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ABSTRACTS OF POSTER PRESENTATIONS

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ANTERIOR SEGMENT

1. A bitter beetle battle

Main Author : Goh Yew Jen, MB BCh BAO(Ireland)
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Institution : University Malaya/Hospital Tengku Ampuan Afzan

Objective: To report a case of a lodged beetle's leg within the cornea, its effects and to show that careful inspection and prompt treatment is vital in its management

Method: Case report

Results: A 40 year old gentleman presented with left painful red eye after he was hit by an insect while riding his motorcycle. Left eye visual acuity was 6/60. Findings showed generalized corneal oedema, Descemet's striae and corneal opacity measuring 2.5x2.5mm at 8 o'clock, mid periphery. A 2mm part of beetle's leg was embedded in the stroma within the opacity. Seidel's negative, fibrin over the lens and intraocular pressure was 14 (right) and 45 (left).

Left eye foreign body removal, toileting and suturing was performed. He was started on hourly broad spectrum topical antibiotics,antifungal and antiglaucoma. Over 5 days, patient's condition worsened- Left eye vision of hand movement, 5x6.5mm corneal epithelial defect, stromal abscess, unresolving level hypopion of 1.5mm but well controlled intraocular pressure.

He was then referred and co-managed with corneal team and started on topical antifungals on top of broad spectrum antibiotics. Over 4 weeks, his symptoms gradually improved-Left eye vision of 3/60,white conjunctiva, corneal scar obstructing visual axis, no epithelial defect, fibrin, infiltrates, nor hypopyon and pending keratoplasty.

Conclusion: A seemingly 'harmless' and minute foreign body, in this case a lodged beetle's leg, resulted in extensive anterior segment damage and caused potentially blinding disability. Detailed inspection and prompt treatment initiation should be carried out to achieve the best possible visual outcome.

2. Ologen as an adjunct to trabeculectomy: Can it replace Mitomycin C?

Authors : Tang PL, Jemaima CH
Institution : Universiti Kebangsaan Malaysia Medical Centre

Introduction: Ologen® was developed to increase the success rate of the trabeculectomies. It is a porous biodegradable collagen matrix implant that modulates early scar formation and helps to maintain long-term intraocular (IOP) control.

Objective: To illustrate a case series of 2 patients with bilateral primary open angle glaucoma (POAG) requiring trabeculectomies (4 eyes) with either Mitomycin C (MMC) or Ologen® as an adjunct and looking into the outcome of the surgery in terms of Intraocular Pressure and bleb survival.

Method: Case series

Result: A 60-year-old Chinese lady with bilateral POAG on 3 anti-glaucoma medications underwent both eye trabeculectomy with Ologen implant at a different setting. There was no prior ocular surface disorder. Post-operative 3 months the IOP were well controlled without any topical anti-glaucomas. There was no bleb rescue procedure needed in this patient.

A 65-year-old Chinese gentleman with bilateral POAG on 4 anti-glaucoma medications underwent left eye trabeculectomy with MMC and right eye trabeculectomy with Ologen implant at a later date. There was ocular surface dryness prior to operation due to long standing topical eye drops. Although Both eyes needed bleb rescue procedure, the IOP at post-operative 3 months were comparable (partial success).

Conclusion: MMC has long be the gold standard as an adjunct to trabeculectomies to enhance the survival of blebs. However, in patients that are at low risk of failure, Ologen implant makes a good choice to prevent the unwanted side effects of MMC. This case series illustrates the importance of patient selection for the usage of Ologen and MMC.

3. Osteo-odonto keratoprosthesis: The Malaysian experience

Authors : Fatin HF, Aida ZMZ, Then KY
Institution : UKM Medical Centre

Objective: Case series of the osteo-odonto keratoprosthesis (OOKP) surgery in Malaysia.

Method: All cases of OOKP that were performed in UKMMC, Malaysia between 2008 and 2015 were reviewed. A total of four patients were identified. The indications for surgery in this case series were Grade IV chemical injury (3 cases) and Steven-Johnson syndrome (1 case), presenting with CF vision or worse in the better eye. The OOKP was performed in two stages.

Results: The mean follow up was 23.25 months (range 2-42 months). 3 patients have significant improvement in vision postoperatively. Best obtained postoperative visual acuity was 6/9. However, best final visual acuity obtained is 6/24 due to various postoperative complications. In Case 1, patient developed vitreous haemorrhage but vision improved from PL to 6/60. In Case 2, vision improved from PL to 6/9 but patient developed secondary glaucoma. In Case 3, vision improved from PL to 6/18 but patient developed endophthalmitis 2 years postoperatively and vision subsequently dropped to PL. In Case 4, CF vision became HM postoperatively. The patient developed retroprosthetic membrane and is now awaiting revision of OOKP.

Conclusion: OOKP is a viable option for visual rehabilitation in severe ocular surface disease. However, care needs to be taken in managing potential postoperative complications.

4. Case series of dislocated/subluxated posterior chamber intraocular lens (PCIOL) in patients with retinitis pigmentosa

Authors : Lam CS, Mae-Lynn Catherine Bastion
Institution : Universiti Kebangsaan Malaysia Medical Center

Objective: To report the presentation PCIOL dislocation/subluxation, management and outcome in retinitis pigmentosa.

Method: Case report

Results: 2 medical records of patients with retinitis pigmentosa who develop dislocated or subluxated PCIOL were evaluated. 2 patients had bilateral eye cataract operation done and had PCIOL implanted. 1 patient develop left eye subluxated PCIOL inferiorly after 2 years of the cataract operation and right eye dislocated PCIOL anteriorly 4 years after cataract operation; while the other patient develop right eye subluxated PCIOL inferiorly after 11 years of the cataract operation. First patient with right eye dislocated PCIOL underwent intraocular lens (IOL) explantation and was left aphakia as her visual prognosis was poor due to advanced retinitis pigmentosa. While the other patient with right eye subluxated PCIOL underwent (IOL) explantation and anterior chamber intraocular lens (ACIOL) implantation. ACIOL remain stable and visual acuity improved 3 months post-operation. Both the operations were uneventful. Post-operatively, there was no elevated intraocular pressure; no prolonged ocular inflammation, which required prolonged anti-inflammatory and no retinal detachment in both patients.

Conclusion: Both patient and surgeon should be aware of potential PCIOL subluxation or dislocation in retinitis pigmentosa. The presentation may be late as only happen after a few years of cataract operation.

5. Anterior uveitis in a dengue patient

Main Author : Farah Binti Abu Bakar (MB Bch BAO)
Co-Author : Hanizasurana Bt Hashim (MBBS, MS(Opth), Fellowship in Medical Retina and Uveitis)
Institution : Hospital Selayang

Objective: To report a case of anterior uveitis in a dengue patient in Malaysia

Method: Case report

Case report: We report a 50 year old lady with long standing uncontrolled diabetes melitus and hypertension who was admitted for dengue fever, in defervescence phase with warning signs of diarrhoea, thrombocytopenia, abdominal pain and complicated with transaminitis. After four days in medical ward, she developed left eye pain and redness with blurring of vision. Examination revealed she had left anterior uveitis secondary to dengue infection and bilateral eye mild non-proliferative diabetic retinopathy with hypertensive retinopathy. She was treated with topical steroids and responded favourably to treatment.

Conclusion: Ocular manifestation in dengue patients may also involve the anterior segment as well as the commoner posterior segment involvement such as dengue maculopathy. Therefore ealy referral may help in early detection and management to provide best possible visual outcome.

