exudative maculopathy that results in full thickness macula hole. Management of macula hole in this setting is difficult and prognosis for vitrectomy is guarded due to underlying retinal ischaemia and persistent macula oedema.

**Keywords:** central retinal vein occlusion, macular oedema, macular hole

## **POS12 HERPES ZOSTER KERATOUVEITIS IN IMMUNOCOMPETENT PATIENT**

N Ashikin, Mahiran CD, Shamala Ratnasabapathy

Department of Ophthalmology, Hospital Sungai Buloh

**Objective:** To report a case on herpes zoster keratouveitis in immunocompetent patient

**Method:** A case report

**Results:** A 48-year-old lady with history of left trigeminal herpes zoster infection presented with left eye painful red eye associated with reduced vision and photophobia. Her best corrected vision (BCVA) for right eye was 6/9 and left eye was 6/60. On examination showed left trigeminal nerve distribution vesicular periorbital rashes with the presence of Hutchinson's sign. Left eye corneal sensation reduced. There was epithelial defect with corneal thinning at 5 to 7 o'clock position, anterior chamber cells and posterior synechiae. Left eye fundus examination was unremarkable. She was diagnosed to have left eye herpes zoster ophthalmicus with keratouveitis and was started with oral Acyclovir 800 mg 5 times per day for a week, followed by 400 mg BD and ointment acyclovir .and topical steroid. After 2 weeks on treatment, her left BCVA 6/18 and and the cornea thinning improved.

**Conclusion:** Herpes zoster ophthalmicus with keratouveitis is uncommon among immunocompetent patient. Early detection of the diagnosis and aggressive early long term systemic antiviral treatment is vital to control inflammation, corneal thinning progression and complications.

## **POS13 BILATERAL OPTIC NEURITIS SECONDARY TO MULTIPLE SCLEROSIS-RESISTANCE TO TREATMENT**

Anis BA , Norshamsiah Md Din

Department of Ophthalmology, University Kebangsaan Malaysia Medical Center, Kuala Lumpur, Malaysia

**Purpose:** To report a patient with recurrence bilateral optic neuritis (ON) secondary to multiple sclerosis (MS) who responded poorly to treatment with intravenous methylprednisolone and interferon beta-1 $\alpha$

**Methods:** Case report

**Result:** A 43-year-old lady with multiple sclerosis presented with gradual loss of vision of both eyes. It was associated with pain on eye movement. Concomitantly she had active neurological systemic symptoms i.e. body weakness, reduce sensation and hearing. Clinical examination revealed a visual acuity of 6/12 in the right eye and no perception of light in the left eye with left positive relative afferent pupillary defect. She also had anterior uveitis in the left eye. Fundus examination revealed temporal disc pallor in the right eye and pale optic disc in the left eye. Neurological examination revealed reduced power in the right and left upper and lower limbs. Sensation was reduce over the right side (all dermatomes). Cranial nerves I, II, V, VIII, IX, X were affected. Her visual field was totally obscured in the left eye and inferior field defect in the right eye.

She had similar episode before when she was first diagnose with multiple sclerosis about 1 year prior to this current presentation. She was commenced on intravenous methylprednisolone followed by oral prednisolone. She was also initiated on interferon beta-1 $\alpha$ . Her symptoms improved with the treatment initially. However, the illness recur while she was on interferon beta-1 $\alpha$ . She was then restarted back on intravenous methylprednisolone followed by oral prednisolone but there was no sign of recovery

**Conclusion:** ON secondary to MS is a frequent diagnosis in neuro-ophthalmology and it can be invalidating and distressing in an already disabled patient. This case is a reminder that optic neuritis can be recalcitrant and non-responsive to steroid therapy.

## **POS14 BILATERAL POSTERIOR UVEITIS SECONDARY TO PRESUMED TUBERCULOSIS IN A 4 YEAR OLD CHILD**

Neshalene Ratna K<sup>1</sup>, Lakana Kumar T<sup>1</sup>, Azita<sup>1</sup>, Elias H<sup>1</sup>,

<sup>1</sup>Department of Ophthalmology, Hospital Kuala Lumpur

**Objective:** To report a case of bilateral posterior uveitis secondary to presumed tuberculosis in a 4 year old child

**Method:** Case report

**Result:** A 4 year old child presented with sudden onset of bilateral painless blurring of vision for 2 weeks. He had history of contact with a tuberculosis patient. Visual acuity was PL OD and 6/60 OS. He had multifocal choroiditic lesions with presence of complete macula star bilaterally. He was diagnosed to have bilateral posterior uveitis with optic neuropathy secondary to presumed ocular tuberculosis based on a raised ESR count, features of pulmonary tuberculosis from chest X-ray and history of tuberculosis contact. Ethambutol sparing anti-tuberculosis treatment was started which showed gradual improvement of his vision in the first week. Intravenous ceftriaxone was given later which showed a decrease in the choroidal lesions. His vision showed improvement within 2 weeks of treatment.

**Conclusion:** Proper evaluation for other features of infection or inflammation in a child with optic neuropathy is crucial for the diagnosis and management

## **POS15 CILIARY BODY MEDULLOEPITHELIOMA IN AN ADULT**

Intan Shafinaz Mohd Radzuan, Ling Kiet Phang, Haslina Mohd Ali

**Objective:** To report a case of an adult ciliary body medulloepithelioma

**Method:** Case report

**Summary:** A 53-year-old gentleman presented with complaints of poor vision in the left eye of 2 months duration. He underwent posterior vitrectomy for retinal detachment and uncomplicated cataract surgery in the same eye 10 years ago. He had only hand motion vision on affected left eye with an intraocular pressure of 28 mmHg. There were dilated episcleral vessels on superotemporal, whitish spherical cyst inferiorly in anterior chamber. There were also whitish cystic like mass seen at the vitreous cavity posterior to intraocular lens, not permitting the fundus view. Histopathological examination revealed an epithelial tumor arising from non-pigmented ciliary body epithelium consistent with a benign medulloepithelioma.

**Result:** Ciliary body medulloepithelioma is predominantly a paediatric tumor. This case emphasizes the need to include in the differential diagnosis of ciliary body tumors in adult.



## **POS16 A RARE CASE OF CENTRAL RETINAL VEIN OCCLUSION (CRVO) WITH CENTRAL RETINAL ARTERY OCCLUSION (CRAO) IN A PREGNANT LADY**

Durgavashini G, MD(UNPAD), Tan Pek Hwi, MS(Ophthal)UKM

Department of Ophthalmology, Hospital Tuanku Ja'afar, Seremban, Negeri Sembilan, Malaysia

**Objective:** To report a case of CRVO with CRAO in a healthy primigravida

**Method:** Case report

**Results:** A 24-year-old primigravida at 21 weeks gestation, with no medical illness complained of left eye sudden profound visual loss for 45 minutes. She regained her vision over few hours. Her visual acuity was 6/6 in both eyes. Left fundus showed features of CRAO and CRVO. She was admitted for acute management of CRAO and anticoagulation therapy was started. Autoimmune screening was normal. There was no evidence of intracardiac thrombus, carotid artery stenosis or internal jugular vein thrombosis. The patient was co-managed with medical and obstetric team.

**Conclusion:** Retinal occlusive disease can occur in healthy pregnant women as pregnancy itself is a relative hypercoagulable state. Synchronous CRAO and CRVO is a rare case occurring during pregnancy. Close monitoring throughout the pregnancy is important to ensure safety of mother and foetus.

**Keywords:** CRAO, CRVO, pregnancy

## **POS17 LEFT EYE CONGENITAL MUCOCELE WITH FISTULA FORMATION AND UPPER PUNCTUM ATRESIA .**

Mohammad Fahim<sup>1</sup> , Sunder Ramasamy<sup>1</sup> , Jamalia Rahmat<sup>1</sup> , Sharifah Intan<sup>1</sup>  
<sup>1</sup> Hospital Kuala Lumpur

**Introduction:** To report the importance of examination under anaesthesia (EUA) in an infant with a left eye congenital mucocele with fistula formation and upper punctum atresia.

**Method:** Case Report:

**Result:** We report a case of a 3 months old girl who was referred to Paediatric Ophthalmology Service at Hospital Kuala Lumpur for a left eye dacryocystitis which was not responding to courses of antibiotics. The child had persistent left inner canthus swelling for 2 months associated with persistent purulent discharge and tearing. Our initial impression was left eye fistula formation secondary to chronic dacryocystitis. Examination under anaesthesia(EUA) with left eye probing and syringing revealed a left eye patent inferior punctum with nasolacrimal duct fistula formation and superior punctum agenesis. Post-operative diagnosis was changed to left eye congenital mucocele with fistula formation and upper punctum atresia. The baby girl was referred to the oculoplasty services for further management. Following another confirmatory EUA, a fistulectomy was performed.

**Conclusion:** This case highlights the need for a formal EUA to help with the diagnosis and management of babies presenting with persistent dacryocystitis.

## **POS18 THE UNUSUAL TRANSORBITAL PENETRATING CRANIAL INJURY BY A METAL FOREIGN BODY**

Farhana I (MD UKM), Hamisah I. (MS Surgery Ophthalmology)

Department of Ophthalmology, Hospital Kuala Lumpur.

**Purpose** : To report a rare case of transorbital penetrating cranial injury by a metal foreign body.

**Method** : Case report

**Introduction** : Orbital trauma usually affects the bony parts of the orbit, however in rare cases foreign bodies are found within the orbit and penetrate the brain. We report a case with unusual large infraorbital foreign bodies ( metal screw) with extradural involvement following a fall.

**Result** : A 23-year-old Sabahan man was referred to Hospital Kuala Lumpur for penetrating cranial injury by metal foreign body through infra orbital region following an alleged fall. On examination, the GCS was full with stable hemodynamics. There was a huge metal foreign body at the right eye which obscured the orbital structures. The left eye was otherwise normal. There was no neurological deficit. Computed tomography (CT) revealed two pieces of metallic foreign body. One of the foreign body penetrating through the right inferior orbital wall towards the right infratemporal region which end at the temporo-mandibular joint region. The other metal foreign body was seen in the right temporo-parietal region. CT scan showed right medial, lateral and inferior walls fracture with intracranial bleeding. Combined surgery for removal of foreign body and craniotomy done by ophthalmology and neurosurgical team. His final visual acuity was handmovement.

**Conclusion** : Intraorbital foreign body can be associated with severe injuries leading to loss of vision or may lead to death with intracranial penetration. Education and enforcement on proper way to dispose the waste metal instruments from construction site may help to prevent such injury.

**Key word** : intraorbital foreign body, cranial injury

## **POS19 CHOROIDAL MELANOMA IN ADOLESCENT**

Loh Sze Lian, MBBS (UM), Nor Masniwati Binti Saidin, M.Med.Ophthal (USM)

Department of Ophthalmology, Hospital Taiping

**Objective:** To report an atypical presentation of choroidal melanoma diagnosed in adolescent.

**Method:** Case report.

**Results:** A 17 years old boy with no predisposing factors presented with right eye painless blurry vision for 3 months. It was associated with right eye exotropia and leukocoria. His vision was perception of light and RAPD was positive. The anterior segment was normal with intraocular pressure of 10mmHg. There was white cataract with no fundus view. B scan ultrasonography revealed a well demarcated homogenous endophytic growth in vitreous. CECT orbit and brain show heterogeneous enhancing mass occupying the superior-posterior aspect of orbit involving the sclera with coarse calcification seen within suggestive of right eye retinoblastoma. The affected eye was enucleated. Histopathology reported as choroidal melanoma.

**Conclusion:** Even though rare, the diagnosis of choroidal melanoma should be kept in mind in case presenting with retinal or vitreous growth in an adolescent.

**Keywords:** choroidal melanoma, adolescent, enucleation, vitreous growth, B scan ultrasonography

## POS20 M. TUBERCULOSIS A TRIGGER FOR EALE'S DISEASE: A CASE REPORT

Adeline Low Shan Lyn<sup>1</sup> (MBBS), Tan Jin Poi<sup>1</sup> (Mmed Ophthalmology USM)

<sup>1</sup>Department of Ophthalmology, Penang Hospital

**Objective:** Eales' disease is characterized by 3 overlapping stages of venous inflammation (vasculitis), occlusion, and retinal neovascularization. It has been associated with tuberculosis or tuberculin protein exposure.

**Case Report:** A 28-year-old Malay gentleman presented with sudden, painless blurring of vision over his left eye. Upon examination, right eye vision was 6/5 and left eye hand movement with no relative afferent pupillary defect. Anterior segment examination was unremarkable. Right eye fundus showed vascular sheathing, periphlebitis, tortuous blood vessels peripherally with neovascularisation. Left eye fundus revealed vitreous haemorrhage.

Blood investigations sent to rule out infective, inflammatory or autoimmune pathology were all negative. Mantoux test was 0mm. Quantiferon TB was then sent and tested positive. Fundus fluorescein angiography was done followed by bilateral eye panretinal photocoagulation. Patient was started on oral steroids and anti-tuberculosis medication by the medical retina team. Left eye vitreous haemorrhage had been slowly resolving with improved vision up to 6/9.

**Result:** M.tuberculosis has to be investigated when treating a patient with Eales's disease. Quantiferon TB has excellent sensitivity and specificity, hence, should be done even when Mantoux test is negative. It is crucial to exclude active tuberculosis infection before starting systemic corticosteroid which is the mainstay treatment in the active inflammatory stage. Other treatments include laser photocoagulation and anti-VEGF in ischemic or neovascularization stages; corticosteroid or anti-VEGF intraocular injections in macular edema; vitreoretinal surgery in persistent vitreous haemorrhage and retinal detachment.

**Conclusion:** Tuberculosis appears to be the cause of Eale's disease but the relation is yet to be established and clinically proven. Eye care providers should be aware of this complication of tuberculosis and the treatment options available.

**Keywords:** Eale's disease, M.tuberculosis, Quantiferon TB, photocoagulation, steroid therapy

## POS21 BILATERAL CORNEAL ULCER IN A YOUNG LADY

Lee Hong Nien, Fazliana Ismail, Sujaya Singh  
University Malaya Medical Centre

**Background:** The incidence of contact lens bacterial infection is about 2/10000 per year for rigid contact lens, 2.2-4.1/10000 per year for daily soft contact lens and 13.3-20.9/10000 per year for extended wear soft contact lens. Although more common unilaterally, it can present bilaterally with different severity.

**Objective:** To report on an uncommon bilateral contact lens related cornea ulcer.

**Method:** Case report.

**Result:** A 31 year old woman with no previous ocular or systemic medical history presented with acute bilateral painful red eyes. She has been experiencing discomfort and redness over the years and usually resolved the next day after contact lens removal. A long-term use (11 years) of contact lens has been noted. Corneal scrapping, contact lens solution, contact lens casing for culture and sensitivity have been taken and she was commenced on prophylactic broad spectrum antibiotic eye drops. Both eyes vision has improved from RE 6/36, LE 6/18 to both eyes 6/12. *Pseudomonas Aeruginosa* has been identified as the causative agent, which was also being identified in the contact lens casing.

**Conclusion:** A bilateral presentation of cornea ulcer can be infectious and non-infectious origin. In contact lens related cornea ulcer, *Pseudomonas aeruginosa* has been the main causative bacterial organism. It survives in the moist environment of the contact lens casing, solution, and also the bathroom. Prompt action is required as it can cause quick destruction to the cornea.

## **POS22 A COMBINED RETINA ARTERY AND VEIN OCCLUSION IN A HYPERTENSIVE PATIENT**

Lay Hui Ng, PY Tai, Fazilawati Q

Department of Ophthalmology of Hospital Tengku Ampuan Rahimah

**Introduction:** Combined central retinal artery occlusion (CRAO) and central retinal vein occlusion (CRVO) is a rare retinal vascular disease which causes sudden vision loss. It is also associated with poor prognosis and serious complications. We report a case of combine CRAO and CRVO with good prognosis after prompt treatment.

**Case report:** A 59 year-old gentleman, with precious left eye complained of sudden onset painless visual loss started 2 hour prior to visit. His best corrected visual acuity (BCVA) was 3/60. Left fundus revealed edematous retina with cherry red spot, leading to a diagnosis of CRAO. Ocular massage, hyperventilation, antiglaucoma and anticoagulant were commenced immediately. He was seen again 24 hour later, which his left fundus showed dilated vein and diffuse dot blot haemorrhages suggestive of CRVO. The patient received intravitreal anti- VEGF once from private. Fundus fluorescein angiography (FFA) done 1 month later demonstrated delayed in artery filling time, prolonged arterio-venous transit time, and irregular filling of superior temporal branch artery. His BCVA 5 months later was 6/18. Retinal neovascularisation and neovascular glaucoma was not seen. Echocardiogram done later was normal.

**Conclusions:** Combine retinal artery and vein occlusion can occur simultaneously. Although it carries poor diagnosis, early detection and treatment can save the vision.

## **POS23 EARLY TREATMENT OF TUBERCULAR SERPIGINOUS-LIKE CHOROIDITIS MAINTAINS GOOD VISUAL OUTCOMES**

Ing Hong Lim<sup>1</sup>, Nor Azita AT<sup>1</sup>, Amir Samsudin<sup>2</sup>

<sup>1</sup>Medical Retina Department, Department of Ophthalmology, Hospital Kuala Lumpur, Kuala Lumpur, Malaysia

<sup>2</sup>Department of Ophthalmology, Faculty of Medicine, University of Malaya, Kuala Lumpur, Malaysia

**Introduction:** Tuberculosis infection, like serpiginous choroiditis, affects the choroid and may produce similar choroidal changes. Studies have demonstrated that patients with serpiginous-like choroiditis and evidence of systemic or latent TB are best treated with antituberculosis treatment (ATT) in addition to the corticosteroid therapy.

**Result:** We report a case of a 36-year-old man who complained of painless decreased vision in his left eye. His visual acuity was 6/6 right eye and 6/9 left eye. Funduscopy examination revealed a large sectoral choroiditis. Mantoux skin test showed an area of induration measuring 30mm. We initiated antituberculosis treatment which resulted in complete resolution of retinal lesions after 4 weeks of treatment. His final visual acuity was 6/6 in the left eye with no recurrences over a follow-up of 6 months. The use of ATT together with corticosteroids is likely to reduce active inflammation and eliminate future recurrences.

**Keywords:** antituberculosis treatment, chorioretinal scar, corticosteroid, tubercular serpiginous-like choroiditis



## **POS24 A CASE OF OPTIC DISC MACROANEURYSM PRESENTED WITH VITREOUS HEMORRHAGE.**

Irene Cho<sup>1</sup>, MD, Khor Hui Gim<sup>1</sup>, MD, Koh Alisa-Victoria<sup>1</sup>, M.MED (Ophthal)

<sup>1</sup>Department of Ophthalmology Miri Hospital

**Introduction:** Retinal artery macroaneurysms are commonly encountered. However, macroaneurysm at the optic disc is a rarer entity.

**Method:** Case report

**Result:** A 60-year-old chinese lady presented with left eye vitreous hemorrhage. She was borderline hypertensive but she had no Diabetes Mellitus. She complained of sudden onset of left eye blurring of vision for 3 weeks, affecting mainly nasal side of visual field. Visual acuity (unaided) on left eye was 6/9-3. Anterior segments examination was unremarkable. Fundoscopy of left eye showed vitreous hemorrhage. Peripheral vitreous detachment was seen. Superior retina appeared flat. Repeated fundoscopy 2 weeks later showed an optic disc macroaneurysm. Followed up fundoscopy after 4 weeks revealed involution of macroaneurysm. MRI brain showed no evidence if intracranial aneurysm.

**Conclusion:** There are no specific guidelines for the management of retinal artery macroaneurysms. Spontaneous regression of optic disc macroaneurysm is possible and therefore can be observed.

**Keywords:** optic disc macroaneurysm

## **POS25 B-CELL LYMPHOMA RESULTING IN BLINDNESS**

Izwan KT<sup>1</sup>, Mushawiahti M<sup>1</sup>, Bastion MC<sup>1</sup>

<sup>1</sup>Department of ophthalmology, Universiti Kebangsaan Malaysia

**Objective:** To describe a case of diffuse large B-cell lymphoma that resulted in blindness

**Method:** Retrospective case report

**Result:** A 58 year old man with underlying diabetes and ischemic heart disease presented with a frontal lobe swelling for the past 5 months associated with progressive painless visual loss in the left eye for the same duration. Symptoms rapidly accelerated for the past 1 month, accompanied by blocked nose and epistaxis. A nasal scope investigation revealed a mass in the left nasal cavity. An MRI of the brain, orbit and paranasal sinuses revealed a large mass arising from the left ethmoid sinus extending laterally into the left orbit with destruction of the medial aspect of the orbital roof and floor. The tumour mass effect caused compression of the left optic nerve. Excision biopsy was performed and microscopic examination showed tissues infiltrated by malignant lymphoid cells, immunohistologically found positive for CD20, CD10 and BCL-6. A diagnosis of diffuse large B-cell lymphoma was reached, and the patient is currently undergoing chemotherapy.

**Conclusion:** Diffuse large B-cell lymphoma is a malignant condition which can result in ocular blindness when it arises near the orbit as the tumour extends and compresses its surrounding tissue.

## **POS26 CO-INFECTION OF CAT SCRATCH DISEASE AND TUBERCULOSIS IN NEURORETINITIS**

Izzati O, Chong KL, Zawanah Z, Mok LW  
Ophthalmology Department, Hospital Bintulu

**Objective:** To report a case of false positive Bartonella Hensellae serology in Tuberculous Neuroretinitis patient

**Method:** Case report

**Result:** A 30 years old lady presented with right eye blurred vision of 1 month duration. She had history of contact with cats but not Tuberculosis (TB). There were no other constitutional symptoms. Right visual acuity was 6/9. Right anterior segment was normal with no relative afferent pupillary defect. Right fundus examination revealed an optic disc with blurred margins and hyperemia with star-shaped hard exudates distributed in the macula. Blood result showed raised ESR of 58mm/h. The Mantoux test was 20mm. Serologic test revealed Bartonella Hensellae IgM Positive (titer of 1:24;normal range: 1:16) and IgG Negative (titer of 1:128;normal range: 1:256). Chest X-ray was normal. QuantiFERON test show positive. A diagnosis of neuroretinitis secondary to co-infection TB and Cat-Scratch Disease (CSD) were made. Initially she was only treated with oral Doxycycline BD while awaiting for QuantiFERON result but there was no improvement. Later anti-TB drug was started, her visual symptom had improved and the optic disc swelling and macular edema had resolved.

**Conclusion:** Although CSD is the commonest cause of neuroretinitis (60%), we need to exclude other causes such as Tuberculosis especially in endemic countries. False positive serology test occurs in 3-5% of the healthy population. PCR Bartonella serology (gold standard) with sensitivity of 86-100% is required in co-infection cases.