6. Two siblings with isolated microspherophakia

Authors : Khoo C L, Nor Higrayati A K
Institution : Hospital Sultanah Nur Zahirah, Kuala Terengganu

Objective: Microspherophakia is rare and may be isolated or associated with various medical disorders. We aim to report two siblings with isolated microspherophakia and lenticular myopia.

Method: Case report.

Results: A 24 year-old gentleman with high myopia since childhood was referred to us by a private ophthalmologist. He had an episode of bilateral acute angle closure glaucoma following pupillary constriction with intraocular pressures (IOP) of 50mmHg(OD) and 30 mmHg(OS). The IOP came down spontaneously after dilatation. His best-corrected visual acuity were 6/6(OD) and 6/9(OS). Anterior chambers were shallow and his IOPs were within normal range. Upon pharmacodilation, the crystalline lens appear spherical, small and bulging forward. The margins of the lens and zonules were clearly visualized. Phacodonesis and iridonesis were noted. Refractive assessment showed myopia of -20.0DS(OD) and -20.5DS(OS). A-scan revealed lens antero-posterior diameter of 4.89mm(OD) and 4.06mm(OS). Lens diameters were 8.0mm x 7.8mm in both eyes. Axial lengths (AXL) were 24.07mm(OD) and 24.17mm(OS). Anterior chamber depths (ACD) were 2.14mm(OS) and 2.15mm(OS).

His 17 year-old sister has a similar condition. Her ocular findings were almost similar to her brother's. Both siblings have no systemic conditions commonly associated with microspherophakia. There is a history of consanguinity in the family whereby both parents are cousins.

Conclusion: High myopia, dislocated lens and glaucoma may impair the quality of life of patients with microspherophakia. Zonular weakness and small lens diameter often make cataract surgeries challenging. Due to the risks each treatment method entails, decision to proceed should be considered carefully.

7. Changes in intraocular pressure after pupillary dilation in normal eyes

Authors : Lim CW (MMed), Mohd Aziz Husni (MMed)
Institution : Hospital Tengku Ampuan Afzan, Kuantan

Objective: To evaluate the changes in intraocular pressure (IOP) after pupillary dilation in normal eyes.

Methods: Eligible subjects were recruited from the Department of Ophthalmology, Hospital Tengku Ampuan Afzan Kuantan. Normal eyes with open angle confirmed by slip lamp examination and gonioscopy were included. Subjects with concurrent ocular pathology, pseudophakia, previous laser therapy and high myopia were excluded. The IOP was measured by using Goldmann Applanation Tonometer. Immersion ocular biometry was performed to determine the anterior chamber depth (ACD). Subsequently subjects' pupils were dilated pharmacologically according to the dilation protocol. IOP measurement was repeated 1 hour after pupillary dilation.

Results: A total of 51 eyes of 51 subjects were included in the study. The mean IOP before and after pupillary dilation were 14.92mmHg and 15.94mmHg respectively. The mean IOP significantly increased by 1.02mmHg after pupillary dilation. Independent t test showed that the mean IOP increment was greater in ACD of ≤2.50mm (+1.73mmHg) than ≥2.51mm (+0.83mmHg), although the difference was not significant statistically.

Conclusion: Pupillary dilation causes IOP elevation in normal eyes and the increment may be greater in subjects with shallow ACD.

8. A 2 year review of acute primary angle closure cases in Hospital Raja Perempuan Zainab II

Authors : Maya Sapira Hanapi, Norhalwani Husain
Institution : Hospital Raja Perempuan Zainab II, Kota Bharu

Objective: To identify cases of acute primary angle closure in Hospital Raja Perempuan Zainab II over 2 years period and to review the outcome

Methods: This is a retrospective study of 31 eyes of 26 patients who presented with acute primary angle closure from January 2014 till December 2015.

Results: There were 20 (77%) female and 6 (23%) male with the mean age of 64 ±7.6. Malay contributes 80.8% while Chinese 19.2%. Five patients were affected bilaterally. The most common type of angle closure was PACG (74.2%) while PAC (25.8%). Seventy-seven percent of patients presented within 1 week of the acute attack. The mean IOP at presentation was 50.1± SD 12.1 and 57.7% had visual acuity of 6/60 and worst. Laser peripheral iridotomy was performed in 96.8% of cases and 16.1% (5 eyes) underwent cataract extraction with IOL implant. Subsequently, 12.9% underwent trabeculectomy with Mitomycin C. Of these, 80.6% had good vision of 6/18 and better, after medical treatment and surgical intervention.

Conclusions: This study illustrates majority of the patients have already developed glaucoma at presentation. Prompt medical and laser treatment contribute to the good visual prognosis. Despite the patency of iridotomy, one third of cases needed further surgical intervention to control the IOP. Awareness of acute angle closure attack lead to early presentation hence prevention of blindness.

9. Outcome of Ahmed glaucoma valve implant in Hospital Melaka, Malaysia

Authors : Siti Zakiah MK, Mas Edi Putriku Intan AK, Raja Norliza RO, Nor Fadzillah AJ
Institution : Hospital Melaka

Aim: To study the success and outcome of Ahmed Glaucoma Valve Implant in Hospital Melaka.

Methods: Medical records of all patients who underwent Ahmed glaucoma valve implantation between January 1, 2009 and August 31, 2015 whom were followed up for at least 3 months postoperatively in Hospital Melaka were retrospectively reviewed.

Results: A total number of 26 eyes of 21 patients with the age range between 10 to 76 years underwent primary Ahmed glaucoma valve implantation (n = 22, 84.6%) and combine with cataract surgery (n = 4, 15.4%). Most eyes had failed primary trabeculectomy (n = 12, 46.2%), followed by neovascularization glaucoma (n = 6, 23.1%), uveitic glaucoma (n = 3, 11.5%) and steroid induced glaucoma (n = 2, 7.7%). The other disease spectrum includes angle recession glaucoma, scleritis with secondary open angle glaucoma and aphakic glaucoma, each contributes 1 patient (3.9%). The mean intraocular pressure (IOP) was reduced from 33.38 ± 11.06 mmHg before the implant surgery to 17.31 ± 7.31 mmHg at 3- month, 16.47 ± 6.78 mmHg at 6- month, 18.00 ± 7.48 mmHg at 12- month and 17.45 ± 4.97 mmHg at 12- month. In 42.3% eyes had fifty percent or more reduction of IOP after 3 months of the implant surgery. The success rate of this procedure was 96.1% and only 3.8% had complete failure.

Conclusions: The Ahmed glaucoma valve implant appears to be effective in controlling IOP in a case of failed primary trabeculectomy and most of the secondary glaucoma. The glaucoma implant surgery performed in Hospital Melaka has comparable success with those reported in non- Asian eyes.

10. Case report: Role of oral doxycycline in the management of early post trabeculectomy bleb leak

Authors : Nurull BS, Roslinah M, Suresh K, Jelinar MN
Institution : Kuala Lumpur Hospital

Purpose: To report the role of doxycycline in the management of early post trabeculectomy bleb leak.

Method: An interventional case report

Results: A 42-year-old man with primary open angle glaucoma in the left precious eye, developed medically uncontrolled raised intraocular pressure (IOP) 3 weeks after uneventful cataract surgery. He underwent a trabeculectomy with mitomycin C 0.3mg/ml in his left eye. One week postoperatively he developed ocular hypotony secondary to a leaking bleb. In view of his age and the only eye, the left eye bleb resuturing was done with an additional mattress suture. However, the limbal conjunctival wound breakdown and the bleb re leak again one week later. The second and the third resuturing were performed. Unfortunately the bleb was still leaking and new leaking point was detected. Hence, the patient was managed conservatively with oral doxycycline 100mg twice daily. There was a dramatic improvement in the leaking bleb within one week of doxycycline initiation. Two weeks later, the ocular hypotony resolved and he regained his preoperative visual acuity. The patient had a well-controlled IOP with diffuse healthy bleb at 4 weeks post operatively.

Conclusion: This is a safe and non-invasive method which helps in hastened the recovery after multiple attempts of resuturing of the leaking bleb.

11. Visual outcome and postoperative sequelae of angle- supported and iris-fixated anterior chamber intraocular lens

Main Author : Logandran VK (MD)
Co-Author : Ch'ng Tun Wang (MMed)
Institution : Hospital Raja Permaisuri Bainun, Ipoh

Objective: To study the visual outcome and post-operative sequelae of Angle-supported anterior chamber intraocular lens (AS-ACIOL) and Iris-fixated anterior chamber intraocular lens (IF-ACIOL).

Methods: A retrospective study of 76 cases of anterior chamber intraocular lens (ACIOL) implanted between January 2014 and November 2015 in Hospital Raja Permaisuri Bainun Ipoh, Malaysia. A total of 47 AS-ACIOL and 29 IF-ACIOL implanted were analyzed by review patients' record notes. Visual outcome and postoperative sequelae within 6 weeks post operative were analyzed.

Results: In our study, AS-ACIOLs are more implanted compare to IF-ACIOL. Both groups have the same visual outcome. The main cause of poor vision in both types of ACIOLs at 6 weeks post-

operative is high astigmatism due to multiple cornea sutures. Other reasons of poor vision include post-operative cystoids macula edema and cornea edema. The mean postoperative intraocular pressures (mIOP) are within normal limits with IF-ACIOL shows a higher mIOP compare to AS-ACIOL at 6 weeks. The complications observed in AS-ACIOL are prolonging endothelium striae, pupillary block, endophthalmitis, block PI and chronic pigments dispersion. Cornea wound leaking and choroidal detachment were observed in IF-ACIOL.

Conclusion: AS-ACIOL and IF-ACIOL are the common types of ACIOLs implanted in the eye with loss of posterior capsule support. Both provide the same visual outcome. High cornea astigmatism due to suture is most common cause of treatable poor vision at 6 weeks post-operative.

12. Efficacy of selective laser trabeculoplasty (SLT): A 6-weeks review

Main Author : Nurulhuda A
Co-Authors : Haireen K, Ong PY
Institution : Hospital Selayang

Objective: To evaluate the efficacy of SLT for open angle glaucoma in Malaysian patient attending Hospital Selayang.

Method: Retrospective analysis of intraocular pressure (IOP) profile at 1 and 6 weeks for all patients underwent 360 degree SLT at Hospital Selayang in 2015. Pre-SLT IOP taken as the baseline. Patients who defaulted or has follow-up at referral hospitals are excluded.

Summary of the result: There were 7 eyes (7 patients) with primary open angle glaucoma, normotensive glaucoma and pseudoexfoliative glaucoma that fulfilled the inclusion criteria. Among all, 57% are Chinese, 28.5% are Indian and the remaining is Malay with age between 47 to 77 years. 6 out of 7 cases involved left eye. Indications for SLT in these patients are non-compliance or non-optimized IOP with maximally tolerated medical or surgical treatment and treatment naïve.

Baseline IOP is ranging from 14 to 22mmHg. 50 to 100 laser shots given per eye with laser power setting between 0.4 to 1mJ. 50% of patients developed IOP spikes up to 36% from the baseline, thus requires additional temporary antiglaucoma. None of them had severe intraocular inflammation following the procedure. All except 1 patient had IOP lower than baseline at 1 week review. At 6 weeks post-procedure, IOP reduction was successfully proven in all patients with IOP decrement ranging from 14-43% and median of 4mmHg.

Conclusion: SLT should be considered as an initial or adjunct treatment in cases of open angle glaucoma as it is safe and the short term effectiveness in lowering IOP is proven.

13. For sanity or for vision

Main Author : Khay Wei Poh
Co-Authors : Nadine Anne Harry Isaacs, Rohana Bt Alias, Thiageswary C U
Institution : Hospital Kuala Lumpur

Objective: To report a case of corneal and lens deposition after prolonged treatment with chlorpromazine

Method: Case report

Results: A 61 year old lady presented with a history of gradual blurring of vision on both eyes for the past 3 years. She also complained of glaring of vision. Her vision was better with glasses. She denied any eye pain, redness, ocular procedure or history of trauma. She was diagnosed with schizophrenia since 30 years ago and has been receiving long term chlorpromazine. On examination, visual acuity was 6/18 OU. There were diffuse deposits in corneal endothelium and stroma layers and stellate cataract bilaterally. Anterior chamber was deep and quiet with normal intraocular pressure bilaterally. Fundus examination was normal. She was explained regarding the diagnosis. Her psychiatrist was informed regarding the diagnosis and she was advised for an alternative anti-psychotic as a substitution for chlorpromazine.

Conclusion: Corneal and lenticular opacities occur rarely after long term use of high doses of chlorpromazine. These changes are dose related and irreversible. Co management between ophthalmologist and psychiatrist is necessary to ensure vision preservation.

14. A study of central corneal thickness and intraocular pressure in full-term Malay newborns

Main Author : Kogilavaani Jayaraman MBBS(MAHE), MMed Ophthal (USM)
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Institution : Hospital Seri Manjung, Perak

Introduction: Central corneal thickness is known to affect the intraocular pressure measurement and must be considered in interpreting IOP. It is important to measure the CCT and IOP in newborns to avoid under diagnosis or over diagnosis of paediatric eye disease.

Objective: To determine the mean CCT and IOP and to determine the correlation between mean CCT and IOP in full-term Malay newborns.

Methodology: Full-term Malay newborns 4-6 weeks in Hospital USM and fulfilled the selection criteria were recruited by simple random sampling. Anterior segment examination was performed using a portable slit lamp. Posterior segment examination was performed after dilatation of pupil. CCT and IOP for all these newborns were checked. Mean of three readings of CCT and IOP was recorded.

Results: A total of 97 newborns (194 eyes) with 46 females and 51 males were included. The mean gestational age was 38.2 ± 1.0 weeks and the mean birth weight was 2.94 ± 0.49 kg. The mean age at examination was 43.0 ±1.1 weeks and the mean weight at examination was 3.70 ± 0.62 kg. The mean CCT and IOP was 559.78 ± 17.56 µm and 15.3 ± 2.5 mmHg respectively in full-term Malay newborns. There was a poor correlation ($r = 0.110$, $n= 194$, $p= 0.218$) between CCT and IOP observed in this group of patients.

Conclusion: The mean CCT was 559.78 ± 17.56 µm and the mean IOP was 15.3 ± 2.5 mmHg in full-term Malay newborns. There was poor correlation between CCT and IOP in full-term Malay newborns.