**Keywords:** co-infection, neuroretinitis, false positive

## **POS27 A CASE REPORT: I GOT A RASH OVER MY FACE AND SUDDENLY I CAN'T SEE!**

Jennifer D<sup>1</sup>, Lakana K.T<sup>1</sup>

Department of Ophthalmology<sup>1</sup>, Hospital Kuala Lumpur

**Objective:** To describe a case of Herpes Zoster infection with various ocular manifestations.

**Method:** A case report reviewed.

**Result:** An elderly Chinese gentleman presented with right sided vesicular rash over the face. A week after the rash he noticed a right droopy eyelid and his vision was deteriorating. On examination, we noted rash and Hutchinson's sign. He also had anterior chamber cells, keratic precipitates and reduced corneal sensation. Besides that, he has an incomplete ophthalmoplegia and a right rapid afferent pupillary defect. Intra-ocular pressure (IOP) over right eye was 15-25mmHg. Fundus examination showed hazy view and Ct orbit showed features of right optic neuritis.

**Conclusion:** In this case, Herpes Zoster Infection manifest with Herpes Zoster Ophthalmoplegia, keratouveitis, optic neuritis and secondary raised (IOP).

## **POS28 AN ATYPICAL PRESENTATION OF DISCIFORM KERATITIS**

ZYHW Lim(MBBS), A Musa (MOphth)

Department of Ophthalmology, Selayang Hospital

**Objective:** This case illustrates an atypical presentation of disciform keratitis with multiple subepithelial infiltrates

**Method:** Case report

**Result:** 19-year-old Malay gentleman, presented with a blurring of vision and photophobia in the left eye for 1 week. His visual acuity was counting finger at 1 feet in the left. Slit lamp examination showed injected conjunctiva, cornea had a central mid-stroma oedema with underlying Descemet folds. There were also multiple subepithelial whitish infiltrates at the centre of the cornea. The right eye was normal. He was started on Occ acyclovir 5 times daily and Gutt Dexamethasone 4 times daily. 2 weeks later, his symptoms and vision in the left eye improved to 6/12. The whitish corneal opacities became less dense, more well defined with areas of scarring, Descemet folds were less and cornea was clearer.

**Conclusion:** Multiple corneal infiltrates as seen in this case is a rare manifestation of viral keratitis. Early introduction of topical corticosteroids with antiviral cover do hasten recovery and reduce disease sequelae.

**Keywords:** Disciform Keratitis

## **POS29 THE HEADACHES OF MANAGING WOODEN ORBITAL FOREIGN BODY**

Silva J.M, Sumugam S. Kala, Tagal.Julian

**Objective :** To report on the challenges of managing wooden orbital foreign body

**Method:** Case report

**Results:** A 35 year-old man with a left upper lid laceration wound sustained from a motor-vehicle accident had vision of 6/24 with positive RAPD. CT orbit was suggestive of infected hematoma and abscess collection causing compressive optic neuropathy. Patient was started on systemic steroids with concurrent antibiotics. 2 weeks post trauma, his condition worsened with vision of CF, proptosis and raised IOP. Repeat CT showed worsening of left retro orbital collection and endoscopic decompression was done. Pus and wooden FB was found abutting the left MR muscle. 2 months later, patient came back with diplopia and restricted extraocular movements. Third CT revealed residual retro orbital collection with foreign body. Patient underwent another endoscopic decompression but no foreign body was seen thus an MRI was ordered which showed an infraorbital lesion with retro orbital extension to the orbital apex. Subsequently this case was managed by the oculoplastic team and thin wood material and necrotic tissue were removed.

**Conclusion :** It is imperative to have MRI when vegetative material is suspected especially when the patient has worsening signs and symptoms.

**Keywords:** Wooden foreign body, orbit, CT, endoscopic decompression

## **POS30 PLASMABLASTIC LYMPHOMA WITH ATYPICAL OCULAR MANIFESTATIONS**

Kalatheran MD, Wong Chi Lun M.S Ophthal

**Objectives:** Plasmablastic lymphoma (PBL) is an aggressive lymphoma, high-grade neoplasm commonly associated with immunocompetent individuals. Atypical clinical manifestation of the lymphoma confuses clinician.

**Methods:** Case history

**Result:** A 57 years old Man with underlying renal failure, history of emphysematous gall bladder and nonspecific abdominal pain with distension was referred by medical counterpart to look for infections source as left eye swelling and discomfort for 1 week doubting on going sepsis. Patient was admitted few times for fever and gastrointestinal complaints. Ocular examination shows RAPD positive, left eye vision 6/60, restricted all the gazes, proptosed eyeball and lid lag, fundus shows dilated and tortuous vessels, optic disc pink. Right eye vision 6/36 normal anterior and posterior segment. Exophthalmometer left eye 23mm, right eye 18mm. Blood results unremarkable. Left vision progress to NPL within days. Repeated fundus review showed compression features superior nasal adjacent of OD. CT brain and orbit evaluation shows orbital cavernous hemangioma. Medical counterpart had done CT scan of abdomen and pelvic in view of unexplained abdomen pain and distension. CT scan resulted diffuse abdominal and mesentery lymphadenopathy with enlarged prostate. Neck biopsy arranged in view cervical lymph nodes also enlarged. HPE resulted as plasmablastic lymphoma. Patient was referred to haematologist for definitive treatment.

**Conclusions:** Plasmablastic lymphoma onset leads to rapid loss of vision within days however ocular findings leads to the main diagnosis breakthrough. Despite competent history taking, examinations and diagnostic modalities, ocular examination had played pivotal role in concluding the diagnosis.

## POS31 MATURE CATARACT AND ASTEROID HYALOSIS- DILEMA IN INTRAOCULAR LENS POWER CALCULATION

Khairuddin<sup>1</sup>, Premala Devi-S<sup>1</sup>, Puspha R<sup>1</sup>, Mohd Khalil-KH<sup>1</sup>

<sup>1</sup>Department of Ophthalmology, Hospital Tuanku Ampuan Najihah Kuala Pilah

**Objective:** To report the accuracy of axial length (AL) measurements obtained from B-scan ultrasonography for intraocular lens (IOL) power calculation in a patient with mature cataract and dense asteroid hyalosis.

**Method:** Case report

**Results:** A 60-year-old female with background history of treated proliferative diabetic retinopathy (PDR) presented with bilateral blurring of vision. On ocular examination, bilateral vision was hand movement (HM). There was no relative afferent pupillary defect. Anterior segment examination showed bilateral mature cataract. Since there was no fundus view, a B-scan was done which showed bilateral dense asteroid hyalosis and flat retina. Patient was planned for right cataract operation and initial repeated immersion and optical biometry showed very short axial length of 19.16mm and 16.50mm in right and left respectively despite normal anterior chamber depth and lens thickness. Plain right phacoemulsification was done and patient left aphakic. Post operatively, right axial length recalculated with B-scan showed 23.5mm. However average of 24mm was taken and a monofocal IOL with post operation refraction aimed at -0.82 was selected and implanted. Two months post-operative right refraction was +0.25DS/-0.50DC X 120 (Spherical equivalence: plano) with distance vision 6/7.5 and near vision N6 with +2.50DS.

**Conclusion:** B-scan ultrasonography can be used effectively to calculate axial length to provide satisfactory results in patients with dense ocular medias when there's limitation of optical and immersion biometry.



## **POS32 EYELID GOUTY TOPHUS WITH COMPLETE PTOSIS: THE FIRST CASE REPORT**

Lu Sing Hui (MD), S. Kala Sumugam (MBBS), Murni Hartini Jais (MBBCh BAO)

**Objective:** To report a rare case of a gouty tophus of the eyelid, the first case in the literature that causes complete ptosis.

**Method:** A case report

**Case Report:** A 79-year-old man presented with a gradually enlarging painless swelling around the right upper eyelid for over 1-year duration. On examination, a hard and non-tender mass noted over right upper eyelid, causing complete mechanical ptosis. CT scan revealed a well-defined enhancing lesion at the right upper eyelid, size measuring 0.9x2.4x1.4cm. Following excision biopsy, the histologic examination revealed fragmented tissue comprising mixture of dense chronic inflammatory infiltrates and scattered amorphous eosinophilic deposits. The deposits are surrounded by histiocytes and multinucleated giant cells. Special stain with Congo Red showed the deposits are non-congophilic. It is consistent with gouty tophus.

**Conclusion:** There should be an increase level of suspicion for tophus in a patient presenting with a painless periocular mass.

## **POS33 REVISITING NON-SURGICAL TREATMENT OPTION FOR ADVANCED GLAUCOMA**

Khay Wei Poh (MBBS) <sup>1,2</sup>, Sunder Ramasamy<sup>1</sup>, Jamalia Rahmat<sup>1</sup>  
Department of Ophthalmology, Hospital Kuala Lumpur<sup>1</sup>  
Department of Ophthalmology, Universiti Kebangsaan Malaysia<sup>2</sup>

**Objective:** To discuss about management of a case of a young patient with advanced glaucoma and vernal keratoconjunctivitis.

**Method:** A case report

**Result:** This is a 12-year-old boy who had longstanding both eye allergic conjunctivitis without any proper treatment. He was taking over-the-counter eye drop for the past 2 years. Upon review for his allergic conjunctivitis, incidental finding of both eyes advanced glaucoma with counting finger vision OS and 6/6 but tunnel vision OD. Intraocular pressure was 52mmHg OS and 44mmHg OD, which was managed to be controlled with 3 anti-glaucoma. His CDR was 0.9 OS and 0.8 OD. Both eyes had features of severe vernal keratoconjunctivitis and immature cataract. In view of advanced glaucoma in a young child with inflammatory eye disease, further intervention was considered to control glaucoma progression with the aim to reduce number of anti-glaucoma needed to ensure good compliance to treatment. Filtering surgery was deferred for him at this moment as he has an underlying ongoing inflammatory condition. Instead, both eyes lens aspiration, intraocular lens insertion and transscleral cyclophotocoagulation was offered to him. His vision remained the same post-surgery. His intraocular pressure was managed to maintain with 2 types of anti-glaucoma.

**Conclusion:** Conventionally, transscleral cyclophotocoagulation was used for recalcitrant glaucoma with poor visual prognosis. However, this laser still has its role as a temporary measure for IOP control before undertaking invasive filtering surgery which has more complication and failure rate in a young child.

## **POS34 NON-TUBERCULOUS MYCOBACTERIAL OCULAR INFECTION MASQUERADING AS CHOROIDAL TUMOUR – A DIAGNOSTIC CONUNDRUM**

KC Yeap<sup>1</sup>, Premala Devi-S<sup>1</sup>, Puspha R<sup>1</sup>, Mohd Khalid-KH<sup>1</sup>

<sup>1</sup>Department of Ophthalmology, Hospital Tuanku Ampuan Najihah

**Objective:** To report a rare case of non-tuberculous mycobacterial (NTM) choroiditis masquerading as choroidal tumour, whose diagnosis was initially masked by keratitis.

**Method :** Case Report

**Results :** A 57-year-old heroin chaser with a left blind eye presented with diffuse left bacterial keratitis. Systemic examination revealed multiple non-tender cervical lymphadenopathy. B-scan ultrasonography showed hyperechoic mass with surrounding exudative retinal detachment, resembling a choroidal tumour. However, Computed Tomography (CT) and Magnetic Resonance Imaging (MRI) scan findings were in favour of inflammatory changes (choroiditis) instead. Erythrocyte Sedimentation Rate (ESR) and C-Reactive Protein (CRP) were markedly raised, and patient was confirmed to have HIV and Hepatitis C. Tuberculosis workup was normal. In view of intractable pain, an evisceration was done and his vitreous humour was sent for culture, which grew *Mycobacterium Fortuitum*. Post-evisceration, the globe has been quiescent.

**Conclusion :**

NTM ocular infections are rare, challenging to diagnose and potentially sight-threatening. Early recognition and prompt treatment is life and vision saving.

**Keywords :** Non-tuberculous mycobacteria, choroiditis, *Mycobacterium Fortuitum*.

## **POS35 THE TALE OF A HAPPY BUT TIRED LOOKING KID**

Logeswari K (MBBS)<sup>1,2</sup>, Nurulhuda MA (MBBS)<sup>1</sup>, Ng KK (MS Ophthal)<sup>1</sup>, Raja Norliza RO (MS Ophthal)<sup>1</sup>, Nor Fadzillah AJ (MMed Ophthal)<sup>1</sup>

<sup>1</sup>Hospital Melaka

<sup>2</sup>University Malaya

**Objective :** To report two rare cases of myasthenia gravis in toddlers.

**Method :** Case report

**Result :** Myasthenia gravis (MG) is an autoimmune disease involving neuromuscular junction resulting in symptoms of variable muscle weakness. In the paediatric population, incidence is estimated to be between 1.0 and 5.0 cases per million person years. We report two cases of MG in which they presented with drooping of both upper lids. First case, a 24 month old girl with bilateral ptosis and bilateral asymmetrical ophthalmoplegia, had negative anti-acetylcholine receptor (AChR) antibodies. Second case, 18 months old girl with moderate ptosis bilaterally in which the AChR antibodies were positive, but developed myasthenic crisis. Both cases responded well with oral anticholinesterase and steroids.

**Conclusion:** AChR antibody should not be the sole diagnostic tool in Juvenile MG, thus high index of clinical suspicion and early commencement of treatment is indicated to prevent its complication.

**Keywords:** Myasthenia gravis, ptosis, anti-acetylcholine receptor antibodies

## **POS36 A CASE OF VALSALVA RETINOPATHY POST CARDIOPULMONARY RESUSCITATION**

Nilani MN, Nor Fadhilah M, Department of Ophthalmology , University of Malaya.

**Objective :** To report a case of valsalva retinopathy post cardiopulmonary resuscitation (CPR) in adult.

**Method :** Case Report

**Results :** A 35 year old obese man admitted to intensive care unit for acute exacerbation of bronchial asthma secondary to pneumonia and receive CPR during his resuscitation. He developed bilateral central reduce vision post extubation with visual acuity of 6/60 in the right eye and 6/24 in the left eye. Fundus examination showed bilateral pre macular haemorrhage. Patient was treated conservatively and regain normal vision after 6 weeks with complete resolution of the pre retinal haemorrhage.

**Conclusion :** Valsalva retinopathy is a well-described phenomenon. A pre-retinal hemorrhage in the macula area is the usual finding at presentation. The cause is thought to be a rupture of a retinal vessel, following physical exertion – usually a sudden and rapid rise in intrathoracic pressure. Although it involved the central area of macula, prognosis is good and as in this case the complete anatomical is observed within months.

**Keywords :** valsalva retinopathy, pre retinal haemorrhage, cardiopulmonary resuscitation

## **POS37 ISOLATED VINCRISTINE-INDUCED BILATERAL PTOSIS IN A CHILD**

CZ Lim (MD), Khairy Shammel (MD), Mohtar Ibrahim (MS)

Department of Ophthalmology, Hospital Universiti Sains Malaysia, Kelantan

**Objective:** To report a case of isolated vincristine-induced ptosis in a 3 year old child with acute lymphoblastic leukemia who was successfully treated with pyridoxine only.

**Method:** Case report.

**Results:** A 3 years old girl with B-cell acute lymphoblastic leukemia on UK ALL regime A, developed bilateral ptosis on 28<sup>th</sup> day of induction. Examination revealed bilateral ptosis exclusively, other examinations were unremarkable. Cerebral spinal fluid analysis, serum electrolyte, liver function and calcium levels were normal. She was not on any drugs that could potentiate vincristine neurotoxicity. Chemotherapy was deferred, ptosis improved markedly after 10 days of pyridoxine with complete resolution after 4 weeks. Vincristine was reinitiated without recurrence of neuropathy. Currently, she has received total of 10.5mg vincristine.

**Conclusion:** Vinca alkaloid induced neurotoxicity are predominately sensory neuropathies that developed after cumulative dose. The presentation of isolated bilateral ptosis as initial symptom is unique to our case and prompted withholding of drug and early treatment, avoiding severe toxicity.

**Keywords:** ptosis, vincristine

## **POS38 DIPLOPIA AS AN INITIAL MANIFESTATION OF ORBITAL LYMPHOMA: A CASE REPORT**

Long LY, MD (UKM), Nazila AA, MD (UKM), MSOphthal (UM)

**Objective:** To report a case of bilateral primary non-Hodgkin orbital lymphoma presented with persistent restrictive ophthalmopathy.

**Method:** Case report.

**Results:** A 70-year-old diabetic man presented with gradually worsening binocular diplopia for past one year. On examination, his vision was 6/9 bilaterally without RAPD. Anterior and posterior segments were unremarkable. Extraocular movement was -3 to -4 in all gazes bilaterally. Both eyes were slightly proptosed measuring 20mm using Hertel exophthalmometer. Hess chart showed limited motility. MRI orbit revealed bilateral symmetrical intraconal and extraconal multilobulated lesions extending posteriorly near orbital apex, which has low signal intensity on T1W/T2W and low ADC value. Lacrimal glands were also enlarged and enhancing. An orbitotomy and incisional biopsy was then performed. Histopathological examination showed low grade non-Hodgkin B cell lymphoma.

**Conclusion:** Orbital lymphoma is one of the rare causes of persistent restrictive ophthalmopathy. This should alert clinicians to consider orbital lymphoma as a differential diagnosis to prevent delay in diagnosis and treatment.

**Keyword:** diplopia, orbital lymphoma, restrictive ophthalmopathy

## **POS39 AN UNCOMMON CASE OF LANGERHANS CELL HISTIOCYTOSIS: CASE REPORT AND REVIEW OF LITERATURE**

Maftuhim Addenan MBBS, Choo May May FRCS, Teah Kean Hooi MB Bch, Fazliana Ismail MMedOphth, Tengku Ain Fathlun Bin Tengku Kamalden DPhil.

**Objective:** To report an uncommon case of orbital Langerhans Cell Histiocytosis.

**Method:** Case report.

**Case report:** Langerhans Cell Histiocytosis (LCH) is rarely encountered. It is a spectrum of disorder characterized by accumulation of histiocytes in various tissue. Diagnosis is challenging as it may simulate periorbital cellulitis, traumatic hematoma, rhabdomyosarcoma and Ewing's sarcoma. We report a case of orbital LCH with intraorbital extension. Histopathological examination from the incisional biopsy showed numerous histiocytes. The presence of Langerhans cells was confirmed by the presence of protein S-100, CD68 and CD1a antigenic determinants. Treatment depends on degree of organ involvement, and as our case was a uni-system and multifocal LCH, thus she responded well to cytotoxic drugs and steroids.

**Conclusion:** Diagnosis of Langerhans Cell Histiocytosis can be challenging as it may simulate various clinical presentation. Prompt tissue diagnosis is crucial for early management.

**Key words:** Langerhans cell histiocytosis; Orbit; Histopathological examination.



## **POS40 A CASE REPORT OF BEST'S VITELLIFORM MACULAR DYSTROPHY**

Mahani Mastor<sup>1,2</sup>, Fiona Chew Lee Min<sup>1</sup>, Hanizasurana Hashim<sup>1</sup>

<sup>1</sup>Department of Ophthalmology, Hospital Selayang

<sup>2</sup>Department of Ophthalmology Hospital Universiti Kebangsaan Malaysia

**Introduction:** Best disease also termed as vitelliform macular dystrophy is an autosomal dominant disorder which commonly present in childhood with the classical appearance of a yellow or orange yolk lesion in the macula.

**Case report:** An 8 year old girl with no medical illness presented with 6 months blurring of vision which is progressively worsening. Vision was 6/18 in both eyes and anterior segment of both eyes were normal. Fundus showed yellowish-orange, elevated, well defined border lesion in both macula. OCT in both eyes showed choroidoneovascularization(CNV) complex with subretinal fluid and fibrosis. Fundus Fluorescein Angiography also demonstrated CNV with leakage. Electrooculogram resulted Arden ratio of Right Eye 1.444 and Left eye 1.363. Findings and investigations all pointing towards Best Vitelliform macular dystrophy. Patient underwent both eyes Intravitreal Ranibizumab injection. Subsequently during monitoring vision has improved to 6/7.5 in both eyes. Nevertheless the patient was reported to have recurrence after 1 year of treatment thus Intravitreal Ranibizumab was repeated which gave good visual outcome.

**Conclusion:** There are multiple trials of treating CNV in Best Disease including Photodynamic therapy, Intravitreal Triamcinolone or combination of both. Intravitreal Ranibizumab could be a new approach despite of its recurrence which frequently been reported. Further evaluation and studies are demanded to prove its efficacy and to create protocol of giving the injections.

**Keywords:** Arden ratio, Electrooculogram, BEST's vitelliform, CNV complex, Ranibizumab

## **POS41 SUCCESSFUL TREATMENT OF LEPTOSPIRAL UVEITIS**

Muhammad Fadhli Bin Ab Hamid (MBBS), Ku Chui Yong (Mophthal), Angela Loo Voon Pei (Am (Mal), FRCSI (Ire), FHKAM (Ophthal), Fcophth. (HK), Mrcophth (UK), Mbbs (Aust)

**Objective:** To report a case of Anterior Uveitis Leptospirosis

**Methodology:** Case report

**Result:** 49 years old lady, a canteen operator, presented with progressive painful visual loss of her left eye for 1 month duration. Comorbid, she is schizophrenic and diabetic. Her vision on presentation was 'hand movement'. Anterior chamber reaction was present along with a huge fibrin plaque obstructing the pupillary plane. Fellow eye and systemic examinations were unremarkable. Investigations : ESR (80 mm/hr) and TWBC ( $10.5 \times 10^9/L$ ). Leptospiral serology (IgM) was positive with MAT 1:400. Oral doxycycline and intensive topical dexamethasone were started. Her vision improved to 6/24 at day 4 of treatment, and subsequently 6/9 after 1 week.

**Conclusion:** Leptospiral uveitis can cause visual loss if left untreated. Lack of rapid diagnostic tool often hinders prompt treatment. High index of clinical suspicion and timely instillation of steroids and antibiotic is the key to success management of this ocular pathology.

**Keywords:** Leptospirosis, anterior uveitis

## **POS42 A COIL TO STOP THE BULGE.**

<sup>1</sup>Muhamad Amin Ramli, <sup>2</sup>AP Mohd Shafie Abdullah, <sup>1</sup>Liza- Sharmini Ahmad Tajudin

<sup>1</sup>Department of Ophthalmology, School of Medical Sciences, Health Campus, Universiti Sains Malaysia, 16150 Kubang Kerian, Kelantan, Malaysia

<sup>2</sup>Department of Radiology, School of Medical Sciences, Health Campus, Universiti Sains Malaysia, 16150 Kubang Kerian, Kelantan, Malaysia

**Objective:** To report a case of successful transarterial embolization using coils in unilateral direct carotid-cavernous sinus fistula.