15. Subjective and objective assessment of the junior residents' initial learning barriers in phacoemulsification cataract surgery training

Authors : Wei Yan NG MBBS, Daniel Shu Wei TING PhD, Mohamad ROSMAN FRCS, Ian Yew San YEO FRCS
Institution : Singapore National Eye Centre

Aim: To survey the junior residents' self-perceived difficulties and evaluate the initial learning barriers in phacoemulsification cataract surgery training

Methods: This study was performed in the Singapore National Eye Centre. Prospective single blinded descriptive case series. A single-centre prospective descriptive case series involving 90 cataract surgeries performed by nine junior ophthalmology residents between July 2014 and June 2015. We recorded their demographics, frequency of surgical video review and discussion, and self-reported difficulties in various surgical step using a 5-point Likert scale. The surgical videos were collected and analysed for overall time taken for the entire surgery and each individual steps.

Results: The mean age of the residents were 29.3±1.7 years and 66.7% (n=6) were female. Six out of nine (66.7%) residents reviewed their own surgical videos. Average total time taken for each phacoemulsification cataract surgery was 31.0±8.4 min, with the longest time spent on phacoemulsification step (12.4±4.5 min) followed by irrigation and aspiration (IA)(4.7±2.2 min). Residents needed 8.3 ± 4.5 grasps for completing capsulorrhexis but also had 3.0 ± 3.2 lost grasps. Residents were most concerned about capsulorrhexis, phacoemulsification of last fragment and soft nucleus. Shorter total surgical timing correlated with faster nucleus phacoemulsification, IA and capsulorrhexis ($p < 0.001$).

Conclusion: Junior residents were most concerned about capsulorrhexis and phacoemulsification of the nucleus while spending the longest time on nuclear phacoemulsification and irrigation and aspiration. Greater directed step-by-step training might be needed improve surgical competency in junior residents.

ORBIT, NEURO-OPHTHALMOLOGY & OCULAR ADNEXA

16. Spontaneous resolution of bilateral optic perineuritis

Authors : CP Siuw, MBBS, CC Gan, MOphthal, SK Vasudevan, MOphthal
Institution : Hospital Sultanah Aminah, Johor Bahru

Purpose: To report a rare case of bilateral optic perineuritis in a young patient

Method: Case report

Result: A 15-year-old female presented with sudden bilateral blurring of vision for one week duration. She was otherwise healthy. Clinically right eye vision was perception to light, while the left eye vision was hand movement. There were right eye relative afferent papillary defect positive and bilateral patchy optic disc swelling. Her investigations were normal except raised erythrocyte sedimentation rate (ESR) initially. Magnetic resonance imaging (MRI) orbits and brain showed streakiness over the optic nerve sheaths. Cerebrospinal fluid had negative results. This patient showed clinical improvement in both vision and optic disc swelling spontaneously within one week. Her ESR had become normal at the same time. One month after onset,

without any intervention, bilateral vision improved to 20/20 and optic discs swelling were resolved. However, the colour vision impairment persisted.

Conclusion: Optic perineuritis is a rare orbital inflammatory disease. Most of the cases are idiopathic. It may be caused by Wegener granulomatosis, sarcoidosis, syphilis and inflammatory bowel disease. Bilateral optic perinueritis was reported related to giant cell arteritis. Corticosteroid was thought to be the mainstay treatment for it. However, spontaneous resolution has been reported in literature. Clinician should suspect bilateral optic perineuritis in patient with atypical presentation like in this case.

Keywords: optic perineuritis, bilateral, spontaneous resolution

17. Bilateral cavernous sinus thrombosis: A rare case

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Institution : Hospital Tuanku Jaafar, Seremban

Objective: To report a rare case of bilateral cavernous sinus thrombosis and left dural sigmoid sinus thrombosis with bilateral orbital cellulitis complicating sphenoid & ethmoidal sinusitis.

Method: Case report.

Case report

A 20-year-old male military trainee visited our hospital for proptosis, chemosis and ophthalmoplegia. Patient also had fever, lethargy, bilateral periorbital edema, left nasal, cheek and labial swelling. Contrast-enhanced computered tomography (CECT) showed prominent bilateral superior ophthalmic veins (left more than right), bilateral proptosis and bilateral frontal soft tissue swelling with no loculation. Magnetic resonance imaging (MRI) showed absent of flow related enhancement at the left sigmoid sinus, persistent filling defect within the cavernous sinus bilaterally, left sigmoid sinus, dural sinus and visualised intracranial left internal jugular vein. Ethmoidal and sphenoid sinuses showed mucosal thickening with air-fluid level. Left maxillary sinus showed minimal mucosal thickening. He was diagnosed with bilateral orbital cellulitis with bilateral cavernous sinus thrombosis and left dural sigmoid sinus thrombosis complicating sphenoid & ethmoidal sinusitis. Patient was started on intravenous ceftriaxone 2g twice daily, intravenous cloxacillin 1g four times daily, intravenous acyclovir 500mg thrice daily & intravenous hydrocortisone 50mg thrice daily. Clinical symptoms and signs improved after early appropriate medical treatment.

Conclusion: Bilateral cavernous sinus thrombosis rarely occurs, but it has high morbidity and rarely full recovery. High index of suspicion and imaging are required to make a correct diagnosis. MRI is more superior than CECT in aiding the physician to come to a correct diagnosis. Early and aggressive medical treatment contributes to the successful management of this life-threatening complication.

18. Case series: Left superior oblique myokymia

Main Author : Lim I-Liang, MD (USM)
Co-Authors : Nor Fadzillah Abdul Jalil, MMED Ophthalmology (USM)
Raja Norliza Raja Omar, MS Ophthalmology (UKM)
Angela Loo Voon Pei, FRCSI (IRE)
Institution : Pusat Perubatan Universiti Malaya

Objective: To report two rare cases of left superior oblique myokymia.

Method: Case Series

Results:

Case 1:

A 44-year-old Chinese gentleman complained of sudden intermittent binocular double vision for two days. The intermittent, recurrent episode of double vision was described as vertical and diagonal in nature. It occurs multiple times unpredictably.

The vision were 6/6 OU. The anterior and posterior segment assessments were unremarkable. On orthoptic assessment, the prism cover test revealed a 16$^{\Delta}$ right over left which was evidenced by Hess test. The rest of ocular and physical examination were unremarkable. The imaging of brain and orbit, and blood investigations were also insignificant. He was observed and the symptoms resolved after two weeks, with a normal Hess test subsequently.

Case 2:

30-year-old Malay gentleman presented with sudden intermittent diagonal binocular double vision for 3 days.

The best-corrected vision were 6/6 OU. The anterior and posterior segment assessments were unremarkable. On orthoptic assessment, the prism cover test for distance showed 12$^{\Delta}$ right esotropia, which was evidenced by Hess test; there was no movement for near. The rest of ocular and physical examination were unremarkable. The imaging of brain and orbit, and blood investigations were also insignificant. His symptoms resolved after five days of observation as evidenced by a normal Hess test.

Conclusion: In superior oblique myokymia, patients who notice symptoms but yet can function adequately, simple observation and reassurance for the patient may be all that is required. Other forms of treatment include pharmacological therapy and extraocular muscle surgery.