**Method:** Case report.

**Result:** An apparently healthy 15 years old boy presented with sudden onset painless progressive right eye proptosis associated with redness for two days. He was involved in a motor vehicle accident two weeks ago and sustained cerebral concussion. He also sustained closed proximal 1/3 of right femur fracture and right mandible angle undisplaced fracture. On examination, his bilateral visions were 6/6 with no relative afferent pupillary defect. There was significant right eye proptosis (different of 11mm between both eyes) with complete ptosis and chemotic conjunctival with presence of cockscrew vessels. Bruit was heard at right periocular region. Right pupil was dilated about 5mm. Intraocular pressure was 51mmHg. CT orbit with contrast showed bulging and engorged right cavernous sinus. Cerebral angiogram confirmed right direct carotid-cavernous sinus fistula arising from C4 segment of the right internal carotid artery. Transarterial embolization using coils was performed by the interventional radiologists. He was symptom free with complete disappearance of proptosis and retained good vision without any sequelae.

**Conclusion:** Transarterial embolization using coils is generally reserved for direct carotid-cavernous sinus fistula. The success rate is high. However, the cost of the procedure remained high.

## **POS43 A CASE OF ORBITAL LYMPHANGIOMA**

Nurul Najieha Amir, Fazliana Ismail, Mimiwati Zahari

**Introduction** Lymphangioma is rare, benign vascular tumor, represent 1-3% of orbital mass which occurs in children.

**Objective:** To report a case of orbital lymphangioma.

**Method:** Case Report

**Result:** 8 years old Malay boy presented with left upper lid swelling for two weeks. No other associated symptoms. At presentation, there were left proptosis and swelling at medial upper lid, soft and non-tender. EOM on the LE restricted on elevation. Optic nerve function tests and systemic review were normal. Magnetic Resonance Imaging of the brain and orbit showed lobulated extraconal cystic lesion with blood fluid level at left orbit. Patient was planned for picibanil injection initially. Fortunately, spontaneous regression occurs within 2 months of diagnosis.

**Discussion:** Orbital lymphangioma should be included in the differential diagnosis in any case of acute proptosis especially in young patient. Conservative management is a treatment of choice if there is no visual compromise or optic nerve compression.

## **POS44 ATYPICAL PSEUDOMONAS POSTERIOR KERATITIS: A DIAGNOSTIC DILEMMA**

Ng Chun Wai(Md)<sup>1</sup>, Fahmi(Ms(Ophthal) <sup>2</sup>, Fatimah  
Suhila(Ms(Ophthal)Ukm)<sup>1</sup>, Akmal Haliza(Ms(Ophthal)Um)<sup>1</sup>

<sup>1</sup>Department Of Ophthalmology, Hospital Tengku Ampuan Afzan

<sup>2</sup>International Islamic University Malaysia

**Objective:** To report a case of Atypical Pseudomonas Posterior Keratitis due to contact lens wear.

**Result:** 17 years old girl, presented with bilateral eye blurring of vision with eye redness and eye pain for 2 weeks with history of contact lens wear prior. Patient's both eyes visual acuity was 6/60. There were generalized superficial punctate keratitis, perineural like infiltrates and pan stromal edema with endothelitis of cornea. There was anterior chamber reaction but no hypopyon. Both IOP & fundus examination was normal. OCT central corneal thickness demonstrated 800-820µm. Her condition remained status quo after treated with antifungal eye drops, ciprofloxacin eye drops and oral antiviral. Hence bilateral eye aqueous tap under LA were performed and aqueous were sent for culture. Aqueous culture result showed few gram-negative bacilli suggestive of Pseudomonas. Gentamycin 0.9% eye drops and oral ciprofloxacin were commenced for 2 weeks. Patient was also given 3 course of bilateral eye subconjunctival gentamycin 0.3% injection. Patient visual acuity improved to 6/6 bilaterally with resolved cornea edema.

**Conclusion:** Pseudomonas contact lens related infection can cause posterior chamber infection without a breach of cornea epithelium.

**Key words:** Pseudomonas, Posterior Keratitis, contact lens wear

## **POS45 LIGHTNING DOES STRIKE TWICE**

Nurul Shima Ismail, Muzaliha Mohamed Nor

Ophthalmology Department, Hospital Sultanah Bahiyah, Alor Setar, Kedah.

**Objective:** To report a patient who developed Central Retinal Artery Occlusion (CRAO) with previous history of hypertensive intracranial bleed.

**Method:** Case report

**Results:** A 50 year-old Indian man with Diabetes Mellitus, hypertension and hyperlipidemia presented with sudden onset, painless, profound blurring of vision in the left eye. Visual acuity was Hand Movement (HM) with positive Relative Afferent Pupillary Defect (RAPD). Left fundus showed pale optic disc, area of macula and retina oedema with a 'cherry-red spot' appearance sparing the maculopapular bundle. There was also presence of 'cattle-trucking' signs and venous tortuosity. Further questioning revealed that he had history of hypertensive intracranial bleed required surgical evacuation due to undiagnosed hypertension 11 years ago. His right eye vision was 6/9 with limited temporal field of vision.

**Conclusions:** Profiling high risk patients to develop CRAO does not involves ophthalmologist alone. It should also be detected, prevented and controlled at the primary level itself.

**Keywords:** Central Retinal Artery Occlusion, Cherry-red spot, Cattle-trucking sign, Hypertensive intracranial bleeding, Painless blurring of vision

## **POS46 ATYPICAL MECHANISM OF INJURY CAUSING BILATERAL RETINAL HAEMORRHAGES IN AN INFANT**

Nor Diyana Zainal Noor,<sup>1</sup> Umi Kalthum Md Noh,<sup>1</sup> Wan Haslina Wan Abdul Halim<sup>1</sup>

<sup>1</sup>Department of Ophthalmology, University Kebangsaan Malaysia Medical Centre (UKMMC), Jalan Yaacob Latif, 56 000 Cheras, Kuala Lumpur, Malaysia

**Objective:** To report a case of bilateral retinal haemorrhages of an infant caused by a baby swing.

**Method:** Case report

**Result:** A 3 months old baby boy presented with history of seizures and irritability for 2 days. He was brought in unresponsive that required cardiopulmonary resuscitation. The infant was regularly placed in a baby swing for sleeping. No other history suggestive of non-accidental injuries or trauma. Examination revealed reactive pupils bilaterally and bilateral fundus revealed multiple scattered retinal haemorrhages. There were no other signs of injuries. CT and MRI brain showed bilateral subacute subdural haemorrhage with severe hypoxic ischemic injury. He was treated conservatively for the intracranial bleed by the neurosurgery team and was planned for visual evoked potential soon.

**Conclusion:** This is an interesting case of bilateral retinal haemorrhages seen in an infant caused by baby swing. Thorough physical examination is mandatory to exclude non-accidental injury.

**Keywords:** baby swing, non-accidental injury, retinal haemorrhages

## **POS47 ACUTE PANCREATITIS AND CENTRAL RETINAL ARTERY OCCLUSION : IS IT POSSIBLE?**

Nur Hafizah Maffar<sup>1</sup>, Premala Devi-S<sup>1</sup>, Pushpa R<sup>1</sup>, Khairul Husnaini Mohd Khalid<sup>1</sup>

<sup>1</sup>Department of Ophthalmology, Hospital Tuanku Ampuan Najihah Kuala Pilah

**Objective:** To report a rare case of unilateral central retinal artery occlusion (CRAO) in a severe acute pancreatitis patient.

**Method:** Case report

**Results:** A 38-year-old male presented with sudden onset of right painless loss of vision for 5 days duration associated with severe left hypochondriac abdominal pain. He had no prior ocular or systemic conditions. On ocular examination, right vision was perception to light and left vision was 6/12. There was right relative afferent pupillary defect. Anterior segment examinations were normal. Right fundus showed pale retina with cherry red spot and pallish optic disc corresponding to CRAO. Laboratory workup showed markedly elevated serum amylase and computed tomography of abdominal imaging showed necrotising pancreatitis with cholelithiasis, diagnostic of acute severe pancreatitis. Patient was treated with aggressive intravenous fluid rehydration, analgesic and antibiotic meropenem. However, patient developed pancreatic abscess complicated with klebsiella pneumonia and patient eventually succumbed to the condition.

**Conclusion:** CRAO in relation to acute pancreatitis is a rare complication with poor visual prognosis. The pathogenesis of this ocular event is likely due to complement-induced leukoembolization.

**Keywords:** Acute pancreatitis, central retinal artery occlusion, complement-induced leukoembolization.



## **POS48 LARGE CONJUNCTIVAL MASS**

Peng Li Jing<sup>1,2</sup>, Hanida Hanafi<sup>2</sup>, Choo May May<sup>1</sup>

<sup>1</sup>Ophthalmology department, University Malaya, Kuala Lumpur.

<sup>2</sup>Ophthalmology department, Queen Elizabeth Hospital

**Introduction:** Conjunctival papilloma is a benign epithelial tumor commonly appears as pink fibrovascular fronds. The epithelial surface is typically a transparent covering that has a glistening appearance. We aim to report an atypical presentation of conjunctiva papilloma and its treatment.

**Method:** Case report

**Results:** 60-year-old gentleman presented with a 4-year history of gradually enlarging pigmented growth on the left cornea. He had a brownish papillomatous mass arising from the left inferior fornix and covering the medial half of the cornea. The mass was associated with multiple feeder vessels from the nasal bulbar conjunctiva. Incisional biopsy was performed and histological examination revealed benign melanosis. A wide surgical excision with corneal epithelial debridement together with amniotic membrane transplant was done. Histopathology of the tumour revealed conjunctiva papilloma.

**Conclusion:** The treatment options for conjunctival papilloma include surgical excision, cryotherapy, carbon dioxide laser, oral dinitrochlorobenzene, oral cimetidine, topical mitomycin C, and topical and/or intralesional interferon alfa-2b. There was no recurrence after 12 months post operation.

**Key words:** conjunctiva papilloma, amniotic membrane

## **POS49 SEVERE PERIPHERAL ULCERATIVE KERATITIS WITH CORNEAL PERFORATION COMPLICATED WITH FUNGAL INFECTION**

Premalatha S, Mahiran CD, Shamala Retnasabapathy

Hospital Sungai Buloh, Selangor, Malaysia

**Objective:** To report about the case of severe peripheral keratitis with corneal perforation complicated with fungal infection.

**Method:** Case Report

**Result:** A 49 years old Malay gentleman with both eye peripheral ulcerative keratitis presented with sudden onset right eye pain. Best corrected visual acuity of the right eye is 6/24 and left eye is 6/18. Ocular examination of the right eye revealed corneal perforation with iris plugging at 9 o'clock position with perilimbal corneal thinning from 7 to 11 o'clock with surrounding vascularization. Posterior segment was normal. Left eye examination was unremarkable. Systemic examination revealed fungal infection of finger and toe nails. Patient was started on Oral Titraconazole 200mg OD, Oral Azathioprine 50mg BD and Oral Prednisolone 0.5mg/kg. Once the systemic fungal infection resolving, patient underwent right lamellar keratoplasty. Postoperatively, Oral Prednisolone dosage increased to 1mg/kg OD with weekly gradual tapering dosage. Upon last follow up, the visual acuity was 6/12 with good clinical response.

**Conclusion:** Severe peripheral ulcerative keratitis with concurrent systemic fungal infection need a slow induction of immunosuppressant and lamellar keratoplasty which plays a favourable clinical outcome.

**Keyword:** Fungal, Immunosuppressant, Keratitis, Keratoplasty, Peripheral

## **POS50 EPIBLEPHARON AS AN EARLY SIGN OF CHILDHOOD THYROID EYE DISEASE**

Kuhapriya Selvarajah MD<sup>1</sup>, Ho Shu Fen MBBS<sup>1</sup>, Chong Mei Fong MD<sup>1</sup>

<sup>1</sup> Department of Ophthalmology, Hospital Raja Permaisuri Bainun, Ipoh

**Objective:** Acquired epiblepharon is rare but can occur secondary to thyroid orbitopathy. We report a rare case of epiblepharon in a child as an early sign of childhood orbitopathy.

**Method:** Case Report

**Result:** An 11-year-old Chinese girl with no comorbidities presented with bilateral watery eye and irritation for three weeks. Clinical examination revealed bilateral lower eyelid epiblepharon with bilateral punctate epitheliopathy. She underwent bilateral lower eyelid epiblepharon repair. Despite initial success, there was gradual recurrence of epiblepharon after one month. Bilateral mild proptosis and neck swelling were noted in subsequent review and was diagnosed thyrotoxicosis by raised FT3, T4 and depressed TSH. Three months post treatment with carbimazole, there is a mild improvement in her epiblepharon.

**Conclusion:** It is important to rule out secondary cause of epiblepharon such as evolving thyroid orbitopathy despite patient being a child.

**Keywords:** Epiblepharon, punctate epitheliopathy, thyroid orbitopathy

## **POS51 RHINO-CEREBRAL-ORBITAL MUCORMYCOSIS SECONDARY TO RHIZOPUS**

Rathna Ramayaj<sup>1</sup> (MBBS), Umi Kalthum Md Noh<sup>1</sup> (MBBCh BAO; BA; MS (Ophth.))

1. Department of Ophthalmology, Faculty of Medicine, Universiti Kebangsaan Malaysia Medical Centre, Jalan Yaacob Latiff, Bandar Tun Razak, 56000, Cheras, Kuala Lumpur, Malaysia.

**Objective:** We report a case of rapidly progressive fatal rhino-cerebral-orbital mucormycosis in a diabetic ketoacidosis patient.

**Method:** Case report

**Result:** A 70-year-old gentleman with underlying diabetes mellitus presented with right sided facial swelling, redness and drooping of the eyelid. There was associated fever and greenish nasal discharge. He was diagnosed with ketoacidosis. Examination showed right eye counting finger, complete ptosis, proptosis and total ophthalmoplegia, with facial and periorbital redness. There was presence of afferent pupillary defect. Anterior segment examination showed congested and chemosed conjunctiva, with high intraocular pressure, necessitating lateral canthotomy. The left eye was normal. CT scan showed findings consistent with orbital cellulitis and subsequent nasal endoscopy sample grew *Rhizopus* sp. He became unresponsive, and MRI confirmed cavernous sinus thrombosis and acute cerebral infarction. He developed bilateral retinal artery occlusion, and the right eye rapidly became ischaemic, with progressive necrosis of nasal alar and lower lid. Despite functional endoscopy, antibiotic and antifungal treatment, his condition deteriorated, and he succumbed to death at day 7 of presentation.

**Conclusion:** rhino-cerebral-orbital mucormycosis is a serious and fatal form of this disease if not treated adequately. Thus, early diagnosis and prompt treatment is important in improving the survival rate of the patient.

**Keyword:** Orbital, Cerebral, Mucormycosis, Diabetic ketoacidosis, *Rhizopus*

## **POS52 THE ULCER-CAUSING HONEY**

Rebecca Louis, Rohanah A, Rosilah M, YP Lai, Muhammad Zulfadhli

**Objective:** Reporting a case of fungal keratitis.

**Method:** Case report

**Result:** A 16 year-old boy presented with blurring of vision, tearing and redness for three weeks after instilling unapproved eye drops containing honey.

There was a large central stromal abscess with endothelial plaque.

Topical Moxifloxacin 0.5%, Fluconazole 0.2% ,Natamycin 5%, and Gentamycin 0.9% hourly were started along with oral Fluconazole 200mg daily. There was drastic improvement after a week of treatment and gradual resolution of keratitis over three months with slow tapering of topical antibiotics. Visual acuity of right eye was regained to 6/12 with central corneal scarring.

**Conclusion:** Aggressive and prolonged period of treatment is required to ensure complete resolution in fungal keratitis.

**Keywords:** Fungal keratitis, stromal abscess, endothelial plaque

## **POS53 LATE ONSET DEVASTATING OCULAR COMPLICATION OF DENGUE FEVER**

Mohd Hikmi R, Viona Lai MS, Chiang WS

Ophthalmology Department, Hospital Duchess of Kent, Sandakan, Sabah

**Objectives:** To illustrate a case of dengue fever with late onset and severe ocular complication.

**Method:** Case report

**Result:** A 13 years old boy presented with left eye progressive painless loss of vision for 2 weeks. He denied history of ocular trauma. He has history of dengue fever that required hospitalization about 1 month ago. Snellen visual acuity was no perception of light in left eye and 6/6 in right eye. Both pupil was reactive to light and left eye showed positive relative afferent pupillary defect. Left eye fundus was hazy view. B-scan showed left eye dense vitreous opacities with thickened posterior vitreous phase that mimicked funnel shaped retinal detachment. He was referred to vitreoretinal consultant for vitrectomy immediately. Intraoperative findings showed left eye vitreous haemorrhage with subhyaloid haemorrhage and posterior vitreous detachment. Post operatively , left eye visual acuity was improved to hand movement.

**Conclusion:** Ocular complication with posterior segment involvement in dengue fever is a sight threatening condition. Co- management of ophthalmology and medical can save sight and life.

## **POS54 INTRAVITREAL AMPHOTERICIN B IN TREATMENT OF CANDIDA ENDOPHTHALMITIS**

Brindha Gulendran (MBBS) , Dr Amelia Lay Suan (Als.Lim, MD (UPM), M.Surg Ophthal (UKM)

Department of Ophthalmology, Selayang Hospital;

**Introduction:** Endogenous endophthalmitis accounts for 2-8% of all endophthalmitis. Candida species is the commonest fungal endophthalmitis in immunocompromised.

**Result:** A 62-year old gentleman with uncontrolled diabetes and hypertension presented as urosepsis with 1 week of fever. Subsequently he developed both eyes blurring of vision and redness. His vision was 6/36 OD and counting fingers OS. Examination showed bilateral panuveitis with multiple choroiditis at posterior segments. His blood and urine cultures grew candida albicans. He was then treated with multiple intravitreal Amphotericin B and systemic fluconazole. Post intravitreal injection, he developed severe vitritis which required intensive topical steroids treatment. He responded well. Both eyes improved to 6/12.

**Conclusion:** Fungal endophthalmitis is a rare intraocular infection which can potentially lead to blindness. Aggressive and prompt treatment should be administered once diagnosis is established. Although Amphotericin B is a mainstay of treatment, we must be vigilant for the potential intraocular toxicity.

**Keywords:** Amphotericin B, Candida species, Endogenous endophthalmitis, Immunocompromised

## **POS55 CHALLENGES IN MANAGEMENT OF FUSARIUM KERATITIS**

SS Tan, YP Lai, Rohanah A, Rosilah M, Izzaifa H

Department of Ophthalmology, Hospital Kuala Lumpur

**Objective:** To report the clinical findings, management and outcome of a case of refractory keratitis caused by the filamentous fungi *Fusarium* sp.

**Method:** Case report

**Result:** A 62 year-old man presented with left eye pain, redness and blurring of vision for 1 week. There was large paracentral stromal infiltrate with epithelial defect, irregular margins and fluffy edges. He was diagnosed with left eye *Fusarium* corneal ulcer from corneal scraping culture. Despite being given topical antibiotics and antifungals, his condition worsened. A therapeutic penetrating keratoplasty was performed. Post-operatively he had recurrence of infection and intracameral recombinant tissue plasminogen activator (rTPA), amphotericin B and voriconazole was given. The infection was under controlled and eventually followed by graft failure, secondary glaucoma and persistent epithelial defect. The intraocular pressure was controlled with anti-glaucoma and amniotic membrane transplant patching was done for the persistent epithelial defect.

**Conclusion:** *Fusarium* keratitis is remarkably challenging to treat and to salvage the integrity of the globe despite various methods as highlighted in this case.

**Keywords:** Amniotic membrane, *Fusarium*, graft failure, keratitis, penetrating keratoplasty, recurrence



## **POS56 THE CHALLENGE OF OVERLAPPING ANTI-NMDA RECEPTOR ENCEPHALITIS AND NMO IN A MIDDLE AGED MAN**

Sherina Quay, Haslinda A. Rahim

Department of Ophthalmology, Hospital Sultanah Nur Zahirah, Kuala Terengganu

**Purpose:** To report a rare case of N-methyl-D-aspartate receptor (NMDAR) encephalitis coexisting with seropositive neuromyelitis optica spectrum disorder (NMOSD) in a middle aged man.

**Method:** Case report.

**Report:** A middle-aged gentleman with diabetes mellitus and hypertension, had history of transverse myelitis in 2012, supported by MRI showing hyperintensity from C7 to T2 spinal cord segments. He defaulted follow up and 3 years later, admitted for hypertensive emergency with left eye NAION. The following month, he developed hallucinations, hypersomnolence, speech and memory dysfunction along with right eye reduced vision. He was treated with intravenous immunoglobulin and pulse intravenous methylprednisolone for NMDAR encephalitis as serum and CSF anti-NMDAR antibodies were present. He responded and gradually improved. Initial ocular diagnosis was right cortical blindness evidenced by left temporo-occipital lesion on CT brain. However, the next month, he had another episode of transverse myelitis. Anti-AQP4 antibodies were detected and MRI demonstrated cord atrophy C7 to T3 spinal segments, no new lesion seen. Retrospectively, ocular diagnosis was revised to bilateral optic atrophy secondary to NMO.

**Conclusion:** It is important to realize that anti-NMDAR encephalitis and NMO may overlap because treatment and prognosis for each varies. Demyelinating disease causes variable residual deficits, emphasizing prompt diagnosis and treatment. Diagnosis however, remains a challenge and high index of suspicion is necessary.

**Keywords:** NMDAR, NMO, Optic neuritis

## **POS57 FROSTED BRANCH ANGIITIS SECONDARY TO CYTOMEGALOVIRUS INFECTION IN ACQUIRED IMMUNODEFICIENCY SYNDROME PATIENT WITH HIGH CD4 COUNT**

Siti Nurhuda Sharudin<sup>1,2</sup>, Hayati Abdul Aziz<sup>2</sup>, Nor Fadhilah Mohamad<sup>1</sup>, Suresh Kumar Vasudevan<sup>2</sup>

<sup>1</sup>Department of Ophthalmology, University of Malaya Medical Centre, 59100, Kuala Lumpur, Malaysia

<sup>2</sup>Department of Ophthalmology, Hospital Sultanah Aminah, 80100 Johor Bahru, Johor, Malaysia

**Introduction:** To report a case of frosted branch angiitis secondary to cytomegalovirus (CMV) infection in immunocompromised patient with high CD4 count.

**Method:** Case report

**Results:** A 30-year-old human immunodeficiency virus (HIV) positive Malay man presented with two days history of left eye poor vision associated with redness. The symptoms occurred after two months commencement of highly active antiretroviral therapy (HAART). The left eye visual acuity was 6/12 pinhole 6/12. There was evidence of anterior segment inflammation with secondary high intraocular pressure. Funduscopy showed perivascular sheathing and well demarcated area of retinitis at retinal zone 3 inferotemporally. His CD4 T lymphocyte count was 132 cells/mm<sup>3</sup> with positive cytomegalovirus serology. Patient was diagnosed clinically as having frosted branch angiitis secondary to cytomegalovirus. He was started on intravenous ganciclovir with the continuation of antiretroviral therapy. There was marked regression of angiitis and retinitis two weeks post treatment . The left visual acuity has improved to 6/6.