19. Bilateral colloidal degeneration of the lower eyelids

Main Author : Kenneth Rohan Lee (MBBS)
Co-Authors : Zurina Zainal, MS (Ophth), Nor Fadhilah M, M.MED (Ophth)
Visvaraja Subrayan, FRCOpth, FRCS

Objective: To report an unusual case of nolludar colloidal degeneration in a young lady in an abnormal site

Case report

A 39 year old housewife, with no prior premorbids, presents with bilateral lower eyelid swellings for a period for 1 month which are progressively increasing in size with mild discomfort and itchiness. Both the masses are located at the inferior orbital rims, just below the eyelid crease

with a purplish-pink hue. As it was cosmetically unappealing an excision biopsy of both the masses was performed under general anaesthesia. Intraoperatively, a few nodular postseptal solid masses with fairly well delineated borders were found. Light and electron microscopy reported a nodular colloid degeneration, which is part of the colloid milium spectrum, which was first described by Wagner in 1866. The adult and nodular forms are thought to be caused by excessive UV-light exposure, usually seen in populations with long exposure to sunlight. Among the differential diagnoses with the similar presentation includes lichen amyloidosis, lipoid proteinosis, syringoma, sebaceous hyperplasia and cutaneous sarcoidosis.

Conclusion: This case highlights the probability that colloidal degeneration can also be seen in the young population exposed to constant ultraviolet radiation, more so in the tropics.

20. Neuro-ophthalmology manifestations in syringomyelia patients

Authors : Qi Zhe Ngoo, Ahmad Razif Omar, Premala Devi, Wan Hazabbah Wan Hitam
Institution : Universiti Sains Malaysia

Objective: We report 2 cases of Syringomyelia presented with neuro-ophthalmology manifestation.

Method: Case report

Results: A 36-year-old Malay lady with Syringomyelia for 12 years presented with left eye sudden onset of blurring of vision for 1/52. Visual acuity of RE was 6/6 and LE was CF at 1 metres with positive RAPD. Light brightness, red saturation and colour vision of LE were affected. Confrontation VF showed left inferior field defect. EOM was full. Both anterior segments were normal. Fundus was normal in both eyes. A diagnosis Syringomyelia with left retrobulbar optic neuritis was made. Patient was given with intravenous and oral steroid and showed improvement.

A 44-year-old Malay lady presented with recurrent episodes of bilateral lower limb weakness for 8 months. It was associated with central scotoma of the right eye. Visual acuity of RE was 6/9 and LE was 6/6. RAPD was positive in the RE. Light brightness, red saturation and colour vision of LE were affected. Confrontation VF showed central scotoma. EOM was full. Both anterior segments were normal. RE fundus showed pale optic disc. LE fundus was normal. MRI brain and spine confirmed Syringomyelia at T3-T6. A diagnosis of Syringomyelia with RE optic atrophy was made. Patient was treated with intravenous and oral steroid and showed improvement.

Conclusion: Neuro-opthalmology manifestation is not uncommon in Syryngomyelia patients. They may present with optic nerve problem like optic neuritis and optic atrophy.

21. Congestion, congestion at the junction

Main Author : Lathalakshmi T
Co-Authors : Wan Hazabah, John Tarakan, Liza Sharmini AT
Institution : Hospital Universiti Sains Malaysia

Purpose: To report a rare case of cerebral venous thrombosis who presented with papilloedema

Method: Case Report

Results: A 37-years-old healthy young man presented with history of generalised blurring of vision in both eyes for 1 week. He also complained of headache, giddiness and double vision of left gaze. His visual acuity was 6/24 in right eye and 6/12 in left eye. Right eye optic nerve function was affected more compare to the left one especially in red saturation and light brightness. Extraocular muscle movement was full. Both anterior segments were normal. Fundoscopy showed a bilateral optic disc swelling with dilated vessel. His fasting blood sugar was 10.0 mmol/l. MRI revealed filling defect in the right inferior sagittal, transverse and sigmoid sinuses that suggest dural sinus thrombosis. He was diagnosed to have right cerebral venous thrombosis with newly diagnosed diabetes mellitus. He was treated with subcutaneous anticoagulant daily, intravenous antibiotics cephalosporin, cloxacillin and metronidazole. He developed minimal vitreous haemorrhage at 3 days post anticoagulant that resolved spontaneously after adjustment of treatment. He responded well to treatment and regained back premorbid vision. Both discs swelling resolved after 2 weeks of treatment.

Conclusion: Cerebral venous thrombosis with bilateral optic disc swelling can cause diagnosis dilemma. A high index of suspicion and accurate management is important to safe life and to preserve vision.

22. Blinding Ignorance – Large sellar tumours: A case series

Main Author : Wendy See Yen Nee
Co-Author : Neoh Yee Ling, Chua Lausanne
Institution : Hospital Umum Sarawak

Objective: To report two cases of large sellar tumours with suprasellar extension in two young adults presented with blind eye.

Method: Case series
Primary intracranial tumour has multitude presentations, including ophthalmic implications. Its diagnosis is generally uncomplicated with widespread use of high definition advanced imaging modalities. Nevertheless, late presentation alongside vague symptoms often delay its diagnosis, hence treatment. We report two cases of large sellar tumours in two young otherwise healthy gentlemen, presented with blindness and no signs of high intracranial pressure. Both of them had painless progressive blurring of vision for many years, which was ignored as refractive error. There was no other visual complains, headache or neurological symptoms. Upon presentation, both had one-eyed blind with positive Marcun Gunn pupil and pale optic disc. First gentleman was diagnosed as giant pituitary macroadenoma, confirmed on contrasted computed tomography (CT) and magnetic resonance imaging (MRI) of brain, who underwent transphenoidal tumour excision complicated by cerebrospinal fluid (CSF) leak. Another gentleman had large sellar mass with suprasellar extension seen on CT and MRI suggestive of meningioma, who underwent bifrontal craniotomy and tumour debulking complicated by intraoperative and postoperative intracranial bleeding.

Conclusion: Meningioma is the most common primary intracranial tumour, accounting at 34% while pituitary tumour 13%. Headache and epilepsy are the commonest presenting symptoms. Lack of specific clinical signs render diagnosis challenging, especially when there is no high index of suspicion or known history of a primary disease. We report our experience to emphasise the need for careful critical evaluation of neuroophthalmological examination and imaging for precise diagnosis in view of potential devastating life-threatening complications.

23. Papilloedema secondary to extensive cerebral venous thrombosis – A rare complication of internal jugular vein thrombophlebitis

Main Author : Chan Suet Mei MD (Rus)
Co-Author : Angela Loo Voon Pei AM (Mal), FRCSI (Ire), FHKAM (Ophthal), FCOphth. (HK), MRCOphth (UK), MBBS (Aust)
Institution : University Malaya Medical Centre

Objective: To report a case of bilateral papilloedema secondary to right internal jugular vein thrombophlebitis complicated with extensive cerebral venous thrombosis

Method: Case report

Results: A 24-year-old female with no premorbidities presented with right neck painful swelling for 2 weeks and subsequently developed diplopia. Ophthalmologic examination revealed visual acuity 6/6 OU. Right eye grade 1 relative afferent pupillary defect. Fundus showed bilateral papilloedema with right eye venous congestion. Systemic examination showed right lateral neck swelling measuring 3cmx2cm with mild right facial swelling. Routine blood investigations showed raised white cell count and erythrocyte sedimentation rate. CT scan showed right internal jugular vein thrombophlebitis with minimal extension to proximal superior vena cava. Patient's symptoms worsened despite intravenous antibiotic and anticoagulant therapy.MRV noted complete thrombosis of right transverse sinus and entire internal jugular vein down to right brachiocephalic vein and partial thrombosis of posterior half of sagittal sinus. Long term anticoagulant was hence proposed and subcutaneous arixtra was commenced. 6 months later, CT brain and throrax was performed, noted resolved transverse sinus clot and reduced filling defect on right sigmoid sinus and right IJV. Subcutaneous was withold and changed to long term tablet warfarin.