**Conclusion:** Our patient demonstrated a case of frosted branch angiitis secondary to CMV infection which has a complete resolution with standard therapy. CMV infection may occur despite high CD4 counts. Hence, early recognition and timely initiation of treatment is essential to prevent substantial visual loss.

## **POS58 LIGNOCAINE DELAYED-TYPE HYPERSENSITIVITY: A CASE REPORT**

Leon Jia Hui<sup>1</sup>, Nor Ismarudi Ismail<sup>1</sup>, Selva Raja A/L P.Vengadasalam<sup>1</sup>

<sup>1</sup>Department Of Ophthalmology, Selayang Hospital.

**Objective:** To report a case of lignocaine delayed-type hypersensitivity

**Method:** Case report

**Results:** A 54-year-old man, previously exposed to lignocaine during ophthalmic surgery for a right eye retinal detachment six months prior, had a second operative procedure done for removal of silicon oil along with cataract surgery. Both surgeries were uneventful. Five days postoperatively, he presented with right eye pain, swelling and redness. Examination showed right eye proptosis, erythema and chemosis with restriction of extraocular movements. His right eye vision was counting fingers and the intraocular pressure was normal. The cornea was hazy and anterior chamber was clear. Fundus examination showed a clear vitreous and flat retina. The fellow eye was ptysical from a childhood trauma. He was apyrexial with normal blood investigations. CT orbit showed proptosis of right globe with preseptal thickening, intraconal fat streakiness and enlarged thickened optic nerve. He was initially treated as right orbital cellulitis and empirically started on intravenous rocephine with gutt vigamox. Subsequently, when there was no improvement, he was started on antihistamines and intravenous methylprednisolone, and later on changed to oral prednisolone with tapering dose for two weeks. After treatment, he recovered with no proptosis, erythema or chemosis. Vision improved to 6/60. Skin prick test later showed allergy to lignocaine.

**Conclusion:** While lignocaine, also known as lidocaine, is widely used as an anaesthetic agent, it is considered uncommon to have a delayed-type hypersensitivity reaction to lignocaine. It is necessary to suspect lignocaine hypersensitivity in patients presenting with acute post-operative orbital signs and symptoms.

**Keywords:** Hypersensitivity, Lignocaine, Periorbital swelling

## **POS59 POSTERIOR POLYMORPHOUS DYSTROPHY: AN UNUSUAL PRESENTATION WITH HIGH ASTIGMATISM AND AMBLYOPIA IN A CHILD**

Syamil Salmi<sup>1</sup>, Umi Kalthum Md Noh<sup>1</sup>, Jemaima Che Hamzah<sup>1</sup>

<sup>1</sup> Department of Ophthalmology, Universiti Kebangsaan Malaysia Medical Centre, Kuala Lumpur, Malaysia.

**Purpose:** To report a case of Posterior Polymorphous Dystrophy in a patient who presented with high astigmatism and amblyopia.

**Method:** Case report

**Result:** A 10 year old girl with a family history of glaucoma presented with right eye blurring of vision since few years. She related a history of frequent glass changing due to unimproved visual acuity. Cycloplegic refraction revealed high cylindrical refractive error and moderate amblyopia over the right eye. Her vision was 6/12 for the right eye and 6/9 for the left. Slit-lamp examination showed vesicular-like lesion at periphery of corneal endothelial layers in both eyes. Endothelial cell density was much reduced on the right eye compared to the left, with more severe astigmatism. Other ocular examination was unremarkable. Patient was instructed to patch her better left eye periodically and followed up with special attention on any worsening of visual acuity, refraction, intraocular pressure and endothelial cell counts.

**Conclusion:** Although patients with Posterior Polymorphous Dystrophy present at the age of adulthood, the age at diagnosis is highly variable due to the broad spectrum of disease severity. It may rarely lead to high astigmatism in children due to the steep keratoconic or nonkeratoconic corneas (which may lead to amblyopia), as well as being associated with glaucoma. It is rare and inherited through autosomal dominant pattern. Eye with the worse endothelial cell count will result in worse visual acuity and may require corneal transplant in the future. Thus, family members should be screened for similar disorder together with its associated disease.

**Keywords:** Cornea, Astigmatism, Amblyopia

## **POS60 EALES DISEASE COMPLICATED BY RHEGMATOGENOUS RETINAL DETACHMENT IN A PATIENT WITH HISTORY OF MENIERES DISEASE**

K.L. Oh, Mushawiahti Mustapha, M.L.C Bastian

Ophthalmology Department, Universiti Kebangsaan Malaysia Medical Centre.

**Objective:** To report a case of Eales disease with left eye tractional retinal detachment who underwent vitrectomy with silicon oil insertion.

**Method:** Case report

**Result:** A 26-year-old gentleman with underlying Meniere's disease and history of left inferior oblique myomectomy for traumatic superior oblique palsy at 4 years old, presented with a 6-month history of left painless reduced vision. He denied photopsia or eye redness. He was asymptomatic in his right eye. Vision on presentation was 6/9 OD and HM OS with normal anterior segment. Fundal examination revealed neovascularization in the right inferior retina and left subtotal tractional/ rhegmatogenous retinal detachment with sclerosed vessels. Investigations showed normal glucose and lipid profile. His infective work-up was negative. Fluorescein angiogram showed right inferior neovascularization with capillary fallout and left occlusive vasculitis. A diagnosis of Eales disease was made. He underwent left vitrectomy, peeling of the fibrovascular proliferation, retinotomy and silicon oil insertion. Pan photocoagulation was commenced to the right inferior retina. Post operatively, his vision OS improved to 6/60 with a flat left retina.

**Conclusion:** Eales disease is a diagnosis of exclusion in patients with proliferative retinopathy. Vitrectomy is effective in advanced cases with tractional retinal detachment.

**Keywords:** Eales disease, proliferative retinopathy, tractional retinal detachment

## **POS61 EXTIOPIA LENTIS IN CHILDREN WITH MARFAN'S SYNDROME**

Tashna E. MD, Priscilla M.S. MD , Adeline S.MSOph

**Objective** : To report a case of ectopia lentis in Marfan's Syndrome and its surgical treatment considerations.

**Method** : Case report

**Results:** We undertake a case of Marfan's syndrome with bilateral eyes ectopia lentis. Patient is a 8 year old girl with no known medical illness, presented to us with reduced vision for approximately a year. Ophthalmic assessment revealed reduced vision both eyes, with no RAPD demonstrated. Lens were clear but superotemporally dislocated passing the visual axis. Patient fulfilled the Ghent's criteria of Marfan Syndrome with ocular, skeletal and cardiac manifestation. She underwent bilateral eye trans pars plana vitrectomy, lensectomy and scleral fixated IOL. Post operatively, patient's vision improved.

**Conclusion** : There are various approaches in management of ectopia lentis in Marfan's syndrome. In this patient lensectomy/scleral fixated IOL versus plain lensectomy was chosen based on several studies where patients had stable and well-positioned posterior chamber IOL with good visual improvement. However, long-term studies are needed to determine the safety of IOL-fixation in children, especially those with Marfan syndrome

## **POS62 A SEVERE ENDOGENOUS ENDOPHTHALMITIS LEADING TO PANOPHTHALMITIS – LESSONS TO LEARN**

Bin Hoo Teo, Umi Kalthum Md. Noh, Safinaz Mohd Khialdin, Wan Haslina Wan Abdul Halim

Department of Ophthalmology, Universiti Kebangsaan Malaysia Medical Centre

**Introduction:** Endogenous endophthalmitis is a devastating intraocular infection. Finding the primary infection and directed treatment is life-saving.

**Methods:** Case report

**Case report:** A 47-year-old man, with uncontrolled diabetes mellitus, presented with two weeks history of progressive reduced vision and redness of the left eye. He was generally unwell since a month previously. Examination showed RAPD in the affected eye and visual acuity was hand movement. There was moderate AC and vitreous reaction. Fundus examination showed a huge dome-shaped choroidal mass covering the entire macula. Diagnosis of severe endogenous endophthalmitis was made, with positive blood culture. Other investigations were normal. He improved with antibiotic but progressive inflammation occlude fundus details. Unfortunately, he developed rubeotic glaucoma and is treated conservatively. The repeated blood culture and urine was normal.

**Conclusion:** Endogenous endophthalmitis with eventual panophthalmitis is difficult to treat. Our case highlights the challenges in management of such cases.

**Keywords:** endogenous endophthalmitis, panophthalmitis, choroidal mass

## **POS63 CASE REPORT OF METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS UNILATERAL ORBITAL CELLULITIS**

Ui Lyn Loh <sup>1,2</sup>, Gaayathri Nadarajah <sup>1</sup>, Fazilawati A. Qamaruddin <sup>1</sup>, Adil Hussein <sup>2</sup>

<sup>1</sup>Department of Ophthalmology, Hospital Tengku Ampuan Rahimah, Klang, Malaysia

<sup>2</sup>Department of Ophthalmology, Universiti Sains Malaysia, Kubang Kerian, Kelantan, Malaysia

**Introduction:** Often referred as a “super bug” for its antibiotic resistance, Methicillin-resistant Staphylococcus aureus (MRSA) causing orbital cellulitis is a challenge to treat.

**Method:** A case report

**Results:** A previously well 23 year-old gentleman developed right painful, erythematous, periorbital swelling associated with diplopia three days after pinching a small pustule on the lateral aspect of his upper lid. Upon examination, his right visual acuity (VA) was 6/9, no relative afferent pupillary defect, restrictions in all gazes with diplopia on downward and upward gazes, proptosis and chemosis with pus discharge from upper lateral lid margin. Intraocular pressure was normal and fundus examination was unremarkable. Pus from upper lid was expressed out and intravenous Ceftriaxone was commenced. Contrasted computed-tomography scan showed adjacent fat streakiness at the right periorbital region extending to lateral extraconal space and minimal right periorbital abscess. Patient underwent conjunctival abscess drainage. Swab culture and sensitivity grew MRSA. Intravenous Vancomycin was commenced, following which he showed significant improvement. Treatment was planned for 4 weeks but patient requested to be discharged after a week. He was discharged with oral Trimethoprim/sulfamethoxazole planned for at least 6 weeks as decided by Infectious Disease team. After 12 days of oral medication, his right VA improved to 6/6, no gaze restrictions, resolved periorbital swelling with minimal temporal conjunctival injection and chemosis. Patient subsequently defaulted his appointment.

**Conclusion:** MRSA should be suspected in atypical presentation of orbital cellulitis not responding to conventional antibiotics. Early surgical drainage of abscess and administration of the right antibiotic can have excellent visual outcome.



## **POS64 TOPICAL ACYCLOVIR TOXICITY : SIGNS AND THERAPEUTIC APPROACH**

Lyvia L, Chong KL, Jeane N, Pua TH  
Ophthalmology Department, Hospital Bintulu

**Objective:** To report a case of prolonged geographical corneal ulcer

**Method:** Case report

**Results:** An 83-year-old gentleman, with history of persistent left eye herpetic geographical corneal ulcer, on long-term topical acyclovir, presented with worsening of left eye vision for one month. Visual acuity was perception to light in left eye, 6/9 in right eye. On examination, left eye showed a geographical corneal ulcer with stromal infiltrate, and multiple small dendritic lesions. Treatment commenced with topical Acyclovir five times daily. Initially, there were slight reduction in stromal infiltrate and dendritic lesions. Due to persistent keratitis, topical acyclovir was continued. However, at sixth week of treatment, epithelial defect of the geographical ulcer worsened. Autologous serum eye drops was started and bandage contact lens was applied but there was no improvement seen. At ninth week, topical Acyclovir was reduced to once daily and oral acyclovir was started. Epithelial defect began healing. At nineteenth week, keratitis resolved with minimal cornea scarring. Best corrected visual acuity in left eye was 6/9.

**Conclusion:** Although topical Acyclovir is the drug of choice for herpetic keratitis, prolonged usage may impair healing. Signs of toxicity observed were persistent and progressively worsening epithelial defect, low-grade stromal inflammation, as well as elevation and smoothening of dendritic edges. One of the treatment option is switching from topical acyclovir to systemic acyclovir.

**Keywords:** Herpetic keratitis, prolonged corneal ulcer, topical acyclovir toxicity

## **POS65 MEDIAL CANTHAL BASAL CELL CARCINOMA (BCC) OF THE CONJUNCTIVA:CHALLENGE IN MANAGEMENT**

Wan Dalila Wan Hazmy <sup>1</sup>, Ku Chui Yong <sup>1</sup>, Akmal Haliza Zamli <sup>1</sup>

<sup>1</sup> Ophthalmology Department, Hospital Tengku Ampuan Afzan.

**Objective:** Discussing challenges in managing recurrence of medial canthal conjunctival BCC.

**Methods:** Case report.

**Results:** 70 year old Malay lady presented with right medial conjunctival mass for one month with eye redness and discomfort. She gave history of right medial canthal BCC in 2014 and wide excision with clear margin was done. Visual acuity revealed 6/6 bilaterally. Right eye examination demonstrated a medial nodular elongated conjunctival lesion with extension towards the medial fornix. No palpable extension into the medial canthal region. Extraocular movement were normal bilaterally. No lymphadenopathy. No pigmented lesion noted elsewhere. Incisional biopsy confirmed the diagnosis of BCC. She underwent right conjunctival wide excision with margin control and conjunctival reconstruction. HPE confirmed BCC with clear margin.

**Conclusion:** Recurrence of medial canthal primary conjunctival BCC is extremely rare which had occurred in this patient. Regular monitoring and follow up are warranted for early detection and treatment.

**Keywords:** basal cell carcinoma, recurrence, medial canthal

## **POS66 CYTOMEGALOVIRUS RETINITIS WITH T-CELL LYMOHOMA: CASE REPORT**

Woon TQ, Looi SY, Raja Norliza RO  
Department of Ophthalmology,  
Hospital Melaka, Jalan Mufti Haji Khalil, 75400 Melaka, Malaysia

**Objective:** To report a case of Cytomegalovirus Retinitis with T-cell Lymphoma

**Case Report:** A 36-year-old Malay gentleman presented with sudden blurred vision in left eye for 1 week. He had been diagnosed as T-cell Lymphoma since February 2017 and underwent 6 cycle of chemotherapy. His best corrected visual acuity of 6/24 in left eye and 6/6 in right eye. Pupillary examination revealed relative afferent pupillary defect (RAPD) on the left side. Rest of the anterior segment examination was unremarkable. Fundus examination of the left eye showed Zone 1 CMV Retinitis (subretinal hemorrhagic retinitis at inferior vessel with macula threatened). He was started on intravitreal Ganciclovir 2mg/0.05ml biweekly for 2 weeks. During subsequent follow up, the lesion became lesser, with improved visual acuity of 6/18 in left eye.

**Conclusion:** Cytomegalovirus retinitis can occur in association with T-cell lymphoma. Early detection and prompt treatment can improve the visual outcome.

**Keywords:** CMV retinitis, T-cell Lymphoma, Ganciclovir

## **POS67 CHOROIDAL MELANOMA IN A YOUNG PATIENT**

Yihui Goh<sup>1</sup>, MBBS, Sujaya S<sup>1</sup>, MBBS, MOPhthal, Wan Zalina M. Zain<sup>2</sup>, MBBch BAO, MS(Ophthal)

<sup>1</sup>Department of Ophthalmology, University of Malaya, Kuala Lumpur, Malaysia.

<sup>2</sup>Department of Ophthalmology, Sultanah Bahiyah Hospital, Alor Setar, Kedah, Malaysia.

**Purpose:** To report a case of choroidal melanoma in a young Asian lady.

**Method:** Case Report

**Results:** A 36-year-old healthy Malay lady presented with left eye progressive, painless, decreasing vision over a year with new onset of excruciating eye pain. Left eye examination showed no light perception, conjunctival chemosis, cornea edema and total hyphema with no fundus view. Intraocular pressure was 42mmHg. B scan revealed retinal detachment with subretinal mass. Right eye was normal. Systemic examination and investigations were unremarkable. Blood investigations including tumour markers were normal. Magnetic resonance imaging of orbits was suggestive of choroidal melanoma with retrobulbar extension. Left eye enucleation was performed and histopathology was consistent with choroidal melanoma. The patient remains under close follow-up with no evidence of recurrence or metastasis.

**Conclusion:** Although predominantly a disease in elderly, choroidal melanoma needs to be suspected in younger patients with intraocular lesion.

**Keywords:** Choroidal melanoma; enucleation

## **POS68 A HAIRY AFFAIR: ATYPICAL INTRAOCULAR FOREIGN BODY: A CASE SERIES**

Yeoh SY, Rachel NSW, Anhar HS, Raja Norliza RO

**Objective:** To report two rare cases of intraocular eyelash following penetrating eye injury

**Method:** Case Series

**Results:** We report 2 healthy Indonesians who sustained penetrating injury with sharp metal. The first gentleman had an eyelash at the inferior vitreous. The eyelash was left in the vitreous as it was deemed inert and there were no signs of endophthalmitis. Up to 8 months post trauma, there were no signs of inflammation or infection. The second gentleman had 6 eyelashes at his posterior capsule. In view there was breach in anterior capsule, lens aspiration was performed and eyelashes removed. Both patients had best corrected visual acuity of 6/12 or better.

**Conclusion:** Intraocular cilia following penetrating injury are rare, reported to form 0.4% of all intraocular foreign bodies. The intraocular eyelashes are usually well tolerated and remain asymptomatic due to their relatively inert nature compared to other organic materials. Therefore, the decision to remove intraocular eyelash should be tailored individually.

**Keywords:** Intraocular eyelash, intraocular foreign body, penetrating injury.

## **POS69 NISHIDA MUSCLE TRANSPOSITION PROCEDURE FOR ABDUCENS NERVE PALSY**

Shu Yee Seow (MBBS)<sup>1</sup>, Jamalia Rahmat (MS Ophth)<sup>1</sup>

<sup>1</sup>Department of Ophthalmology, Hospital Kuala Lumpur, Malaysia.

**Purpose:** To report the course of 2 successful cases of Nishida muscle transposition procedure with medial rectus recession in treating abducens nerve palsy.

**Cases:** Case 1: A 24-year-old gentleman presented with 21-year history of right eye esotropia secondary to traumatic abducens nerve palsy. He had right eye amblyopia and right eye esotropia of 50 to 55 prism diopters. Postoperatively, patient is orthophoric by Hirschberg test. Case 2: A 18-year-old gentleman presented with 2-year history of bilateral eye traumatic abducens palsy with chin down position. He had esotropia of 90 prism diopters on near and 104 prism diopters on far. Postoperatively, the abnormal head position resolved and esotropia decreased to about 45 prism diopters, with mild improvement in abduction.

**Conclusions:** Nishida muscle transposition is a safe procedure that yields satisfactory postoperative results while preventing risk of postoperative anterior segment ischemia.

**Keywords:** abducens nerve, esotropia, nerve palsy, Nishida procedure, squint

## **POS70 BILATERAL DISC SWELLINGS IN POSTERIOR SCLERITIS, LOOK FOR IT!**

Wu SY<sup>1,2</sup>, Hanizasurana H<sup>1</sup>, Loo AVP<sup>2</sup>

<sup>1</sup>Department of Ophthalmology Hospital Selayang, <sup>2</sup>University Malaya

**Purpose:** To report two cases of bilateral posterior scleritis.

**Methodology:** Case Series

### **Results:**

Case 1: 58-year-old lady, Grade 3 breast carcinoma, in remission, presented with right blurred vision, floaters and dim illumination. Examination revealed right vision 6/24 left 6/18. Pupils were reactive with no RAPD. Fundus showed bilateral hyperemic swollen optic discs, dilated tortuous vessels, bilateral exudative retina and choroidal detachments. Optic nerve function test was impaired. Urgent MRI orbit showed bilateral intraocular mural masses with thickened detached choroidals. B scan showed thickened sclera. Fluorescein Fundus Angiography showed bilateral hot discs and multiple pin-point hyperfluorescence suggestive of bilateral posterior scleritis. She was treated with systemic steroids. Her vision and optic nerve function improved.

Case 2: 30-year-old lady, presented with pain on eye movement, headache and vomiting. Examination revealed right vision 6/9, left 6/9, raised intraocular pressure, bilateral optic discs swelling and impaired optic nerve function tests. B scan showed T sign with thickened sclera. OCT showed thickened optic nerve head. CT brain showed thickened sclera, otherwise no space occupying lesion. This patient was treated with systemic steroids and her symptoms, vision and optic nerve function improved markedly. Intraocular pressure which was initially refractory with antiglaucoma treatment, improved upon steroid commencement, suggesting secondary inflammation likely trabeculitis.

**Conclusion:** Posterior scleritis, although easily treatable, is very often missed. In both cases, diagnosis were initially missed in previous eye clinics. One should always have a high index of suspicion when dealing with these patients as early treatment may prevent devastating sight loss.

**Keywords:** Posterior scleritis, disc swellings, secondary glaucoma, trabeculitis

## **POS71 THE MALAYSIAN RIVER BLINDNESS? A TALE OF CONTRASTING FORTUNES IN PAEDIATRIC ENDOGENOUS ENDOPHTHALMITIS AFTER A VISIT TO THE WATERFALLS.**

Wendy Ong Chin Feng, Teh Wee Min, Ling Kiet Phang, Haslina bt Mohd Ali, Wan Hazabbah Wan Hitam

**Objective:** To report the clinical presentation and outcome of two cases of paediatric endogenous endophthalmitis.

**Method:** Case series

**Results:** An 8-year-old girl presented with right eye pain, redness and blurred vision 4 days after swimming at a waterfall. She was otherwise systemically well. On examination, right eye vision was hand movement (HM). No relative afferent pupillary defects (RAPD) seen. There was swelling of eyelids, conjunctival injection, corneal haziness, presence of hypopyon, and poor fundus view. Left eye findings and systemic examination were unremarkable. Serologic testing for leptospirosis and melioidosis were positive. B-scan demonstrated vitritis and inferior loculations. A diagnosis of infectious endogenous endophthalmitis was made; topical moxifloxacin and dexamethasone were started. Intravenous ceftazidime and oral co-amoxiclav were initiated. After completion of systemic antibiotics for a week, right vision improved to 6/36. Oral co-amoxiclav was further continued for 4 months. Her right vision improved to 6/18 after cataract surgery 2 months later.

A 10-year-old boy with recent swimming at a waterfall developed right eye redness and pain the next day, followed by blurred vision. Systemic review was unremarkable. Examination revealed light perception with positive RAPD in the right eye. There was anterior segment inflammation with presence of fibrinous exudates and hypopyon in the anterior chamber (AC) and no fundus view. Left eye was normal. B-scan of right eye showed vitritis with thickened sclera. No organism isolated from the AC and vitreous. Intravitreal ceftazidime and vancomycin were given upon diagnosis, together with topical dexamethasone and moxifloxacin. He underwent AC washout/vitreous biopsy/core vitrectomy 48 hours later together with repeat intravitreal antibiotics. Melioidosis serology was positive. Post-vitrectomy with the completion of intravenous ceftazidime and oral co-amoxiclav for 2 weeks, right eye vision remained poor (HM).