Conclusion: Despite the extensive workups, we have still not found an underlying cause for the right jugular vein thrombosis that had led to extensive cerebral venous thrombosis.This case had involved multidisciplinary management in view of life threatening condition. Any surgical intervention that clear the distal thrombus near SVC will be futile as all the collaterals and right IJV were extensively thrombosed, and distal thrombectomy will not release the obstruction. Surgical intervention may impose high risk of mortality and morbidity. Long term anticoagulant was hence proposed.

24. Surgical treatment for myopic strabismus fixus patients: Case reports

Main Author : Ting SL, FRCOphth
Co-Author : Chua CN, FRCOphth
Institution : UNIMAS

Objective: To report the clinical features and surgical treatment of two myopic strabismus fixus patients who underwent medial rectus recession, partial Jensen's procedure and temporary limbal traction suture.

Method: A 73 year old man and a 39 year old woman with high myopia, high axial length and extreme esotropia underwent medial rectus recession, partial Jensen's procedure and temporary limbal traction suture. The medial rectus muscle was recessed first. The lateral and superior recti were split from their insertion and their superior and temporal halves were tied

with non absorbable suture without sclera fixation. Temporary traction suture which anchored the lateral limbal to the lateral canthus was put.

Result: Six months postoperative showed great improvement of eye alignment in both patients.

Conclusion: Patients with myopia strabismus fixus may benefit from combination of medial rectus recession, partial Jensen's procedure and temporary limbal traction suture.

25. Don't forget to look for another bird when you see one

Main Author : Thilakavathy Tharmalingam, Medical Degree (University Sumatera Utara)
Co-Author : Ho Shu Fen
Institution : Hospital Raja Permaisuri Bainun, Ipoh

Objectives: To describe presentation, diagnostic challenge, management and ophthalmic outcome of three cases of cavernous sinus thrombosis complicating orbital cellulitis but with minimal neurological signs.

Methods: Retrospective case series.

Summary of results: Cavernous sinus thrombosis is a rare sight and life threatening disease usually affecting both eyes with the incidence of 7 in 1 000 000. Over the past two years we had three cases of cavernous sinus thrombosis with similar clinical findings of fever, unilateral painful loss of vision (counting finger and perception to light), periorbital oedema, ptosis, ophthalmoplegia, proptosis and chemosis of 5 to 7 days duration. They had either history of chalazion or facial cellulitis or sinusitis. Provisional diagnosis of orbital cellulitis was made. Computed tomography with contrast of brain and orbit showed filling defect within cavernous sinus, dilated superior ophthalmic vein and loss of concavity of cavernous sinus in addition to orbital cellulitis at the affected site. They were treated with intravenous antibiotics for 2 weeks duration and all recovered well systemically. Two cases were treated with subcutaneous low molecular weight heparin with the aim of reducing the thrombosis and allow better penetration of antibiotics. One patient successfully recovered vision from counting finger to 6/9 with other patient failed to improve due to preexisting optic atrophy.

Conclusions: We highlighted the potential coexistence of cavernous sinus thrombosis in the presence of orbital cellulitis. Routine contrast enhanced computed tomography is crucial in establishing early diagnosis of cavernous sinus thrombosis. Patient with cavernous sinus trombosis may benefit from anticoagulation to improve the vision and reduce mortality.

26. Double depressor palsy secondary to artery of percheron infarction

Main Author : Sangeetha Tharmathurai, MBBS(IMU)
Co-Author : Wan-Hazabbah Wan Hitam, MD (USM), M.Surg (Ophthal)(UKM), FADUSM
Institution : Universiti Sains Malaysia

Objective: To report a case of double depressor palsy and bilateral thalamic infarction secondary to Artery of Percheron infarction.

Method: Case report

Results: A 24-year-old healthy lady presented with sudden onset of diplopia on down gaze for 3 weeks. Her vision was good. There was no history of trauma, headache, body weakness, facial asymmetry or history of fever. On examination, visual acuity of RE was 6/7.5 and LE was 6/6. There was presence of head tilt to the left with right hypertropia and downgaze palsy. There was presence of horizontal and vertical nystagmus. Horizontal and upward movements were within normal range. Fatigability test was negative. Both anterior segments and fundi examination were normal. Neurological examination including cranial nerves was intact. Her connective tissue screening test, full blood count, coagulation profile, thyroid function test and infective screening were also normal. MRI of the brain revealed a hyperintense signal in both thalami, left greater than right, and posterior part of midbrain (tectum and tegmentum) on T2 and FLAIR images. Magnetic resonance angiography (MRA) showed a single common trunk arising from the left P1 segment with double branching vessels distally. The diagnosis of occlusion of the vascular variant known as Artery of Percheron was made. The patient was treated conservatively.

Conclusion: Occlusion of the Artery of Percheron is the only variant that results in bilateral paramedian thalamic infarcts. Acquired double depressor palsy is an extremely rare manifestation of bilateral thalamic infarct.

27. Unusual ocular manifestation of hypercalcemia

Main Author : Nadia Y
Co-Authors : Ilinatasha J, Nor Higrayati AK
Institution : Hospital Sultanah Nur Zahirah, Kuala Terengganu

Introduction: The most common ocular manifestations associated with chronic renal failure and hyperparathyroidism includes conjunctival, limbal and corneal calcifications. Cornea alterations include band keratopathy and limbal involvement similar to limbal girdle of Vogt. Conjunctival lesions resemble pingueculae. Lid lesions include calcified deposits adjacent to the Meibomian gland orifices are much less common.

Objective: To report a unique case of eyelid calcifications in a patient with hypercalcemia.

Method: Case report

Result: A 36 year-old Malay gentleman with end stage renal failure and hyperparathyroidism underwent parathyroidectomy in September 2014. A year after, he was diagnosed with hypercalcemia secondary to over dosage of calcium supplements. He was referred to ophthalmology department after complaining of bilateral eye redness and discomfort for 3 months. On examination, visual acuity on both eyes were 6/6. Slit lamp examinations revealed multiple, small, calcified deposits over inferior lid margin just posterior to orifices of Meibomian glands. Generalized conjunctival injection with early band keratopathy seen at nasal and temporal near limbus. Fundus examination was unremarkable. Patient was started on eye lubrications and topical steroid eyedrops.

Conclusion: This case highlights patient with hypercalcemia can have chronic eye irritation due to calcium deposits on lid margin and limbus. Adequate eye lubrications and topical steroid can help to alleviate symptoms.

28. An unusual presentation of sphenoid sinusitis in a child

Main Author : Wendy See Yen Nee
Co-Author : S. Kala
Institution : Hospital Umum Sarawak

Objective: To illustrate an unusual presentation of sphenoid sinusitis in a child

Method: Case report

Isolated sphenoid sinus disease is a rare entity by itself, prevailing less than 3% of all paranasal sinus lesions. Acute ptosis, associated with isolated oculomotor nerve palsy manifestation, due to sphenoid sinusitis occurs in less than 1%. This is even rarer in children. Hereby we report of a case of bilateral sphenoid sinusitis in a 12 years old boy with acute ptosis as the only sign at presentation. He presented with right upper lid ptosis for one day with no visual impairment, headache or other neurological deficit. Best corrected visual acuity was 6/9. Both pupils were equal and reactive to light with no relative afferent pupillary defect and no ophthalmoplegia demonstrable. Fatiguability test and Cogan's twitch were negative. Bilateral sphenoid sinusitis was diagnosed from a contrasted computed tomography (CT) of brain and orbit. He underwent emergency bilateral sphenoidotomy by the otorhinolaryngology team. Intraoperatively, there was pus from the left sphenoid sinus and bilateral sphenoid mucosa were inflamed. His ptosis completely resolved on the third day of intravenous Amoxycillin-Clavulonic acid and was discharged well.

Conclusion: Although ophthalmic involvement in isolated sphenoid sinus disease is a well-recognised clinical entity, it is unusual for acute ptosis to be the only presenting sign of sphenoid sinusitis, even uncommon in a child. With the paucity of reports in literature, a high level of suspicion is entailed for accurate and timely diagnosis as proper management is essential for successful resolution of symptom, as depicted in our case.

29. Outcome of strabismus surgery in Hospital USM

Authors : Evelyn-Tai LM, Norihan I, Mohtar I, Wan-Hazabbah WH, Shatriah Ismail
Institution : Universiti Sains Malaysia

Background: The aim of strabismus surgery is to improve alignment, in order to improve visual acuity, maximize binocular single vision or correct abnormal appearance. However, strabismus surgery is an art as much as a skill, and achieving optimal post-operative alignment is often challenging.

Objective: To document the outcome of strabismus surgery in Hospital Universiti Sains Malaysia (HUSM) from November 2011- July 2015.

Method: Medical records of strabismus surgeries done in HUSM from November 2011 to July 2015 were reviewed. Data collected included preoperative and post-operative visual acuity, refraction and degree of deviation. A post-operative residual deviation of 10 PD or less was considered satisfactory alignment.

Result: There were a total of 104 patients. The median age was 8 years old. The sample was evenly distributed between boys and girls. Congenital squints formed the majority (61.5%). The most common type of deviation was exotropia (54.8%), followed by esotropia (39.4%). Other causes included sixth nerve palsy and sensory deprivation strabismus. Overall, approximately

15% of patients were amblyopic. At 6 months post-op, 89% had satisfactory alignment. 2 patients required a repeat operation.

Conclusion: Strabismus surgery has a good post-operative outcome. However, amblyopia is a barrier to achieving a satisfactory outcome. As most patients in our study were children, prompt and early management of strabismus is especially important to prevent amblyopia and preserve binocular single vision.

30. Kimura disease of eyelid: Case report

Main Author : Ting SL (FRCOphth)
Co-Author : Chua CN (FRCOphth)
Institution : UNIMAS

Objective: Kimura's disease is a benign chronic inflammatory that involves subcutaneous tissue of head and neck region and associated with regional lymphadenopathy. We report a case of Kimura disease that involved the eye lid.

Method: A 33 years old man with kidney disease presented with painless gradual left eye lid swelling and also involved left pre auricular and parotid swelling. Surgical excision biopsy of left lacrimal gland was performed

Result: HPE reported as Kimura's disease with lymphoid follicles hyperplasia, intense esionophilia and forming eosinophilic abscess. Elevated serum lgE level and blood esionophilia noted.

Conclusion: Kimura's disease is a rare benign cause of eye lid swelling

31. Healthy middle-aged man with dural fistulas ends up with cerebral infarction!

Main Author : Noorlaila B
Co-Authors : Raja-Norliza RO, Zunaina E
Institution : Hospital Universiti Sains Malaysia

Objective: To report a case of healthy middle-aged man with dural fistula developed cerebral infarction as a complication of embolization.

Method: Case report

Result: A 56-year old man with no medical illness presented with right sixth nerve palsy with horizontal diplopia for 2 days duration. It was associated with eye redness, reduce vision, periocular discomfort and mild headache. A diagnosis of dural fistula was made. He underwent successful embolization but complicated with embolization material dislodged in internal carotid artery territory causing cerebral infarction with left hemiparesis.

Conclusion: Embolization for dural fistula is a safe procedure, however the potential for serious complications exists with this procedure.

32. Right frontal osteosarcoma masquerading as recurrent mucocele

Authors : HT Chan (MBBS), Vanessa N Mansurali (FRCS)
Institution : Hospital Pulau Pinang

Objective: To report a case of right frontal osteosarcoma with orbital compression which masqueraded as recurrent mucocele.

Method: A case report.

Results: A 38 years old Malay lady presented with progressive right periorbital fullness and proptosis for 2 months with right eye blurring of vision for 2 weeks. Her right eye was proptosed with limited right upward gaze. Anterior and posterior segment eye examinations were normal. CT brain/orbit showed large lobulated right frontal sinus lesion with right orbital compression and erosion of adjacent bones. She underwent excision of mucocele with histopathology consistent with mucocele. Her symptoms recurred within a month. She underwent revision of functional endoscopic sinus surgery with orbital exploration and histopathology was consistent with mucocele again. Six weeks later she complained of progressive right frontal region swelling with epistaxis. Examination revealed right eye proptosis, limited extraocular movement in all direction except downward gaze, and choroidal folds over posterior pole. She underwent mucocele excision for the third time and histopathology of eroded bone showed high grade osteosarcoma. She then received chemotherapy treatment.

Conclusion: Mucocele of paranasal sinuses are usually slow growing. They behave like space-occupying lesions that can cause bone erosion and displacement of surrounding structures with frontal sinus being most commonly involved. A high index of suspicion for malignant course is necessary if the lesion recurs promptly or progresses rapidly over a short time frame. Biopsy of eroded bone along with existing mucocele is vital to avoid missing out on bone malignancies.

33. Paradoxical visual loss during intracranial tuberculoma therapy

Main Author : Fatishah Amir
Co-Author : Shatriah Ismail
Institution : Universiti Sains Malaysia

Objective: To report a case with paradoxical visual loss during intracranial tuberculoma therapy

Method: Case report

Results: A 27-year-old Siamese female presented with sudden onset bilateral reduced vision for one week. The field loss started at the periphery and progressed gradually to cause entire field loss. She had persistent headache and vomiting for 5 months. No limbs weakness, prolonged cough or contact with infected tuberculosis patient. She is an immigrant from a neighbouring country and working as a cook in Kuala Lumpur. She also denied high risk behaviour.

Her OD was hand movement and OS was counting finger. Relative afferent pupillary defect was noted in the right eye. Funduscopy examination revealed swollen and elevated optic disc with surrounding splinter haemorrhages bilaterally. Right lung crepitation was noted. Other examinations were essentially normal.

Baseline blood investigations were unremarkable except for an increased ESR and raised C-reactive protein. Mantoux test was anergy and sputum did not yield acid fast bacilli. Patient

refused for lumbar puncture. The chest X-ray showed consolidative changes but no cavitation seen. CT-scan of orbit and brain revealed multiple ring enhancing intracranial lesion with obstructive hydrocephalus. She was diagnosed bilateral papilloedema secondary to intracranial tuberculoma. Anti-tuberculosis treatment was started. Unfortunately, vision deteriorated and became blind after one month of treatment. A repeat imaging was not performed due to financial issue.

Conclusion: Paradoxical visual loss during commencement anti tuberculosis warrant for repeat imaging as to exclude new expanding lesion involving optic chiasma or enlargement of pre-existing tuberculoma.

34. A rare presentation of orbital cellulitis secondary to meliodosis

Authors : Hashim S, ST Lee, SW Pan
Institution : Hospital Sibu

Objective: To report a rare presentation of meliodosis causing orbital cellulitis.