**Conclusion:** Melioidosis is an important aetiology of paediatric endogenous endophthalmitis. Clinical presentation and treatment outcome varies, but a high index of suspicion is necessary in this subgroup of patients.

**Keywords:** Paediatric endogenous endophthalmitis, Melioidosis, Clinical presentation, Visual outcome



## **POS72 DESCemet MEMBRANE DETACHMENT POST GLAUCOMA SURGERY.**

Nurul Faaiah Jainuddin, Sujaya Singh, Amir Samsudin

Department of ophthalmology, University Malaya, Kuala Lumpur.

**Objective:** To report a case of extensive Descemet membrane detachment treated with repeated air Descemetopexies and venting incisions.

**Method:** Case report.

**Result:** A 69-year-old diabetic and hypertensive man with medically uncontrolled mixed POAG and pseudophakic glaucoma underwent left eye Ahmed valve implantation. Although the implantation was uneventful, the eye had a shallow anterior chamber (AC) with iridocorneal touch on the first post-operative day, due to overfiltration. We performed AC reformation using Healon GV on the same day. The following day, an extensive Descemet membrane detachment was seen, confirmed by anterior segment optical coherence tomography (AS-OCT). With non-resolution after 1 week, and worsening of vision to hand movement perception, we performed Descemetopexy and AC reformation with Healon GV on day 8 after the initial surgery. On day 16, visual acuity was 6/24 although there was still partial detachment of the Descemet membrane. We repeated Descemetopexy with venting incisions. The detachment completely resolved after 20 days. About 2 months later, visual acuity was 6/24 with mild interface scarring. IOP was well controlled.

**Conclusion:** Early and repeated Descemetopexy in extensive Descemet membrane detachment can lead to reattachment and return of useful vision.

**Keywords:** Descemet membrane detachment, descemetopexy

## **POS73 EIGHT-AND-A-HALF SYNDROME: A RARE PRESENTATION OF GAZE PALSY FOLLOWING CEREBROVASCULAR EVENT**

Intan Shafinaz MR, Muharliza M, Ong BH

**Objective:** To report a case of eight-and-a-half syndrome following cerebrovascular event.

**Method:** Case report

**Summary:** A 53-year-old gentleman known to have non-insulin dependent diabetes mellitus, hypertension and hypercholesterolaemia presented with double vision and dizziness of 1-week duration. There were not associated with reduced vision, no symptoms of raised intracranial pressure, not associated with limb weakness and abnormal speech. At presentation, patient had elevated blood pressure and poorly controlled blood sugar. There were right eye limitation in adduction with contralateral abducting nystagmus, right eye limited abduction consistent with right one and a half syndrome. There was also right lower motor neuron 7<sup>th</sup> nerve palsy.

**Result:** Eight-and-a-half syndrome is a combination of ipsilateral one-and-a half syndrome and lower motor neuron 7<sup>th</sup> nerve palsy. Brainstem conjugate gaze palsy is an importance clinical diagnosis, aid in diagnosis in even a small pontine lesion.

**Keywords:** internuclear ophthalmoplegia, one and a half syndrome, eight and a half syndrome, cerebrovascular event

**POS74 SPONTANEOUS EYEBALL RUPTURE DUE TO EXPULSIVE SUPRACHOROIDAL HAEMORRHAGE**

Lu Sing Hui (MD), S. Kala Sumugam (MBBS)

**Objective:** To report a rare case of spontaneous eyeball rupture due to explosive suprachoroidal haemorrhage.

**Method:** A case report

**Case Report:** A 72 year-old Chinese lady who had narrow angle glaucoma, presented with sudden onset of severe left eye pain and spontaneous expulsion of left eye orbital content with active bleeding. CT orbit showed left ruptured globe and speck of calcifications noted within. Normal lens of left eye was not seen. Left eye evisceration was carried out under general anaesthesia. Intra-operatively, the uveal was prolapsed from the scleral rupture. The vitreous was mixed with blood. The cornea appeared to be normal.

**Conclusion:** In old age, a thin sclera due to angle closure glaucoma can cause massive suprachoroidal haemorrhage with spontaneous eyeball rupture.

## **POS75 OCCLUSIVE VASCULITIS: ATYPICAL CASE OF OCULAR LEPTOSPIROSIS**

Nur Hafizah A, Ng KK, Safiyah Jameelah MY, Nurfadzillah AJ, Raja Norliza RO

**Objective:** To report an atypical presentation of leptospirosis

**Method:** Case Report

**Result:** Leptospirosis is a zoonosis of worldwide distribution. It has a varied clinical manifestations and unusual clinical features related to immunological phenomena. Its ocular manifestations include uveitis and vasculitis. Retinal vasculitis in leptospirosis is often described as perivasculitis. However, we report a case of 26 years old lady presented with non-granulomatous panuveitis with occlusive vasculitis. She presented with left eye decreased vision and floaters, which associated with painful ankle swelling and oral ulcer. Eye examination showed a non-granulomatous panuveitis, haemorrhagic vasculitis and retinal exudation. Systemic examination revealed afebrile patient with multiple oral ulcer, tender ankle swelling and erythema nodosum. Patient showed clinical improvement with oral doxycycline and steroid. Fundus fluorescein angiography done showed an occlusive vasculitic features with focal capillary fall-out areas.

**Conclusion:** Leptospirosis presented as occlusive vasculitis is uncommon. An appropriate approach and treatment may provide good visual outcome.

**Keywords:** Occlusive vasculitis; Ocular leptospirosis

## **POS76 RD OR RB?**

Ong Wu Zhuan <sup>1</sup>, Jamalia Rahmat <sup>2</sup> Sunder Ramasamy MS <sup>2</sup>

<sup>1</sup>Master Trainee, Department of Ophthalmology, University of Malaya

<sup>2</sup>Paediatric Ophthalmology Unit, Hospital Kuala Lumpur

**Objective:** To report an atypical case of retinoblastoma presented as exudative retinal detachment in an older child.

**Method:** Case report

**Results:** A 9-year-old Malay girl, presented to hospital following a fall and her left eye was allegedly hit by the edge of the table while running around at home. She complained of left eye pain and claimed unable to see with her left eye. Her right vision was 6/6 while her left vision was only light perception. Examination of left eye revealed presence of microhyphaema in the anterior chamber, a fixed dilated pupil and extensive exudative retinal detachment. Her right eye examination was unremarkable. CT scan showed a left eye intraocular mass with calcification. EUA revealed a mixed endophytic and exophytic mass nasally along with extensive exudative retinal detachment. Family members consented for left eye enucleation in the same setting. Histopathological report confirmed the diagnosis of retinoblastoma. Post enucleation, patient is doing well with prosthesis eye.

**Conclusion:** Retinoblastoma is more commonly seen in children less than 5 years old, however, the possibility of retinoblastoma should be considered even in older children when they present with unexplained visual loss with exudative retinal detachment.

## **POS77 CASE REPORT: SPECTRUMS OF CONGENITAL RETINOSCHISIS**

Rathna Ramayaj<sup>1</sup>(MBBS), Mushawiahti Mustapha<sup>1</sup> MD (UKM), MS (Ophth) , Mae-Lynn Catherine Bastion<sup>1</sup> MBBS Hons (Syd) MS (Ophth) (UKM).

<sup>1</sup>Department of Ophthalmology, Faculty of Medicine, Universiti Kebangsaan Malaysia Medical Centre, Jalan Yaacob Latif, Bandar Tun Razak, 56000, Cheras, Kuala Lumpur, Malaysia.

**Objective:** We report two cases of congenital retinoschisis presenting with different spectrum of disease severity.

**Method:** Case report

**Result:** First case is of a 7 year old boy whom presented with a two year bilateral reduction in vision with his best corrected visual acuity (BCVA) of 3/60 bilaterally. Examination revealed bilateral eye foveaschisis with bilateral inferotemporal retinoschiasis. Macula optical coherence topography (OCT) revealed wide cystic lesions in the inner nuclear and outer plexiform layers with a break in the inner retinal layer. Second case is of a 13 year old boy presented with progressive right blurring of vision with his right BCVA of 6/24 and left 6/12. Examination showed bilateral eyes foveaschisis with right inferotemporal retinoschisis. Macula OCT showed cystic lesions within inner nuclear and outer plexiform layers. Electroretinogram of both cases showed reduced b-wave amplitude for combined response and reduced photopic responses. Both patients were treated with topical brinzolamide. Their vision remained same during subsequent follow ups.

**Conclusion:** Congenital retinoschisis has a variable presentation and severity due to influence of genetic modifiers and environmental factors. Thus a high index of suspicion is essential to diagnose congenital retinoschisis to prevent permanent vision loss.

**Keywords:** Congenital retinoschisis, Electroretinogram, Optical coherence tomography

## **POS78 BEWARE OF ANOTHER MASS AFTER OPENING A LACRIMAL SAC IN DACRYOCYSTORHINOSTOMY SURGERY**

Siva Sathi Kanesan MBBS, Ho Shu Fen MBBS  
Department of Ophthalmology, Hospital Raja Permaisuri Bainun, Ipoh

**Objective:** To report a case-series of lacrimal sac diverticulum found during unsuspected dacryocystorhinostomy

**Method:** Case series

**Result:** We report a case series of three adult patients, two with history of recurrent dacryocystitis, one with history of inferior medial canthal swelling with persistent epiphora. All have non compressible medial canthal swelling extend inferiorlaterally. External dacryocystorhinostomy were performed and an inflammatory mass arising anterior lateral of lacrimal sac extending from inferior orbital floor to superior orbital roof was found which obstructing the opening of lacrimal canaliculus onto lacrimal sac. Histopathology report revealed chronic inflammation with foreign body giant cell reaction likely to be lacrimal diverticulum of inflammatory origin.

**Conclusion:** Lacrimal sac diverticulum are rare cause of medial canthal swelling with epiphora or dacryocystitis. Careful palpation in identifying location which extends onto inferior orbital rim and its non-compressible nature should alert one of this diagnosis. This will allow adequate exploration of its extension and excision during the curative dacryocystorhinostomy.

## **POS79 A RARE CAUSE OF ORBITAL PROPTOSIS: A CASE SERIES**

Yeoh SY, Ng KK, Raja Norliza RO, Chang ZP

**Objective:** To report two rare cases of orbital metastasis secondary to breast carcinoma in 2 ladies presenting with proptosis.

**Method:** Case Series

**Results:** Metastasis to the soft tissues of the orbit is rare. Nevertheless, a patient with a history of cancer who has proptosis should be evaluated for orbital metastasis. We report 2 cases of orbital metastasis secondary to advanced breast carcinoma in 2 ladies with treated breast carcinoma. Both of them presented with unilateral painless proptosis and ptosis for several months. First lady had blurring of vision with ocular and brain involvement. Second lady did not have any visual disturbances. Both were confirmed with CT brain and orbit.

**Conclusion:** Orbital metastasis is believed to occur in 2% to 3% of patients with systemic cancer. Frequency of their presenting symptoms and signs were mainly limited ocular mobility and proptosis. Ophthalmologist should have a high index of suspicion especially in patients with a history of cancer who present with proptosis.

**Keywords:** Breast carcinoma, breast metastasis, orbital metastasis



## **POS80: A RARE CASE OF HIE AFTER FESS**

Tashna E., Lakana K.T

**Objective :** To report a rare case of Hypoxic- ischaemic encephalopathy after Functional Endoscopic Sinus Surgery

**Method :** Case Report

**Results :** We undertake a rare case of a patient who developed HIE after Functional Endoscopic Sinus Surgery (FESS) done under general anaesthesia. Diagnostic imaging which was done initially showed no pertinent abnormalities. However, a repeat imaging which was done 1 week after revealed features suggestive of HIE. This case emphasizes the fact that hypoxic-ischemic encephalopathy (HIE) may cause enduring damage and that the MRI abnormalities may be subtle. This occurrence should be recognized in the diagnosis and management of patients with HIE.

**Conclusion :** Hypoxic ischaemic encephalopathy results from a global insult, either due to ischemia from hypoperfusion or hypoxia in the setting of sufficient perfusion. Neuroimaging, mainly diffusion-weighted MR imaging is the most sensitive imaging modalities in the early hours following injury and can play an important role in early diagnosis. In clinical practice, imaging could be used as an outcome predictor in HIE when clinical, electrophysiological, or biochemical indicators are negative or inconclusive. However, even severe cases of HIE may have normal or subtle findings on diffusion weighted imaging initially

## **POS81 RECURRENT OCULAR TOXOPLASMOSIS : A CASE REPORT**

V.Nilamani<sup>1</sup>, B.Caroline<sup>1</sup>, Silva J.M<sup>1</sup>, Haron MF<sup>1</sup>, Intan Gudom<sup>1</sup>

**Objective :** To report on a management of a challenging recurrent ocular toxoplasmosis case of an immunocompetent patient in Sarawak General Hospital.

**Method:** Case report

**Results:** Ocular toxoplasmosis is a potentially blinding necrotizing retinitis with a progressive and relapsing course. We are reporting on an immunocompetent 61 years old man who was presented to us with diminutive left visual acuity for 3 months period and clinical findings supportive of left ocular toxoplasmosis with vitritis, scarred edges retinitis and bilateral central serous chorioretinopathy (CSCR). He was treated by a different center for the first 2 episodes with the latest being 6 years ago. He was previously given intravitreal triamcinolone injections and started on oral steroid. We stopped the oral steroid and started tablet azithromycin since he was allergic to trimethoprim-sulfamethoxazole. Right CSCR resolved subsequently. However, left eye showed no clinical improvement. Decision made for intravitreal clindamycin 1.5mg/0.1ml and dexamethasone 400mcg/0.1ml injections. Post 7 doses of intravitreal injection, both left CSCR and retinitis resolved. His vision was restored successfully. He is on maintenance treatment with azithromycin 250mg OD.

**Conclusion :** This case illustrates the challenges in treating a complicated recurrent ocular toxoplasmosis. We would also like to emphasize the fact that recurrent ocular toxoplasmosis does occur in an immunocompetent person.

**Keywords:** ocular toxoplasmosis, central serous chorioretinopathy, posterior uveitis, necrotizing retinitis, *Toxoplasma gondii*, intravitreal injection

## **POS82 MOOREN'S ULCER: CASE REPORT**

Woon TQ, Looi SY, Raja Norliza RO  
Department of Ophthalmology,  
Hospital Melaka, Jalan Mufti Haji Khalil, 75400 Melaka, Malaysia

**Objective:** To report a case of Mooren's Ulcer

**Case Report:** A 31-year-old Malay gentleman presented with right eye pain and redness associated with blurred vision and tearing for 2 weeks. He alleged motor vehicle accident 1 year ago with ocular trauma. His right vision was 6/36 pinhole 6/18 and left vision was 6/18 pinhole 6/9. There was crescent shaped juxtalimbal cornea thinning at 3 to 7 o'clock with overhanging edge, thinnest at 3 o'clock. Seidel test was negative. The anterior chamber on right was deep with cells 1+. Fundus examination of bilateral eye was normal. The rheumatoid factor was positive, while other investigations were normal. The right conjunctival resection was performed and there was sign of improvement with re-epithelization of corneal thinning area.

**Conclusion:** Corneal trauma is one of the predisposing factors of Mooren's Ulcer. Infectious etiologies and other causes of peripheral ulcerative should be excluded.

**Keywords:** Mooren's Ulcer, corneal thinning, conjunctival resection

## **POS83 SEBACEOUS GLAND CARCINOMA OF EYELID – A NEAR MISS**

Yihui Goh<sup>1</sup>, MBBS, Sujaya S<sup>1</sup>, MBBS, MOphthal, Wan Zalina M. Zain<sup>2</sup>, MBBch BAO, MS(Ophthal)

<sup>1</sup>Department of Ophthalmology, University of Malaya, Kuala Lumpur, Malaysia.

<sup>2</sup>Department of Ophthalmology, Sultanah Bahiyah Hospital, Alor Setar, Kedah, Malaysia.

**Purpose:** To report a case of sebaceous gland carcinoma of the eyelid, diagnostic challenge, management and ophthalmic outcome.

**Method:** Case Report

**Results:** A 51-year-old lady was referred for right lower eyelid recurrent nodular growth mimicking a chalazion for nine months with a history of multiple episodes of incision and curettage. An excisional biopsy of the lesion along with reconstruction of right lower eyelid was performed. Histopathological examination confirmed it to be sebaceous gland carcinoma. 5 months later, she developed metastasis to the right preauricular lymph nodes. She then underwent right parotidectomy with lymph nodes removal. One year post-operatively, there is no evidence of recurrence or metastasis.

**Conclusion:** The masquerading feature of sebaceous gland carcinoma makes it a challenging diagnosis and may often leads to delay in management. Recurrent and non-responding eyelid inflammatory conditions in older age group warrant diagnostic biopsy.

**Keywords:** Sebaceous gland carcinoma; masquerade syndrome; chalazion

## **POS84 SELF-PRESCRIBED EYE REMEDIES; STEROID INDUCED GLAUCOMA**

Siti Khadijah AR; MBBS<sup>1,2</sup>, Azhany Y ; MMED<sup>1</sup>, Norwazilah MA MS(Oftalmologi)<sup>2</sup>

<sup>1</sup>Department of Ophthalmology, Health Campus, Universiti Sains Malaysia, 16150, Kota Bharu , Kelantan

<sup>2</sup>Department of Ophthalmology, Hospital Putrajaya ,62250, WP Putrajaya

**Background:** Steroid eye drops is a treatment for acute allergy conjunctivitis and easily available over the counter. However, injudicious use may lead to blindness.

**Objective:** To present 3 cases of allergy conjunctivitis who developed steroid induced glaucoma.

**Methods:** Retrospective case series.

**Case Series:** Case 1: A 10 year old boy who used combination eyedrop Gutt Dexamethasone 0.1% & neomycin 0.5% (Neo-deca) for his allergy conjunctivitis for 2 years. He presented with poor vision and diagnosed as steroid induced glaucoma. At presentation, visual acuity was 6/12 OD and Counting Finger OS. Intraocular pressure (IOP) was 44OD, 52OS mmHg with CDR 0.8 OD and 0.9 OS. The IOP stabilized at 12mmHg bilaterally with four anti glaucoma eye drops.

Case 2: A 15 years old girl, self-prescribed Gutt Gentamicin & Betamethasone (Gentabet) in treating her allergy conjunctivitis for 1 year duration. Presented with poor vision and diagnosed as steroid induced glaucoma and cataract. Her glaucoma was absolute and uncontrolled IOP with medications. She underwent lens aspiration and trans-scleral photo coagulation bilaterally.

Case 3: A 45 years old lady who used combination eyedrop, Gutt Dexamethasone 0.1% and neomycin sulphate 0.5% (Neo-deca), for 1 year duration. Presented with blurred vision and diagnosed as steroid induced cataract and glaucoma. Visual field showed right tunnel vision and left nasal step deformity. She regained VA 6/6 bilaterally after cataract operations and IOP 10mmHg with Gutt Latanaprost.

**Conclusion:** Education on proper monitoring of steroid usage in treating allergy conjunctivitis is mandatory to avoid irreversible glaucoma blindness.

**Keywords:** allergy conjunctivitis, steroid eye drops, steroid induced glaucoma

## **POS85 CHARLIE BUG'S ENIGMA**

Radthiga Chelvaraj (MBBS, AIMST)- HBM, Yeap Thye Ghee (MS Ophthal, UKM), Rohana Taharin (MS Ophthal, UM), Chua Chui Yin (MMed Ophthal, USM)- HBM

**Objective:** To describe the clinical manifestation and management of Charlie bugs (Rove beetles/ *Paederus fuscipes*) induced ocular injury.

**Method:** Case Series

**Result:** This is a retrospective study involving five cases of *Paederus fuscipes* insect induced ocular injury seen in Hospital Bukit Mertajam between January to December 2016. The patients were between 2 to 54 years old, with majority from the paediatric age group. Demographically, all patients reside within 0.5 kilometres radius in the vicinity of paddy fields. The peak incidences occurred during the paddy harvesting months, which are March and September. All patients had history of contact with Charlie bug, with 60% involving the eye directly, and 20% had concurrent hand and cheek regions involvement respectively. Immediately after the contact, all had severe periorbital discomfort, redness and tearing. In term of ocular signs, 2/3 had painful periorbital swelling with tissue sloughing and nearly half had corneal epithelial defect. Almost all patients had good visual acuity (at least 6/9) on presentation. Only two patients had visual acuity of 6/36 and 6/60 respectively due to epithelial defect. More than half of the patients required admission for intravenous antibiotic administration, of these mostly were children. The rest were given outpatient treatment with topical antibiotic eye drops, artificial tears and steroid ointment. Only one child required plastic team referral due to extensive periorbital tissue sloughing, while the rest improved within 2 weeks of treatment with no residual complication.

**Conclusion:** Charlie bugs induced ocular injury poses significant ocular morbidity. Prompt treatment should be rendered to prevent undesirable outcomes, for instance, secondary infection, corneal damage and lid scarring

**Keywords:** Charlie bug, rove beetle, periorbital swelling

**POS86      INTRAVITREAL      RANIBIZUMAB      FOR      CHOROIDAL  
NEOVASCULARISATION SECONDARY TO BEST DISEASE.**

Deivanai Subbiah Md <sup>1</sup>, FIONA CHEW LEE MIN MS Ophthal (Malaya) <sup>1</sup>

<sup>1</sup> Department of Ophthalmology, Hospital Selayang

**Introduction:** Best disease or vitelliform dystrophy, is a rare autosomal dominant inherited retinal dystrophy involving the retinal pigment epithelium. This disease tends to present itself in childhood or early adulthood and usually portends a good visual prognosis. Choroidal neovascularisation (CNV) is a rare complication of the disease.

**Purpose:** To evaluate the effectiveness of intravitreal ranibizumab injection in cases with CNV in Best disease.

**Method:** This was a retrospective case series where case notes, optical coherence tomography (OCT) and other ocular investigations before and after intravitreal ranibizumab of patients with CNV secondary to Best Disease were analysed.

**Results:** Three patients were diagnosed with CNV secondary to Best Disease from January 2006 to June 2017. There were 2 males and 1 female. Aged between 7-8 years. Two patients had CNV in 1 eye and one patient had CNV in both eyes. Pre-treatment vision of the patients ranged from 6/12 -6/45. Two patients had intravitreal ranibizumab x 1. One patient had another dose after 1 year. Post intravitreal ranibizumab, the OCT findings showed markedly reduced sub-retinal fluid. Post treatment vision range from 6/7.5- 6/24.

**Conclusion:** Intravitreal ranibizumab has proved to be effective in the treatment of CNV in Best's vitelliform macular dystrophy. However, further studies are required to assess its efficiency in paediatric population.

**Keywords:** Best Disease, Vitelliform macular dystrophy, Intravitreal ranibizumab

## **POS87 CASE SERIES OF OCULO MOTOR RELATED CRNIAL NERVE PALSIES IN CHILDREN**

Joanne shalini<sup>1</sup>, Haizul Ikhwan<sup>1</sup>, Akmal Haliza<sup>1</sup>

<sup>1</sup>Department of Ophthalmology, Tengku Ampuan Afzan Hospital, Malaysia

**Purpose:** To discuss three cases of oculo motor related cranial nerve palsies in children: case presentation, treatment and outcome

**Method:** Retrospective clinical case report and imaging studies analysis.

**Result:** The children were aged 2 to 5 years old. Two children presented with sixth nerve palsy while one presented with third nerve palsy. Two cases were isolated cranial nerve palsies while one child had other cranial nerve involvement. All three patients had brain imaging studies done. The cause of cranial nerve palsies in these children were diverse with one was congenital, one due to cavernous sinus thrombosis and another was post viral infection.

**Conclusion:** Oculo motor related cranial nerve palsies are rare in children. However if present warrants prompt investigation.



## POS88 NEOVASCULAR GLAUCOMA: CAN BLEBS SURVIVE?

Ong Wu Zhuan <sup>1,2</sup>, Ong Poh Yan <sup>1</sup>

<sup>1</sup>Department of Ophthalmology, Hospital Selayang

<sup>2</sup>Master trainee, University of Malaya

**Background:** Neovascular glaucoma (NVG) is a type of secondary glaucoma commonly seen in patients with ischemic retinal conditions. Management of NVG is challenging as many patients are often refractory to medical therapy and reported to have higher risks of trabeculectomy failure.

**Method:** Case series

**Results:** We presented 3 cases of neovascular glaucoma of different causes, who had completed panretinal photocoagulation and were on maximum antiglaucoma and yet they had uncontrolled intraocular eye pressure. Each of them received either intravitreal or intracameral anti-VEGF (Ranibizumab) and subsequently underwent augmented trabeculectomy. There were no major intraoperative or post-operative complications encountered except two of them had minimal hyphema which resolved spontaneously. Up to one year follow up, their blebs were functioning well and IOP were controlled without any antiglaucoma drops.

**Conclusion:** Neovascular glaucoma generally has poorer prognosis and causes severe morbidity to the patients. Adjuvant use of Ranibizumab prior to trabeculectomy appears to be a promising option in managing neovascular glaucoma and reducing trabeculectomy failure rate.

## **POS89 VISUAL OUTCOME IN OCULAR TOXOPLASMOSIS: A CASE SERIES OF 8 PATIENTS FROM SARAWAK GENERAL HOSPITAL**

N.Vithiaa, Silva J.M, Haron MF, B.Caroline

**Objective:** To assess the correlation between retinal lesion in ocular toxoplasmosis and final visual outcome after completion of treatment.

**Method:** This is a case series involving 8 patients who were treated for Ocular Toxoplasmosis. Ocular Toxoplasmosis was diagnosed based on classical clinical finding with or without serum toxoplasmosis IgG/IgM. The location of the retinal lesion is determined based on Cytomegalovirus (CMV) retinitis zone classification whereas visual impairment is classified based on International Classification of Diseases (ICD 10). All Patients completed oral Bactrim 960mg BD for 6 weeks.

**RESULTS:** Patients age ranged from 18 - 65 and mean age is 49. There are a total of 9 infected eyes. 5 eyes (55.6%) had mild visual impairment (ICD 10 Category 0), 1 eye (11.1%) had moderate visual impairment (ICD 10 Category 1) and 3 eyes (33.3%) were blind (ICD 10 category 4). Retinal lesion of 3 eyes (33.3%) in zone I, 1 eye (11.1%) is in zone II and 5 eyes (5.5%) in zone III.

**Conclusion:** Visual impairment of patients with Ocular Toxoplasmosis directly correlates to the retinal lesions after completion of treatment and is not determined by the visual acuity and severity of the illness at presentation.

**Keyword:** toxoplasmosis, ocular, visual acuity, retinal lesion, bactrim

## **POS90 DIFFERENT FACES OF FUNGAL KERATITIS PRESENTATION IN ADULTS:A CASE SERIES**

Prakash Supahiah<sup>1\*</sup>, MD(MOSCOW) , Goh Siew Yuen <sup>1</sup> MBBS(MAHE), Doctor Oftal(PPUKM)

**Introduction:** The main aim of this case series is to describe the clinical presentation of 5 patients treated as fungal keratitis.

**Methods:** This is a retrospective study of cases with different presentations of fungal keratitis. Patient's demographic and clinical details were determined and reported.

**Results:** Five cases of fungal keratitis, most common *Aspergillus* spp and *Fusarium* spp were reported. Clinical pictures: the common presentations were stroma abscess, satellite lesion, ring shaped infiltrate, feathery borders and nonspecific infiltrate borders. Two cases were responsive to treatment (5% Ceftazidime, 0.9% Gentamicin, 0.15% Amphoterin B) and another two cases required additional (Oral fluconazole 200mg OD and 0.2% Fluconazole). One case was unresponsive to treatment and had therapeutic penetrating keratoplasty done.

**Conclusion:** Specific and nonspecific presentations gives us hint for suspecting fungal keratitis especially in the case of microtrauma or contact with agriculture vegetative matter. As there is often delay or misdiagnosis of fungal keratitis, which can potentially lead to blindness.

**Keywords:** Fungal keratitis, *Aspergillus* spp, *Fusarium* spp

## **POS91 INTRAVITREAL TENECTEPLASE IN SUBMACULAR HAEMORRHAGE FROM IDIOPATHIC POLYPOIDAL CHOROIDAL VASCULOPATHY- A CASE SERIES**

Lee WY<sup>1,2</sup>, Ling KP<sup>2</sup>, Teh WM<sup>2</sup>, Norlina MR<sup>1</sup>, Haslina MA<sup>2</sup>

<sup>1</sup> Department of Ophthalmology, University of Malaya

<sup>2</sup> Department of Ophthalmology, Hospital Sultanah Bahiyah, Alor Setar, Malaysia

**Objectives:** To evaluate clinical outcomes of using intravitreal Tenecteplase (TNKase) as a minimally invasive adjunctive treatment in treating submacular haemorrhage secondary to idiopathic polypoidal choroidal vasculopathy (IPCV).

**Method:** Retrospective analysis of four patients treated with intravitreal TNKase (50mcg/0.1ml) for submacular haemorrhage secondary to IPCV. Outcome measures include anatomic displacement of submacular haemorrhage, change in visual acuity and surgical complications.

**Results:** Four patients received intravitreal TNKase for submacular haemorrhage secondary to IPCV. Three patients were given intravitreal TNKase in conjunction with perfluoropropane pneumatic displacement while one patient was given a combination of intravitreal Ranibizumab and TNKase. Complete resolution of blood was seen in two cases after TNKase with visual acuity improvement. Another two patients with massive subretinal haemorrhage developed vitreous haemorrhage one week later. They underwent vitrectomy and intraoperatively there was incomplete displacement of submacular haemorrhage.

**Conclusion:** Tenecteplase (TNKase) is a third-generation recombinant tissue plasminogen activator (rTPA). Despite the limited evidence base for intraocular injection, we believe that intravitreal TNKase is a feasible treatment option for submacular haemorrhage secondary to IPCV to achieve a favourable outcome. Long-term prospective and comparative clinical trials are warranted to determine the safety and efficacy of TNKase.

**Keywords:** Tenecteplase, intravitreal, submacular haemorrhage, idiopathic polypoidal choroidal vasculopathy

## **POS92 OCULAR TUBERCULOSIS IN IMMUNOCOMPETENT PATIENTS.**

Viona Lai MS, Mohd Hikmi R, Chiang WS

Ophthalmology Department, Hospital Duchess of Kent, Sandakan, Sabah

**Objective :** To illustrate Ocular Tuberculosis presentation and management in immunocompetent patients

**Method :** Case Series

**Result :** Case 1- A 70 years old, gentleman presented with left eye blurring of vision for 2 weeks. No history of tuberculosis contact. Visual acuity (VA) left eye was counting finger (CF). Ocular examination showed severe anterior uveitis with Mutton Fat Keratic Precipitates. Bscan showed retina flat and no vitreous opacities. Right eye examination was normal. He has left eye granulomatous anterior uveitis.

Case 2- A 50 years old lady presented with both eyes loss of vision for 5 days. She has positive history of Tuberculosis contact. VA was CF in both eyes. Fundus showed hyperaemic optic discs swelling and multifocal exudative detachment involving macula. She has bilateral posterior uveitis.

Case 3- A 30 years old gentleman presented with right eye blurring of vision for 2 weeks. No history of tuberculosis contact. VA right eye was hand movement (HM). Anterior segment showed severe inflammation with posterior synechiae. Bscan showed vitreous opacities and retina was flat. He has right eye panuveitis.

Mantoux test was significant positive in all cases. Other infective screening tests were negative. They were treated as ocular tuberculosis with anti-tuberculosis regime per protocol. In addition, topical or/and systemic steroid was given to them accordingly in order to reduce inflammation. Post treatment, all patients showed improvement with regain of vision.

**Conclusion :** Ocular tuberculosis is not uncommon in immunocompetent patients. Clinical presentation can vary individually. Early diagnosis and prompt treatment can yield good visual outcome.

## **POS93 MOBILE EYE SPECIALIST OUTREACH FOR UNDERPRIVILEGED COMMUNITY IN NEGERI SEMBILAN**

Azlina Mokhtar. MS (Ophthalmology)UKM, Norlelawati Zainol . MS(Ophthalmology )UKM, Siti Sarah Seri Masran. Doc of Ophthalmology UKM , Maimunah Abd Munaaim. Doc of Ophthalmology UKM

Faculty of Medicine and Health Science Universiti Sains Islam Malaysia

**Introduction:** Poor and rural community are more at risk from treatable and preventable cause of blindness. Nearly 50% of all world blindness with an estimated 18 million people blind from cataract. It is important to ensure the eye care services are accessible by all communities.

**Objective:** Our Mobile Eye Specialist (KliP Mobile) is an initiative to reach the unreachable community who was referred by local health clinic in the rural area. It contributes to society as well as in health education and awareness among all.

**Method:** Collaboration with Ministry of Health Malaysia, local authority and with the support of Negeri Sembilan state government enhance the outreach program to sustain and success.

**Result:** At present our Klip Mobile has visited seventeen rural areas for Specialist eye clinic and five for eye Retina Disease Awareness Program (RDAP) since early 2016. Patient who was identified need follow up and surgery were give a date to the nearest Eye Specialist center. Patient will be follow up through phone call to ensure he or she visit the respective referral eye specialist.

**Conclusion:** Community outreach program is essential to attract patients instead of simply waiting for patient to arrive on their own. Despite the magnitude of cataract blindness in developing countries, data have shown a small percentage of the people needing cataract surgery actually seek treatment. It is necessary to generate demand for the services through community outreach programmes.

**Keywords:** Blindness, Cataract, Mobile eye Specialist, Outreach,

## **POS94 EVALUATION OF GENERAL PRACTITIONERS' JUSTIFIED BASIC KNOWLEDGE ON EYE EXAMINATION UPON REFERING CASE TO OPHTHALMOLOGY DEPARTMENT, HOSPITAL KULIM, KEDAH.**

Aini Zahidah, W Chi Lun.

**Objective:** To evaluate basic justified knowledge of eye examination among general medical practitioners upon referring cases to Ophthalmology Department.

**Methods:** Observational study.

**Summary:** Referrals to on call medical officers of Ophthalmology department in Hospital Kulim, were observed over a period of 6 months from January to June 2017.

All the inclusive cases were referred from medical personnel from nearby government health clinics, emergency department and private general practitioners; which were seen on that very day or the next day. We observed the relevant knowledge and justified urgency of cases upon referring to Ophthalmology department, through information in referral letters such as visual acuity, basic anterior ocular examination and fundus photography. 105 referrals received between January 2017 and June 2017 were studied. Only 57 (54.3%) referrals had visual acuity documentation. 97 cases (92.3%) had basic anterior segment assessment done, and only 13 cases (12.4%) had fundus photography examination.

**Conclusions:** Basic ophthalmology knowledge is important to identify the urgency of referral which in turn helps ophthalmology team to provide the treatment without delay, especially in vision threatening cases. However, the study showed that this basic knowledge was limited among the general practitioners as we noted some misdiagnosis and inability to detect obvious signs. Apart from that, limited facilities such as fundus camera in primary settings, also reduce the ability and extend of our basic evaluation.

## **POS95 JUVENILE GLAUCOMA ; EPIDEMIOLOGY AND TREATMENT**

Brindha Gulendran, Haireen Kamaruddin, Ong Poh Yan

Department of Ophthalmology, Selayang Hospital

**Objective:** Reporting the epidemiology and treatment outcome of trabeculectomy with mitomycin C in patients with Juvenile open angle glaucoma (JOAG) between the year of 2002 – 2017 at Hospital Selayang.

**Design:** Retrospective

**Materials and Methods:** We included 47 eyes of 29 patients of JOAG between 2002 and 2017. The primary outcome was defined as complete success with intraocular pressure (IOP)  $\leq$  18 mmHg after augmented (mitomycin C 0.3mg/ml) trabeculectomy at 1 year.

**Results:** The mean age at presentation was 19 years old (range: 11–36). More males than females were diagnosed with JOAG (23:6). According to racial predominance, there were more Malays compared to Chinese and Indians(22:6:1). Out of 20 eyes that underwent trabeculectomy and mitomycin C, 15 eyes (75%) achieved complete success and 4 eyes(20%) failed trabeculectomy at 1year. 1 patient defaulted follow up.

**Conclusion:** From our study, JOAG was more predominant in Malays and males. Primary trabeculectomy with MMC produced a good success rate in JOAG which is comparable with previous studies in all age group.

**Keywords:** Epidemiology, Intraocular pressure, Juvenile open angle glaucoma, Mitomycin C, Trabeculectomy



## **POS96 AUDIT ON RETINOPATHY OF PREMATURITY (ROP) SCREENING**

Diana Toh Shi Jin\_MD (RSMU), Ang Ee Ling. MS Ophthal (UM)

Department of Ophthalmology, Hospital Pulau Pinang

**Introduction:** ROP is a condition confined to the developing vascular system of the retina in preterm babies. It is one of the few preventable causes of childhood visual disability. The goal of screening is to identify the severe stages early enough to allow proper intervention.

**Objective:** The aim of the audit was to determine if the timing of first ROP screening appointment is given according to the Malaysia Clinical Practice Guidelines (CPG) for Retinopathy of Prematurity published in December 2005.

**Standard:** 100% of the preterm babies referred should be screened within 4-6 weeks after birth.

**Methodology:** We undertook a retrospective audit on timing of ROP screening by Ophthalmology Department in Hospital Pulau Pinang from year 2012 till 2017. A total of 285 babies were audited from case notes with data collection forms. Babies that were transferred in from other eye centres were excluded.

**Results:** First audit showed 83/285(29.1%) babies were given wrong appointments.

### **Remedial Measures:**

1. A ROP calendar wheel was created to assist nursing staffs and doctors in giving correct ROP screening appointment.
2. Implementation of a cop on case notes to prompt doctors and nurses to document ROP screening date and to ensure screening is arranged on time.

**Re-audit:** Re-audit showed improvement in the timing of first ROP screening in premature babies to 100%.

**Conclusion:** While ROP screening is almost universally adopted in Malaysia, there is a need for the process to be more efficient and effective. This simple, low cost system provides an effective method of ensuring optimum care for premature babies with ROP.

**Keywords:** Audit, Retinopathy of prematurity, Screening

## **POS97 ALOR SETAR EXPERIENCE: SURGICAL OUTCOMES OF MACULAR HOLE SURGERY FOLDING METHOD**

Fatin Nadia Zamawi<sup>1,2</sup>, Haslina Mohd Ali<sup>2</sup>, Ling Kiet Phang<sup>2</sup>, Teh Wee Min<sup>2</sup>

<sup>1</sup>Department of Ophthalmology, Pusat Perubatan Universiti Malaya, Kuala Lumpur, Malaysia

<sup>2</sup>Department of Ophthalmology, Hospital Sultanah Bahiyah, Alor Setar, Kedah, Malaysia

**Purpose:** To review the surgical outcomes of macular hole surgery with internal limiting membrane (ILM) folding method in Hospital Sultanah Bahiyah (HSB), Alor Setar.

**Method:** A retrospective study reviewing the functional and anatomical outcomes of macular hole surgery with ILM folding method for all related cases in HSB during the period between January 2013 to December 2016.

**Results:** Twenty-six patients with purely full-thickness macular hole who underwent ILM folding method surgery were included in the study, with 15 females and 11 males. Ages ranged between 51-74 years. We observed the outcomes of macular hole surgery using folding method based on visual improvement and macular hole closure at 6-weeks and 6-months post-surgery. All surgeries were performed by a single vitreo-retinal surgeon in HSB. Following macular hole surgery using folding method, 22 cases (84.6%) and twenty-three cases (88.5%) showed visual improvement by two or more lines at 6-weeks and 6-months post-surgery, respectively. Hole closure was achieved in all cases (100%) of macular hole surgery using the folding method at 6 weeks and 6 months post-surgery.

**Conclusion:** In conclusion, surgical outcomes of macular hole surgery using ILM folding method in Alor Setar is comparable to available literatures such as Baba et al (2017) and Matsumura et al (2016). The folding method showed superior surgical outcomes as compared to the conventional ILM peeling method in macular hole surgery. Besides techniques, macular hole surgical success is also attributed by size of macular hole and its chronicity.

**Keywords:** macular hole surgery, folding method, surgical outcomes, Alor Setar

## **POS98 1 YEAR RETROSPECTIVE REVIEW OF RUBEOTIC GLAUCOMA IN HOSPITAL SULTANAH BAHIIYAH (HSB)**

Azima AS(MD), Nurul SI(MD), Ch'ng TW(MD)(MMedOph), Farrah J(MD)(MSOph), Ahmad MS(MD)(MSOph)

Jabatan Oftalmologi, Hospital Sultanah Bahiyah

**Objectives:** To report the demographic, clinical presentation and visual outcome of rubeotic glaucoma patients treated in Hospital Sultanah Bahiyah.

**Methods:** Retrospective study of 19 patients (24 eyes) with rubeotic glaucoma in year 2016 (1 Jan 2016-31 Dec 2016) who were treated in HSB. Data collected from hospital records included the demographics, presenting vision and intraocular pressure (IOP), treatment and post-operative vision and IOP.

**Results:** We observed all patients presented with rubeosis and high IOP. The mean age was 51.7 years. Female comprised of 58% of the samples. Right eye was predominantly involved 62.5%. Associated systemic diseases included DM, HTN, CKD, SLE and CVA. Majority of them having blurring of vision (94.7%) and pain(52.6%). The visual acuity presented was worse than 3/60 in the majority of patients (66.66%). All patients completed PRP and 33.3% (8 eyes) received intravitreal lucentis injection. 45.8% (11 eyes) had no visual potential on presentation and were treated conservatively including 5 eyes received diode cyclophotocoagulation. All 13 eyes with better visual prognosis showed improvement of visual acuity at least 1 line and at least 41% of IOP reduction following glaucoma filtering surgery in 11 eyes (7 Ahmed valve implants and 4 augmented trabeculectomy) and topical eye drops in 2 eyes.

**Conclusion:** Most patients of rubeotic glaucoma presented with poor vision. Surgical intervention is the mainstay treatment for immediate IOP reduction and may improve in visual acuity. Preventive measure in managing high risk patients developing rubeotic glaucoma is emerging.

**Keywords :** audit rubeotic glaucoma

## **POS99 IS PATIENT WITH DIABETES MELLITUS ADEQUATELY SCREENED FOR DIABETIC RETINOPATHY?**

Chai Huei Xian (MBBS)<sup>1</sup>, Lim Siew Hwa (MD)<sup>1</sup>, Lim Yi Wen (MBBS)<sup>1</sup>, Ang Ee Ling (MS Ophthal)<sup>1</sup>

Department of Ophthalmology, Hospital Pulau Pinang <sup>1</sup>

**Introduction:** Diabetic Retinopathy (DR) is the leading cause of acquired blindness among working Malaysian adults. An effective and coordinated diabetic screening and treatment program can greatly reduce the burden of blindness in our population.

**Objective:** The aim of this study is to analyze the adequateness of diabetic retinopathy screening among patients who are newly referred to Ophthalmology Clinic Hospital Pulau Pinang (HPP) in year 2016.

**Methodology:** This is a retrospective observational study of 574 patients who were referred to HPP from 1<sup>st</sup> January 2016 to 31<sup>th</sup> December 2016. The study includes all diabetes mellitus (DM) patient regardless their indication of referral.

**Result:** There were only 29% (n=167) of patients had their eye screened upon diagnosis of DM, majority of the screened patients were referred from government health clinic (KK). None of the patient referred from specialty clinic in HPP had their eye screened for DR. Eighteen percent of eyes (n=122) were wrongly diagnosed by primary health care screener and 30 eyes had either sight threatening DR, maculopathy or both. Most of the health care screener did not do visual assessment, grade DR and assess maculopathy in their screening.

**Conclusion:** Our current screening for diabetic retinopathy was still not adequately done by primary health care provider. Steps such as promote diabetic retinopathy screening course, increase awareness of primary screener and increase accessibility of fundus camera are necessary to improve the screening of diabetic retinopathy.

**Keywords:** Diabetic Retinopathy, Diabetes Mellitus, Screening

## **POS100 FACTORS DETERMINING EXOTROPIA SURGERY OUTCOME: A 3 YEAR EXPERIENCE AT PUSAT JANTUNG HOSPITAL UMUM SARAWAK**

Lai YKI<sup>1</sup>, Dr Ting SL<sup>2</sup>, Ramasamy S<sup>3</sup>, Rahmat J<sup>3</sup>

<sup>1</sup>Sarawak General Hospital

<sup>2</sup>Universiti Malaysia Sarawak

<sup>3</sup>Hospital Kuala Lumpur

**Objective:** To determine demographic, clinical features and associated factors which affect exotropia surgical outcome

**Methods:** Retrospective, clinical study of surgeries performed at Pusat Jantung Hospital Umum Sarawak between year 2014 and 2016. Medical records of patients with primary and secondary exotropia were reviewed. The factors affecting surgical outcomes were collected: onset age of squint, age of surgery, interval between diagnosis and surgery, type of exotropia, visual acuity, presence of amblyopia, previous patching, anisometropia, refractive error, type of surgery, preoperative and postoperative deviation, pre-existing ocular comorbidity and systemic illness.

**Result:** Total of 21 patients underwent exotropia surgery. Five patient's records were lost and one incomitant exotropia was excluded. Of the remaining 15, females were predominant (10). Average interval between diagnosis and surgery was 1 year 2 months. 7 patients had primary exotropia while 8 patients had secondary exotropia. Four had V pattern and two had DVD. 8 patients had pre-existing amblyopia while 5 patients had previous patching. 5 patients had anisometropia. Average pre-operative angle was 44.6PD. Average pre-operative angle for primary exotropia was 50.6PD whereas secondary exotropia was 39.3PD. 7 patients had successful surgical outcomes of within 10 prism diopters, 5 for primary exotropia and 2 for secondary exotropia. 9 patients had bilateral lateral rectus recession, of which 7 were in the primary exotropia group. All 6 secondary exotropia patients had unilateral rectus recession and medial rectus resection.

**Conclusion:** In our study, primary exotropia had larger preoperative angle than secondary. Primary exotropia showed better surgical outcome.

**Keywords:** exotropia, surgery, factors, outcome

## **POS101 REFRACTIVE OUTCOMES AFTER PHACOEMULSIFICATION IN MODERATE AND HIGH AXIAL MYOPIA IN HOSPITAL TAIPING - A RETROSPECTIVE STUDY**

Jason Allan Cheah SS MD (UNPAD), Ng Sok Lin M.Med. OPHTHAL (USM)

Department of Ophthalmology, Hospital Taiping

**Objective:** To evaluate postoperative refractive outcomes following phacoemulsification in moderate and high axial myopia in Hospital Taiping

**Method:** A retrospective review 83 eyes from 60 patients with axial length more than 24.00mm who had undergone uneventful phacoemulsification cataract surgery by single surgeon in Hospital Taiping from year 2015 to 2016. Difference between preoperative predicted outcome and actual postoperative outcome, in spherical equivalent, was compared between moderate (24.00-25.99mm) and high (>26.00mm) myopia groups.

**Results:** There are 45 eyes in the moderate myopia group. Hyperopically shifted postoperative refraction accounts for 23 eyes (51.1%), while myopically shifted postoperative refraction accounts for 21 eyes (46.7%). One case achieved targeted spherical equivalent postoperatively. There is no statistically significant difference between hyperopic shift and myopia shift in the moderate myopia group, ( $P=0.763$ ). In the high myopia group, there are 38 eyes. Postoperative refraction showed 27 eyes with hyperopic shift (71.1%) and 11 eyes with myopic shift (28.9%). There is statistically significant hyperopic shift compared to myopic shift in high myopia group, ( $P = 0.009$ ). Immersion ultrasound A-scan ( $N=37$ ) contributed to statistically significant hyperopic shift compared to partial coherent interferometry A scan ( $N=11$ ),  $P=0.001$ .

**Conclusion:** Hyperopically shifted prediction error was significantly higher in the high axial myopia group. Biometry performed using partial coherence interferometry improves the predictive value of postoperative refraction as compared to immersion ultrasound.

**Keywords:** myopia, hyperopic shift, immersion, partial coherent interferometry

## **POS102 ENDOGENOUS ENDOPHTHALMITIS: 3 YEARS EXPERIENCE IN HOSPITAL TUANKU JAA'FAR SEREMBAN**

Norjeehan Maaris<sup>1</sup> (MBBS), Tan Pek Hwi<sup>1</sup> MS(Ophtal)UKM

<sup>1</sup> Department of Ophthalmology, Hospital Tuanku Ja'afar, Seremban, Negeri Sembilan

**Introduction:** Endogenous endophthalmitis is caused by hematogenous dissemination of microorganisms resulting in intraocular infection. It is a devastating and potentially sight-threatening condition.

**Objective:** To analyse the clinical characteristics and visual outcome of endogenous endophthalmitis patients in Hospital Tuanku Ja'afar Seremban in the past 3 years

**Methods:** Retrospective review of medical records was conducted among patients who were diagnosed with endogenous endophthalmitis in Hospital Tuanku Ja'afar Seremban from January 2015 until June 2017

**Results:** Twelve patients were admitted to Hospital Tuanku Jaa'far Seremban and treated as endogenous endophthalmitis. Total of 13 eyes were identified from the 12 patients within this 3-year period. 58.3% were females and the mean age of 60.3 years. Three (25%) patients first presented with eye symptoms. 75% of patients had culture-positive isolates. However, only 1 patient had positive vitreous and anterior chamber tap culture result. The commonest microorganism isolated was Staphylococci followed by Klebsella pneumoniae. Minimum of 2 systemic antibiotics for at least 2 weeks were given to all patients. All cases were given intravitreal antibiotics except for 2 cases. 17% of patients underwent vitrectomy and evisceration each. The commonest source of infection was line-related sepsis (42%). Identifiable risk factors were diabetes mellitus (58%), renal failure (25%) and cancer (8%). Presenting and final visual acuities ranged from Snellen 6/6 to NPL. 25% of patients obtained vision  $\geq 6/12$  post treatment.

**Conclusion:** Endogenous endophthalmitis is an ophthalmic emergency that can have life- and severe sight-threatening sequelae. Early recognition and prompt treatment may offer the best chance of preserving vision and saving the eye.

**Keywords:** Endogenous, endophthalmitis, hematogenous

## **POS103 POTENTIAL SIGHT THREATENING DISORDERS WHICH MISDIAGNOSED AS CONJUNCTIVITIS BY PRIMARY CARE PRACTITIONERS AND ITS OUTCOME: A RETROSPECTIVE REVIEW**

Eng Kah Joon, Ahmad Ilyas Dzulkamal, Ng Hong-Kee , Chong Mei Fong  
Department of Ophthalmology, Hospital Raja Permaisuri Bainun, Ipoh.

**Objective:** Red eye is a common presenting complains in primary health care clinic and it is always diagnosed and treated as conjunctivitis. However, we know that not all red eyes are conjunctivitis. We aimed to study the clinical data to look into potential sight threatening causes of red eye and to find out its outcome.

**Method:** Retrospective review of all conjunctivitis referrals to eye clinic, Hospital Raja Permaisuri Bainun, Ipoh from June 2016 to May 2017 and to compare the actual diagnosis made by ophthalmology team with its outcome.

**Results:** A total of 340 patients were enrolled with mean age of 32 year old. There were 45.0% of patients with inaccurate referral diagnosis. Within this group, sight-threatening erroneous referrals were seen in 23 patients (15.0%) who include anterior uveitis (5.9%), corneal ulcer (1.3%), kerato-uveitis (1.3%), hyphema (0.7%), preseptal cellulitis (2.0%), dacryocystitis (1.3%), neovascular glaucoma (1.3%), subluxated lens (0.7%) and post-operative inflammation (0.7%). All 23 patients had vision acuity of 6/9 or worst at presentation. 5 out of 23 patients (21.7%) warranted admission whereas 3 patients (13.0%) required additional procedures or surgery. 4 patients (17.4%) had defaulted subsequent follow up. 18 patients (78.3%) showed significant symptomatic and clinical improvement upon administered treatment. However, only 1 patient who was diagnosed with neovascular glaucoma secondary to proliferative diabetic retinopathy denied any improvement.

**Conclusion:** Sight threatening disorders are uncommon. However, delayed treatment can lead to blindness. Hence, accurate diagnosis and prompt treatment initiation are important in order to prevent irreversible visual loss.

**Keywords:** Conjunctivitis; Misdiagnosis; Potential sight threatening disorder; Red eye



## POS104 APPEARANCE OF LIPID FLOATING AND TEAR FILM STABILITY IN NON-DRY AND DRY EYE SUBJECTS

Mohd Hafidz Ithnin, PhD<sup>1</sup>, Azrin Esmady Ariffin, PhD<sup>2</sup>, Khairidzan Mohd Kamal, MsOphthal<sup>3\*</sup>

<sup>1</sup>Department of Optometry and Visual Science, Kulliyyah of Allied Health Science, International Islamic University Malaysia, Kuantan, Pahang, Malaysia

<sup>2</sup> Faculty of Optometry and Visual Science, Segi University, Kota Damansara, Selangor, Malaysia

<sup>3</sup> Department of Ophthalmology, Kulliyyah of Medicine, International Islamic University Malaysia, Kuantan, Pahang, Malaysia

\*Correspondence author: Department of Ophthalmology, Kulliyyah of Medicine, International Islamic University Malaysia, Kuantan, Pahang, Malaysia

**Introduction:** Assessment of lipid component of the tear film is still poorly described. The purpose of the study is to evaluate the appearance of lipid floating and tear film stability in non-dry and dry eye subjects.

**Methods:** All subjects were classified as dry eye and non-dry eye patients by using two different criteria; Classification 1 and Classification 2. The lipid floating time (LFT) and TFBUT were evaluated using slit lamp videography. The correlation analysis was conducted between LFT and TFBUT on all subjects. LFT and TFBUT were compared between non-dry and dry eye subjects based on Classification 1 and Classification 2 in this cross-sectional study.

**Results:** 321 subjects with 642 eyes were involved in the study. LFT was correlated significantly with TFBUT ( $r = 0.14$ ,  $p < 0.001$ ). There were no significant differences between non-dry and dry eye subjects based on Classification 1 in LFT and TFBUT ( $p > 0.05$ ). The difference between non-dry and dry eye subjects based on Classification 2 in LFT was not significant ( $p > 0.05$ ). The value of TFBUT in dry eye subjects ( $3.2 \pm 0.9$  seconds) was significantly lower than non-dry ( $4.8 \pm 3.1$  seconds) if dry eye was defined based on Classification 2 ( $p < 0.001$ ).

**Conclusion:** Although low duration of lipid floating could cause tear instability, there were no significant correlation between the movement of lipid in non-dry and dry eye subjects.

**Keyword:** lipid floating time, tear film break-up time, dry eye

## **POS105 EVALUATION OF TEAR PRODUCTION USING OCULAR SURFACE IMAGING**

Mohd Hafidz Ithnin, PhD<sup>1</sup>, Khairidzan Mohd Kamal, MsOphthal<sup>2</sup> Azrin Esmady Ariffin, PhD<sup>3\*</sup>

<sup>1</sup>Department of Optometry and Visual Science, Kulliyyah of Allied Health Science, International Islamic University Malaysia, Kuantan, Pahang, Malaysia

<sup>2</sup>Department of Ophthalmology, Kulliyyah of Medicine, International Islamic University Malaysia, Kuantan, Pahang, Malaysia

<sup>3</sup> Faculty of Optometry and Visual Science, Segi University, Kota Damansara, Selangor, Malaysia

\*Correspondence author: Faculty of Optometry and Visual Science, Segi University, Kota Damansara, Selangor, Malaysia

**Introduction:** Schirmer test is mainly used for measuring tear production. The purpose of this study is to assess the production of tears using ocular surface imaging.

**Materials and Method:** 321 subjects with 642 eyes were involved in this cross-sectional study with convenient sampling. Schirmer test with anaesthesia (STA) and slit lamp videography were conducted. The parameters obtained from slit lamp videography were 30-seconds blinking rate, tear film break-up time (TFBUT), lipid floating time (LFT), and tear meniscus height (TMH).

**Results:** STA was significantly correlated with 30-seconds blinking rate ( $r = 0.12$ ,  $p < 0.05$ ), TFBUT ( $r = 0.25$ ,  $p < 0.001$ ), and TMH ( $r = 0.10$ ,  $p < 0.05$ ). However, the relationship between STA and LFT was not significant ( $p > 0.05$ ).

**Conclusion:** The parameters of 30-seconds blinking rate, TFBUT and TMH in ocular surface imaging are indirect indication for the assessment of tear production.

**Keyword:** Schirmer test with anaesthesia, Tear film break-up time, Tear meniscus height

## **POS106 A STUDY OF LATE IN-THE-BAG SPONTANEOUS INTRAOCULAR LENS (IOL) SUBLUXATION IN PSEUDOEXFOLIATIVE (PXE) SYNDROME PATIENTS POST PHACOEMULSIFICATION**

Goh EP, Ch'ng TW, Gan EH, Jelinar Binti Mohamed Noor  
Department of Ophthalmology, Hospital Kuala Lumpur

**Purpose:** To assess the incidence of late in-the-bag spontaneous IOL subluxation in PXE patients post uneventful phacoemulsification surgery in Hospital Kuala Lumpur from Jan 2015 to May 2017

**Method:** A retrospective cross sectional study was carried out on 46 eyes of 38 patients with PXE and who underwent uneventful phacoemulsification surgery under glaucoma team HKL over a period of 30 months (January 2015 to Jun 2017). The duration of surgery, types of lens used intraoperatively and incidence of late in-the-bag spontaneous IOL subluxation post operation were analyzed.

**Results:** 46 eyes of 38 patients underwent uneventful phacoemulsification with an average of 5.56 years post phacoemulsification. 37 eyes (80.4%) of the 46 eyes were implanted with a single piece IOL while the remaining 9 eyes (19.6%) were implanted with a three-piece IOL. 2 eyes (4.3%) of the 46 eyes were noted to develop late in-the-bag spontaneous IOL subluxation (using single piece IOL) at an average of 6 years post phacoemulsification.

**Conclusion:** The incidence of late in-the-bag spontaneous IOL subluxation in PXE patients is 4.3%. Single piece PCIOL appears to be the most commonly used lens. 5.4% of all PXE patients implanted with single piece IOL developed late in-the-bag spontaneous IOL dislocation.

**Keywords:** late in-the-bag spontaneous IOL subluxation, pseudoexfoliative syndrome

## **POS107 AWARENESS ON CONTACT LENS USAGE AND CARE AMONG MEDICAL STUDENTS OF UNIVERSITI TEKNOLOGI MARA**

Nurliyana Ain Abdul Ghani, Nor Azimah Abd Aziz, Norasyikin Mustafa

Discipline of Ophthalmology, Faculty of Medicine, Universiti Teknologi Mara (UiTM), Sungai Buloh Campus, Malaysia

**Objective:** Contact lenses (CL) are an optical device that provide effective modality for an optical correction. However, most of contact lens complications are due to poor lens care practice. The aim of this study is to determine the awareness on contact lens usage and care by assessing the knowledge about contact lens wear and care among medical students of UiTM.

**Method:** A cross-sectional study was conducted involving 208 medical students from Year 1 to Year 5 in UiTM, Sungai Buloh Campus. They were divided into 2 groups; CL wearers and non-CL wearers. A modified, pretested questionnaire was handed from June 2016 to July 2016 using convenience sampling method. The questionnaire was based on the knowledge about contact lens wear, care and related complications.

**Results:** Out of 208 medical students, 38% were CL wearers and 62% were non-CL wearers. Majority of the wearers were female (89.9%). Most of the students from both groups knew that hands should be washed prior to handling lenses and CL wearers should not sleep with contact lens on. Majority of CL wearers complied to hand washing. However, only 48.1% of CL wearers claimed to never slept with contact lens on. Around half of both groups (55.1% and 57%,  $p=0.79$ ) knew that CL use can be associated with corneal ulcer.

**Conclusion:** In conclusion, educated and knowledgeable medical students have shown unsatisfactory level of awareness on contact lens usage, care practice and complications regardless wearers and non-wearers.

**Keywords:** Awareness, Contact lens, Medical Students

## **POS108 PREVALENCE OF DIABETIC RETINOPATHY AND REFERRAL PATTERNS OF DIABETIC PATIENTS BY PRIMARY CARE TEAM TO EYE CLINIC HOSPITAL TAIPING – A RETROSPECTIVE REVIEW**

Bee See Yee MD (UKM), Chen Chui Yain M.MED OPHTHAL (USM); Ng Sok Lin M.MED OPHTHAL (USM)

Department of Ophthalmology Hospital Taiping, Perak.

**Objective:** To evaluate the prevalence and severity of diabetic retinopathy and referral patterns of diabetic patients by primary care team to eye clinic Hospital Taiping

**Method:** Case notes of 651 diabetic patients, excluding gestational diabetes mellitus, who were seen as new cases in Hospital Taiping from January till June 2017 were reviewed.

**Results:** 571 cases (87.7%) were referred for screening while only 68 cases (10.4%) were referred for diabetic retinopathy changes and 12 cases (1.8%) were referred for other fundus abnormalities. Out of 651 cases, there were 132 cases (20.3%) diagnosed with mild and moderate non-proliferative diabetic retinopathy and 44 patients (6.8%) with severe non-proliferative diabetic retinopathy and worse. 53 patients (8.1%) were diagnosed to have diabetic maculopathy. Among 571 patients who were referred for screening, 141 cases (21.7%) had changes of diabetic retinopathy. 306 patients (53.6%) who were referred for screening had vision better than 6/18 and out of which 242 cases (79.1%) showed no diabetic retinopathy. Among 68 patients who were referred for diabetic retinopathy changes, only 12 cases (17.6%) with correct diagnosis.

**Conclusions:** Detection of diabetic retinopathy with appropriate referral is crucial. Diabetic retinopathy screening by primary care team ought to be improved, especially with use of fundus imaging according to guidelines, to optimize care and reduce referral for diabetic retinopathy screening to eye clinic.

## **POS109 CHALLENGES OF POST OPERATIVE CARE AMONG PSYCHIATRIC PATIENTS IN HOSPITAL BAHAGIA ULU KINTA**

Siva Sathi Kanesan MBBS, Kursiah Mohd Razali MD

Department of Ophthalmology, Hospital Raja Permaisuri Bainun, Ipoh

**Objective:** Cataract surgery is a common surgical procedure in ophthalmology. Postoperative care plays important role in good outcome of cataract surgery. However, post op care specifically in psychiatric patient is challenging. We aimed to study post-operative complications in psychiatric patients.

**Method:** Retrospective review of psychiatric patients from Hospital Bahagia Ulu Kinta who underwent cataract surgery from January 2015 to December 2016.

**Results:** A total of 18 patients were enrolled with male predominant (61.11%). There were 72.2% of patients with underlying schizophrenia, 11.11% with bipolar mood disorder, 11.11% with mental retardation and 5.56% with epileptic psychosis. Ocular diagnosis of mature cataract (50%), immature cataract (44.44%) and drug induced anterior subcapsular cataract (5.56%). Among these patients, 72.22% patients underwent phacoemulsification procedure and 27.78% underwent extracapsular cataract extraction. Post-operative complications in these patients were loose suture (5.56%), 11.11% with wound breakdown caused by self-induce injury (5.56%) and inmate induce injury (5.56%).

**Conclusion:** In this study, high percentage of psychiatric patients presented with mature cataract. This is due to their lack of self-awareness regarding visual deterioration as a result of psychiatry disorder. With regards to post-operative complications, they have higher rate of wound breakdown compare to normal individual who underwent extracapsular cataract extraction. In conclusion, phacoemulsification procedure will be better option for cataract extraction in psychiatric patients.

## **POS110 AXIAL LENGTH, MYOPIA, AND THE SEVERITY OF LENS OPACITY AT THE TIME OF CATARACT SURGERY**

Nur Faizah Harun<sup>1</sup>, Puspha R<sup>2</sup>, Khairul Husnaini Mohd Khalid<sup>3</sup>

<sup>1</sup>Department of Ophthalmology, Hospital Tuanku Ampuan Najihah, Negeri Sembilan

**Objective:** To investigate the relationship between axial length, myopia of the eye, and the severity of lens opacity at the time of cataract surgery.

**Methods:** We retrospectively reviewed a consecutive series of 272 eyes of patients aged older than 50 years at Kuala Pilah Cluster Hospital from June 2016 to January 2017. Patient age at the time of surgery, axial length, spherical equivalent, and the subtypes and severity of cataract (as classified according to the modification of the Lens Opacities Classification System, version III) were recorded.

**Results:** Axial length was weakly associated with age at the time of cataract surgery (P:0.045). Regarding the severity of nuclear cataract, a significant correlation was seen between a higher score of nuclear cataract and longer axial length (P: 0026). The relationship between the severity of nuclear cataract and spherical equivalent at the time of surgery showed a significant association between increasing grade of nuclear cataract and posterior subcapsular cataract and higher myopia (P<.001).

**Conclusion:** An increase in axial length or myopia of the eye was associated with a lower mean age at the time of surgery and higher grade of nuclear cataract. Nuclear cataract and posterior subcapsular cataract associated with higher myopia.

**Keywords:** Axial length, lens opacity, myopia

## **POS111 CONTRAST SENSITIVITY AS A POTENTIAL INDICATOR FOR GLAUCOMA**

Carynn N (MD), Thivakar S (MD), Tanusha D (MBBS), Siti Nurbaiya B.N (MS Ophthal), Roslinah M (MMed Ophthal), Thayanithi S (MS Ophthal, Glaucoma Fellowship Sydney), Department of Ophthalmology, HKL.

**Objective:** Description of contrast sensitivity in glaucomatous and non-glaucomatous patients.

**Methods:** Cross-sectional study of 157 eyes comparing contrast sensitivity of patient with glaucoma versus non-glaucomatous. Patients were randomly selected from ophthalmology clinic in Hospital Kuala Lumpur. All patient underwent standard visual assessment which includes visual acuity and contrast sensitivity. The contrast sensitivity testing was done using Pelli Robson chart. Statistical analysis was performed on the data. Patients with visual acuity worse than 6/12 were excluded.

**Results:** The mean contrast sensitivity was lower in glaucomatous (1.400) compared to non-glaucomatous group (1.452). The mean contrast sensitivity decreases with age in both groups. The mean contrast sensitivity between age-matched group (more than 60 years old) was significantly lower in glaucomatous patients (1.38 vs 1.40),  $p=0.03$ .

**Conclusion:** Contrast sensitivity testing is a potential screening tool and indicator for detecting glaucoma.

**Keyword:** Contrast sensitivity, Glaucoma



## **POS112 SUBFOVEAL CHOROIDAL THICKNESS CHANGES FOLLOWING PHACOEMULSIFICATION IN PATIENTS WITH DIABETES MELLITUS**

Punithamalar V, MBBS; Nandini V, MS (Ophthal); Zulkifli S, PhD; Mushawiahti M, MS (Ophthal)

**Objective:** To compare changes in subfoveal choroidal thickness (SFCT) following uncomplicated phacoemulsification between patients with and without diabetes mellitus and correlate it with central macular thickness (CMT) changes.

**Method:** A prospective case control study conducted from December 2015 to November 2016. In total, 58 patients with diabetes (study group) and 52 non-diabetic patients (control group) completed the follow-up period of 12 weeks. All patients underwent uncomplicated phacoemulsification and had their SFCT and CMT measured pre-surgery and post-surgery at weeks 1, 6, and 12 using enhanced depth imaging optical coherence tomography.

**Results:** The baseline mean SFCT in the study group was  $205.8 \pm 60.8 \mu\text{m}$  and in control group was  $224.8 \pm 50.7 \mu\text{m}$ . The mean SFCT in the study group increased to  $216.2 \pm 65.7 \mu\text{m}$  at week 1 (5 % increment from baseline) and  $222.7 \pm 69.1 \mu\text{m}$  at week 6 followed by decreased to  $218 \pm 71.6 \mu\text{m}$  at week 12. The mean SFCT in the control group increased to  $246.8 \pm 64.6 \mu\text{m}$  at week 1 (9.8 % increment from baseline) and  $252.8 \pm 66.1 \mu\text{m}$  at week 6 and decreased to  $251.8 \pm 61.3 \mu\text{m}$  at week 12. The difference in overall mean SFCT changes over 3 months between study and control group was statistically significant ( $p=0.020$ ). The baseline CMT in study group was  $205.3 \pm 21.1 \mu\text{m}$  and in control group was  $214.5 \pm 26.8 \mu\text{m}$ . The difference in overall mean CMT changes over 3 months between study and control group was not statistically significant ( $p=0.264$ ). There was weak negative correlation between the SFCT changes and CMT changes during each follow up, but statistically significant only during week 1 and 12 post-surgery.

**Conclusion:** SFCT increased in both groups following uncomplicated phacoemulsification. The changes were significantly less in the patients with diabetes than in patients without diabetes.

## **POS113 PREVALENCE OF LOW VISION AND BLINDNESS AMONG KUALA LUMPUR URBAN ELDERLY POPULATION. (A PILOT STUDY)**

Marium JA MBBS, Irina ET MBBS, Najieha A MBBS, Farah, Norlina R MOphthal, Nurliza K MOphthal, Shahrul B PhD

University Malaya Medical Centre

**Introduction:** The National Eye Study in Malaysia (1996) found that the elderly group had the highest prevalence of visual impairment. This study is part of a large population based study on elderly aged 55 years and over in the urban population. (Malaysian Elders Longitudinal Research (MELoR)).

**Methods:** 764 out of a planned 1000 subjects aged over 55 years were recruited. Patients underwent visual acuity(VA) test using LogMAR, contrast sensitivity using a Pelli robson and non-mydratic fundus photography. Blindness was defined as best corrected VA of 6/60 or less in the better eye and low vision was defined as best corrected VA less than 6/12 in better seeing eye following United States definition. The fundus photographs were reviewed by a consultant ophthalmologist blinded to the subject's particulars.

**Results:** There were 324males (42.4%) and 440 females (57.6%). Visual impairment in the better eye was observed in 14.14%%. In total 0.13% had blindness in both eyes, 1.16% had blindness in 1 eye and low vision in the other eye, 11.6% had low vision in both eyes. The remaining 396 subjects (83.7%) had 6/12 and better in the better eye. The most common cause for visual impairment was due to a cataract 43% followed by refractive error (17.6%) and macular abnormalities (11%).

**Conclusion:** Preliminary findings in this population based study suggests that rates of bilateral visual impairment in an urban population in Klang valley is higher than that reported in Singapore, Japan or Taiwan. The most common cause for this was cataract.

## **POS114 PERIORBITAL ANTHROPOMETRIC MEASUREMENTS IN MALAYSIANS AGED 3-20 YEARS**

Rhuen Chiou Chow (M.Ophth), Chin Tuan Ong (Frcophth), Pauline Siew Mei Lai (Phd), Fazliana Ismail (M.Ophth), Tengku Ain Kamalden (D.Phil)

**Objective:** To establish normative values for periorbital soft tissue anthropometric measurements in young Malaysians from three major ethnic backgrounds. The secondary aim was to look for inter-ethnic variations.

**Methods:** This is a cross-sectional observational study involving 513 healthy Malaysians aged 3-20 years, of Malay, Chinese, and Indian ethnic background. Analysis was performed on standardised digital frontal photographs for eight anthropometric measurements using ImageJ software. These were vertical palpebral aperture (VPA), horizontal palpebral aperture (HPA), incidence of double lid fold (IDF), eyebrow height (EH), palpebral slant angle (PSA), inner intercanthal distance (IICD), outer intercanthal distance (OICD), and interpupillary distance (IPD). Data was analysed according to ethnicity and gender.

**Results:** Malaysian Chinese consistently recorded lower values for VPA, HPA, and IDF. Mean values for VPA, HPA, and IDF in males were  $8.5 \pm 1.4$ mm,  $24.5 \pm 2.3$ mm, and 36.7% respectively. For females, mean VPA was  $8.9 \pm 1.2$ mm, mean HPA was  $24.5 \pm 2.3$ mm, and IDF was 60.2%. In contrast, Chinese had highest values for EH, PSA, and IICD. Mean values were  $10.9 \pm 1.8$ mm,  $7.0 \pm 2.3$ , and  $35.7 \pm 3.3$ mm in males; and  $10.9 \pm 1.8$ mm,  $8.3 \pm 2.3$ , and  $34.7 \pm 3.1$ mm in females respectively. Significant inter-ethnic differences were found for all, except OICD and IPD. In addition, different parameters displayed differing growth trends.

**Conclusions:** Access to population norm databases yielded from proper and accurate anthropometric measurements is indispensable. Periorbital features in Malaysian Chinese are distinctively different from the Malays and Indians. This study highlights variations seen amongst South East Asians, and hence establishment of a separate set of anthropometric norms across Asia is important.

## **POS115 THE VALIDATION OF BAHASA MALAYSIA TRANSLATED OSDI**

Ezailina Badarudin (PHD), Aziimah (B. OPTOMETRY), Azrin Esmady Ariffin (PHD), Mohd Zulfaezal Che Azemin (PHD), Norsham Ahmad (PHD)

**Introduction:** Dry eye disease (DED) is a multifactorial condition that results in symptoms of discomfort, visual disturbance and tear film instability with potential damage to the ocular surface. Symptoms are important in confirming the diagnosis. Questionnaire application is efficient in assessing symptoms of DED. Ocular Surface Disease Index (OSDI) questionnaire is a standard measure for DED used worldwide. The English version of OSDI may not be fully understood by the Malaysian population who communicate in Bahasa Malaysia. This study involves the translation and validation of the Bahasa Malaysia version of OSDI.

**Objective:** To validate the same structure of OSDI in Bahasa Malaysia, to remove language barrier in assessing the DED.

**Methodology:** Translation process was conducted via five phases; forward translation, synthesis of translation, backward translation, refine of translation and translation scrutinization. The result from translation process was transformed into an online questionnaire using JotForm program. It was distributed to 230 bilingual participants to answer both English and Bahasa Malaysia version. The responses were automatically calculated and replied via online. SPSS software was used to analyse the results, using Cronbach's alpha coefficients test to determine the reliability of the translated version.

**Result:** The reliability of the scores of all items in OSDI-Bahasa were satisfactory with the Cronbach's Alpha ranging from the acceptable values of 0.88 to 0.94. No significant difference in the items, total score and OSDI score between the repeats of the OSDI-Bahasa ( $P > 0.05$ )

**Conclusion.** OSDI in Bahasa Malaysia is valid as an instrument to assess symptoms of DED.

**Key words:** Dry eye, questionnaire, translation, reliability, repeatability

## **POS116 ENDOGENOUS ENDOPHTHALMITIS: A 6 –YEAR RETROSPECTIVE REVIEW OF CASES AT A TERTIARY HOSPITAL IN TERENGGANU.**

Mohammad, A. Salehuddin, MBChB Otago, New Zealand, Ahmad, M. Aizuddin, MD UKM, Che Omar, S. Zuraidah, MD USM, Mat Min, Faridah, MD USM, MMED USM, Che Omar, Nor Anita, MD UKM, MMED USM, Yaakub, Maizan, MD UKM, M.MED USM.  
Department of Ophthalmology, Hospital Sultanah Nur Zahirah.

**Purpose:** The aim of this study was to review the clinical profile including predisposing systemic conditions, microorganisms responsible, clinical presentation, initiation of treatment and outcomes of endogenous endophthalmitis in Terengganu.

**Design:** Retrospective case series

**Methods:** Retrospective analysis of consecutive cases with endogenous endophthalmitis presenting from 2012 to 2017. The main outcome measure was the visual outcome at the latest follow-up visit.

**Results:** 15 eyes of 10 patients were included. Preceding systemic illness was noted in 9 patients (90%). No predisposing condition was found in 1 patient (10%). 8 of the 10 patients (80%) were inpatients with possible endogenous source of infection and 7 of them (87.5%) were concurrently treated with intravenous antibiotics. Culture positivity was seen in 7 of 10 patients (70%). Gram –negative microorganisms accounted for 40% of infections, while gram-positive and fungal organisms accounted for 20 % and 10% respectively. Klebsiella pneumonia (57%) was the most common isolate. 1 patient (10 %) was treated immediately within 24-hour, 7 (70%) were within a week and 2 (20%) were more than a week after the onset of eye symptoms. 14 eyes (93.3%) were managed medically with intravenous and intravitreal antibiotics, and 6 eyes (40%) also underwent vitrectomy. The visual outcome was poor in general as 7 (46.6%) eyes had no light perception at the latest follow-up visit and 1 (6.6%) eyes required evisceration. A favorable outcome was noted in culture-negative patients and those who received early treatment.

**Conclusions:** Gram-negative microorganisms were the main causative pathogens of endogenous endophthalmitis in Terengganu. The visual prognosis of endogenous endophthalmitis is generally poor as almost 50% of eyes were blind.

**Keyword:** Case series, endophthalmitis, Terengganu

## **POS117 RETAINED INTRAORBITAL FOREIGN BODY CASES IN SARAWAK GENERAL HOSPITAL: A TWELVE MONTHS ANALYSIS**

Chow Jun Yong<sup>1</sup>, Ting Siew Leng<sup>2</sup>, Intan Gudom<sup>1</sup>

<sup>1</sup>Sarawak General Hospital

<sup>2</sup>Universiti Malaysia Sarawak

**Objective:** To review the demographic data, management, and visual acuity outcome of our local patients with retained intraorbital foreign bodies (OrbFBs).

**Method:** Retrospective, non-comparative interventional case series from June 2016 to May 2017

**Result:** Total of 11 cases with the mean age of 38 and the ratio male to female was 10:1. There were 8 inorganic metallic (73%), and 3 organic wood (27%) foreign bodies (FB). 9 patients had workplace injuries due to no personal protective equipment (PPE). 6 cases (55%) of OrbFBs located at ocular posterior segment, 2 (18%) at anterior segment, 2 (18%) at retrobulbar and 1 (9%) at medial extraconal space. One wood OrbFB was missed in computerized tomography orbit scan. 10 patients had surgical removal except one patient's OrbFBs was not removed because of posteriorly located inorganic foreign body. 5 patients (46%) had resultant blind eyes, 2 patients (18%) had moderate visual impairment, 1 patient (9%) had early visual impairment and 3 patients (27%) had best corrected visual acuity of 6/9. 1 patient with retained metallic FB developed siderosis at cornea. 3 patients with retained organic wood OrbFBs were complicated with fungal keratitis, traumatic endophthalmitis and retroorbital abscess respectively.

**Conclusion:** Young male was at risk of retained OrbFBs. Awareness of using PPE at workplace was low. Organic FB potential caused sight blinding secondary to orbital infections. High index suspicious of retained OrbFBs if clinical was relevant as CT orbit might not able to detect tiny non-radio-opaque organic FB.

**Keyword:** Inorganic metallic, organic, retained intraorbital foreign body

**POS118 KUALA LUMPUR GENERAL HOSPITAL (GHKL) EXPERIENCE ON MANAGEMENT OF AGGRESSIVE POSTERIOR RETINOPATHY OF PREMATURITY (APROP).**

Nor Akmal B<sup>1</sup>(MS Ophthal), Mohammad Fahim M. J<sup>1</sup>, Priscilla M.S, Sunder R<sup>1</sup> (MS Ophthal)  
Jamalia R<sup>1</sup>(MS Ophthal).

**Objective:** APROP is a severe form of ROP that rapidly progresses to stage 5 if untreated. However, with early detection, accurate treatment and proper monitoring the complications can be reduced. Therefore, we would like to report the APROP outcome that was managed in KLGH.

**Methods:** Retrospective review of 17 patients with 33 eyes diagnosed as APROP from year 2008 until 2014.

**Results:** Mean gestational age was  $28.29 \pm 2.44$  weeks, mean birthweight was  $1120 \pm 290$  grams. Mean first ROP screening was at  $32 \pm 2.0$  weeks and mean first treatment given was at 34.1 weeks of gestational age. One eye was excluded as it was diagnosed as high risk pre-threshold ROP. Thirteen (13) eyes had been treated for ROP previously by the referring centre. The main clinical features were flat neovascularisation (n=14), retinal haemorrhage (n=9), vitreous hemorrhage or pre-retinal hemorrhage (n=8), and retinal detachment (n=5). The APROP features were mainly found in zone 1 (n=20, 60.6%). 24 eyes (72.7%) had received combination treatment; laser photocoagulation and intravitreal ranibizumab. 5 eyes (15.2%) had received intravitreal ranibizumab monotherapy, 4 eyes (12.1%) had received laser only. 12 eyes (36.4%) had required additional treatment for recurrence.

At final 28 eyes (82.4%) had a favourable anatomical outcome, where the retina was flat at last review. Thirteen eyes (39.4%) had a favourable visual outcome with LogMAR vision  $\geq 0.5$ . The majority (n=14, 42.8%) had moderate visual impairment whereas 5 eyes (15.2%) were blind.

**Conclusion:** Despite good structural outcome, the visual outcome for APROP in this study was poor.

## **POS119 PATTERN OF OCULAR TUBERCULOSIS AND TREATMENT OUTCOMES: A RETROSPECTIVE STUDY IN A TERTIARY REFERRAL HOSPITAL**

Nurfahzura Mohd Jamil<sup>1</sup>, Nur Hafeela Mohamad Rusli<sup>1</sup>, Shelina Oli Mohamed<sup>2</sup>

1 Department of Ophthalmology, Selayang Hospital

2 Department of Ophthalmology, Shah Alam Hospital

**Introduction:** This study analyzed the clinical characteristics and treatment outcomes of Ocular Tuberculosis (TB) patients in Selayang Hospital.

**Methodology:** A retrospective observational case series and medical records review of Ocular Tuberculosis patients from January 2008 until August 2016 in Selayang Hospital.

**Results:** There were 146 patients (219 eyes). The mean age group was 41.66 years. A history of prior contact with TB was seen in 22.6%. Only 12.3% had underlying TB infection. 86.3% presented with blurred vision, while others had eye redness or floaters. The subtype of tuberculous uveitis was mainly panuveitis in 44.7%, intermediate uveitis (22.8%), retinal vasculitis (Eales) (17.8%), anterior uveitis (8.67%), or neuroretinitis (5.9%). Funduscopy revealed choroiditis (37%), vasculitis (32.4%), retinal haemorrhages (23.3%), and choroidal granuloma (5%). 68% had normal Ocular Coherence Tomography (OCT) findings, while others had cystoid macula oedema (CMO) (17.8%), subretinal fluid (5%) or both (3.2%). Fundus Fluorescein Angiography (FFA) revealed vasculitis in 59.8%, capillary non-perfusion (39.3%), CMO (23.7%) and leakage from the optic disc (37.0%). A Mantoux reading of 10mm or more was seen in 92.4%. All patients received either 6 or 9 months of anti TB treatment, 47.9% having a good final visual outcome of 6/6 to 6/9. Oral corticosteroids were required in 61.6%. Complications included glaucoma (39.3%), CMO (20.5%), epiretinal membrane (23.7%), and vitreous hemorrhage (16%). Recurrence was reported in 21.9%.

**Conclusion:** Diagnosis of Ocular TB is challenging with a spectrum of manifestations. Understanding the clinical characteristics with early diagnosis and treatment may ensure good visual outcome while limiting complications.

**Keywords:** uveitis, tuberculosis, mantoux test, choroiditis



## **POS120 A 4.5-YEAR REVIEW OF ORBITAL CELLULITIS CASES IN SULTANAH BAHIYAH HOSPITAL.**

Nik Nurfarhana NMN, Adlina AR, Wan Zalina MZ

**Objective:** To analyze the clinical presentation, risk factors and the outcome of orbital cellulitis cases in Sultanah Bahiyah Hospital from January 2013 until March 2017.

**Method:** A retrospective review of medical records of patients diagnosed with orbital cellulitis between January 2013 until March 2017 in Sultanah Bahiyah Hospital.

**Results:** 13 patients were admitted and diagnosed to have orbital cellulitis within the 4.5 years review. The majority were Malay (69.2%) and the sexual predominance almost equal between male and female. The age range was from 4-year-old to 61 year old, with a mean of 38.5. Tissue specimens were found positive in 11 patients. 4 of the cases grew fungal infections and the rest were bacteria in origin. The risk factors were sinusitis infections, uncontrolled diabetes mellitus [DM] with HbA1c > 7.2%, immunocompromised status with underlying leukemia and beta thalassemia major and one isolated cases from frontal extradural empyema. 84.6% required surgical intervention. 46.15% [6 cases] could not be salvaged with final vision no light perception. They developed either compressive optic neuropathy or central retinal artery occlusions. 3 of the patients has fungal positive culture. 5 of them has underlying DM and presented at 1-2 weeks after symptoms.

**Conclusion:** Orbital cellulitis with positive fungal infection compounded with uncontrolled DM almost always difficult to treat and with very poor visual outcome. Late presentation contributed to challenges in managing the cases.

## **POS121 HYPHEMA SECONDARY TO BLUNT TRAUMA IN TERENGGANU: A RETROSPECTIVE STUDY**

Ooi Say Ting<sup>1</sup>, Nur Nadia Ahmad Tarmizi<sup>1</sup>, Ainul Basirah Ibramsah<sup>1</sup>, Nor Anita Che Omar<sup>1</sup>, Zuraidah Mustari<sup>1</sup>

1. Ophthalmology Department, Hospital Sultanah Nur Zahirah, Kuala Terengganu.

**Introduction:** Traumatic hyphema is an ocular condition which can lead to several complications. We aim to determine the patient's characteristics, causes of trauma, ocular findings, interventions, range of follow up during acute phase, complications and visual outcomes of blunt traumatic hyphema in tertiary center in Terengganu.

**Methods:** Retrospective study of 161 patients who were admitted to ophthalmology ward, Hospital Sultanah Nur Zahirah from 2012 till 2016 due to blunt traumatic hyphema. Medical records were retrieved and data were analyzed using SPSS program.

**Results:** Majority of the patients were male (90%). More than half of patients aged below 20 years (56.9%). Badminton sport was the most common cause of injury (15.6%). Most of patients were discharge within 7 days (80.7%). Most common cause of prolonged hospitalization was globe rupture that needed suturing and completion of antibiotic. Ninety-eight patients (79%) had total resolution of hyphema within 20 days. Six patients developed rebleeding, one case of cornea blood staining and one patient had 8-ball hyphema and needed surgical washout. Only 24.8% patients had high intraocular pressure of more than 25 mmHg during their hospitalization, which 52.4% of these patients needed more than 2 types of antiglaucoma. Patients' follow-up was poor with 64.6% of the patients lost follow-up. Most of patients gained best visual acuity of at least 6/18 during the last visit (80.8%).

**Conclusion:** Public awareness on prevention of ocular trauma, immediate intervention and emphasis on importance of follow-up care should be the main goals to avoid visual impairment.

**Keywords:** Traumatic hyphema; hyphema; blunt injury; eye injury

**POS122 ANTERIOR RETINAL CRYOABLATION (ARC) IN TREATMENT OF NEOVASCULAR GLAUCOMA, REVISITED.**

Thivakar S (MD), Carynn N (MD), Tanusha D (MBBS), Siti Nurbaiya B.N (MS Ophthal), Roslinah M (MMed Ophthal), Thayanithi S (MS Ophthal, Glaucoma Fellowship Sydney), Department of Ophthalmology, HKL.

**Objective:** To determine the role of anterior retinal cryoablation as a treatment of neovascular glaucoma.

**Method:** A retrospective study in 19 eyes with uncontrolled neovascular glaucoma treated with anterior retina cryoablation (ARC) in the Ophthalmology Department, Hospital Kuala Lumpur. Intraocular pressure (IOP) were measured at 1, 2 and 3 months post procedure.

**Result:** Following ARC, IOP reduction was observed in 79% (15 eyes) at 3 months. The average IOP reduction was 46.92%. Two eyes required subsequent cyclodiode procedure to control the IOP.

**Conclusion:** ARC is effective in reducing the IOP in neovascular glaucoma.

**Keywords:** Anterior Retinal Cryoablation, Intraocular pressure

## **POS123 DSAEK IN HOSPITAL KUALA LUMPUR**

YP Lai (MOphthal), Rohanah A (MS Ophthal), Rosilah M (MS Ophthal), CU Thiageswari (MS Ophthal)

**Objective:** To report the outcome of Descemet's stripping automated endothelial keratoplasty in Hospital Kuala Lumpur from September 2015 to June 2017.

**Method:** Cross sectional study

**Summary:** There were total of 19 patients with pseudophakic bullous keratopathy with various underlying ocular co-morbidity underwent DSAEK from September 2015 to June 2017. There were 10 females and 9 males with mean age of  $68.11 \pm 8.35$  years old. The mean of operation duration was  $11.11 \pm 5.52$  months from 2 to 21 months long with only 8 patients exceeded a year post-operatively. The pre-operative vision of all the patients were 6/60 and worse. Three patients had best corrected vision of 6/9 and better, 4 patients had 6/12 and 2 patients had 6/60 and worse at one year. The latter had failed graft due to glaucoma. The mean sphere was  $+1.25 \pm 1.08$ DS with mean cylindrical of  $-2.00 \pm 1.07$ DC at mean axis of  $79.30 \pm 67.17$ .

**Conclusion:** DSAEK is a new armamentarium to corneal surgeon that proves to be rewarding to both patient and surgeon.

**Keywords:** Descemet's stripping automated endothelial keratoplasty, pseudophakic bullous keratopathy, Fuch's endothelial dystrophy

**POS124 KUALA PILAH CLUSTER CATARACT STUDY: ANTERIOR CHAMBER DEPTH AND ITS ASSOCIATIONS WITH OCULAR AND GENERAL PARAMETERS IN ADULTS.**

Alsagoff AD, Puspha R, Premala S, Khairul HK

**Background:** To investigate the normative data of anterior chamber depth and its associations in adults in Kuala Pilah cluster area.

**Methods:** The subjects underwent an ophthalmological examination including measurement of the anterior chamber depth by sonography.

**Results:** Mean anterior chamber depth was  $3.17 \pm 0.49$  mm. In multivariate analysis, a shallow chamber depth was significantly associated with higher age ( $P < 0.001$ ), female gender ( $P < 0.001$ ), hyperopic refractive error ( $P < 0.001$ ), higher lens thickness ( $P < 0.001$ ) and shorter axial length ( $P < 0.001$ ).

**Conclusions:** In the Kuala Pilah cluster population, a shallow anterior chamber was associated with higher age, female gender, hyperopia, thick lens and shorter axial length. The data may be helpful to explain anatomic relationships of the anterior segment of the eye, to explicate risk factors of angle-closure glaucoma and to explain ethnic differences in the prevalence of angle-closure glaucoma.

**Keywords:** anterior chamber depth, ocular biometry, axial length, intraocular pressure, keratometry.