Method: Case report

Results: A 67 year-old lady with diabetes mellitus, hypertension and old pulmonary tuberculosis from Kapit referred to Hospital Sibu for high grade fever, right eye swelling and pain for 10 days with headache, poor oral intake and generalized lethargy, which is progressively worsening. She denied history of trauma, insect bite, sinusitis and tooth extraction. The globe was displaced inferiorly with full ptosis, restricted upgaze and relative afferent papillary defect. She was admitted to medical ward subsequently ICU for severe sepsis complicated with acute kidney injury, metabolic acidosis, hyponatraemia and atrial fibrillation. Urgent CT scan revealed likely pus collection at the right periorbital and superotemporal aspect of the right epibulbar area, involving right lacrimal gland. The patient was immediately posted to decompress the orbit by drainage of pus. Post operatively, ptosis gradually resolved. Pus culture and sensitivity was pseudomonas spp.

Patient was given Augmentin and Metronidazole for 2 weeks. However, she presented back 2 weeks later with the similar problem. Noted Blood culture and sensitivity taken previously was pseudomonas pseudomallei. Meliodosis treatment started and subsequently eradication therapy given for 5 months. She responded well to the treatment.

Conclusion: This case illustrates a rare presentation of meliodosis causing orbital abscess which was complicated with sepsis and recurrent episodes. A prompt diagnosis and accurate treatment is important to prevent serious complications.

35. Panophthalmitis - A potential fatal red eye condition

Main Author : Logandran VK, MD
Co-Authors : Ng Hong Kee (MMed), Ho Shu Fen (FRCOphth)
Institution : Hospital Raja Permaisuri Bainun, Ipoh

Objective: To report clinical characteristics, treatment and outcome of three patients with panophthalmitis

Methods: Retrospective case series

Results:
1) A 39-year-old lady with uncontrolled diabetes mellitus (DM) presented with an acute right painful red eye. The vision was PL with a corneal epithelial defect, sub-total hypopyon. Ultrasound showed vitreous loculation. Vitreal tap culture grew Klebsiella Pneumonia. Intravitreal and systemic antibiotics were given. Despite that, she continued to develop fever, diabetic ketoacidosis, proptosis and scleral abscess. Urgent medical treatment was followed by enucleation. She recovered well immediately post enucleation.

2) A 49-year-old lady with uncontrolled DM presented with a painful red left eye. The vision was PL with left corneal stromal infiltrate associated with thinning, hypopyon, proptosis, scleral abscess and raised intraocular pressure. While vitreal tap culture showed no growth, colon and sputum biopsy showed TB. She was initiated on antiTB treatment in addition to intravitreal and systemic antibiotics. Outpatient follow-up showed reducing stromal infiltrate.

3) An 81-year-old bed-ridden lady with recent stroke presented with a one-week history of eye redness and yellowish discharge. Clinical examination showed conjunctival congestion, chemosis, hazy cornea, total hypopyon and scleral abscess. Ultrasound showed loculation. Eye swab grew Pseudomonas aeruginosa. Antibiotics were given. Despite that, the patient developed sepsis and died one week after hospitalisation.

Conclusion: Panophthalmitis is rare, potentially blinding and fatal eye condition, especially among immunocompromised and frail patients. Early recognition and aggressive treatment are important. Enucleation may occasionally be required to save life if patient failed to respond to local and systemic treatment.

36. Bilateral Dacryoadenitis in Systemic Lupus Erythematosus

Authors : Tan Chai Lee (MD)*, Adil Hussein MMed (Ophthal)**
Wan Hazabbah Wan Hitam, MSurg (Ophtal)*
Raja Azmi Mohd Noor, MSurg (Ophthal)*
Institution : *Universiti Sains Malaysia
** Hospital Universiti Sains Malaysia

Study Objective: To report a rare case of bilateral acute dacryoadenitis in a patient with systemic lupus erythematosus

Method: Case report

Results: A 14-year-old Malay lady with underlying anti-Ro positive systemic lupus erythematosus (SLE) on corticosteroid therapy presented with lid swelling, pain and mild discharge in both eyes. The SLE involved mucocutaneous, haematological, musculoskeletal and renal system. She also has Hepatitis C. Examination revealed bilateral lid oedema with mild mechanical ptosis, enlarged lacrimal gland with temporal conjunctival injection. Visual acuity was 6/9 in both eyes and other ocular examinations were normal. Systemic examination revealed mild pallor with oral candidiasis and crepitation over lower zone of left lung. White cell count was normal, haemoglobin was low and blood culture was negative. Patient was diagnoses to have bilateral dacryoadenitis. She was treated with intravenous cefuroxime and responded to treatment. Patient was also co-managed with Physician and Rheumatologist for community acquired pneumonia, oral candidiasis and anaemia.

Conclusion: Acute bilateral dacryoadenitis is an uncommon presentation in SLE patient. Patient is predisposed to develop infective dacryoadenitis due to immunocompromised state. Early treatment with broad spectrum antimicrobial therapy prevented further complications.

37. Advanced extra-nodal natural killer/T-cell lymphoma with bilateral optic neuropathy: A case report

Author : Chua Lausanne, MBBS
Co-Authors : Neoh Yee Ling, M. Med(Ophthalmology)
Widad b Mohd Yusof, CCFT(Vitreoretina)
Institution : Sarawak General Hospital

Objective: To report a case of successfully treated advanced extra-nodal Natural Killer/T-cell lymphoma (NKTL) with bilateral compressive optic neuropathy.

Method: Case report.

Results: A 51-years-old Chinese gentleman presented with right proptosis, blurred vision and retro-orbital pain for 1 month. He had epistaxis, nose block and constitutional symptoms for 2 months. BCVA was counting finger in the right and 6/18 in the left with right relative afferent pupillary defect (RAPD). Marked right periorbital, mid-facial swelling and conjunctival chemosis were noted, with 11mm of relative right proptosis. Ocular motility in the right eye was limited markedly in all field of gaze. Funduscopic examination showed right choroidal folds with normal disc. Computer Tomography of head and nasal biopsy diagnosed nasal NKTL with involvement of both orbits, paranasal sinuses and brain. SMILE (Dexamethasone, Methotrexate, Ifosfamide, L-Asparaginase and Etoposide) chemotherapy and radiotherapy were administered. Patient's optic nerve function improved drastically with BCVA of 6/6 in both eye and resolved RAPD. Ocular motility, periorbital oedema, proptosis and choroidal folds resolved completely over short period. The patient remained in remission till now.

Conclusions: Compressive optic neuropathy secondary to head and neck tumour is not uncommon and the outcome with treatment is often variable. This case has achieved complete visual recovery with remission of the primary malignancy despite advanced stage of disease on presentation. We believed this is the first case report that illustrated a successful treatment of advanced NKTL with orbital involvement using SMILE chemotherapy regime.

38. Intracranial peripheral dural primitive neuroectodermal tumour with optic nerve meninges involvement

Authors : Ahmad Razif Omar[1,2], Ameilia Ahmad[2], Khairy Shamel Sonny Teo [1,2]
Institution : [1]Universiti Sains Malaysia, [2]Hospital Universiti Sains Malaysia

Objective: To report an extremely uncommon case of intracranial peripheral dural primitive neuroectodermal tumour (P-PNET) with optic nerve meninges involvement

Method: Case report

Results: A previously healthy 2-year-old boy admitted for prolonged fever and bilateral eye preseptal swelling and redness. After 2 weeks in ward, patient had developed severe proptosis and lagopthalmos complicated with exposure keratopathy in bilateral eye. MRI brain and orbit done and reported as bifrontal and right parietal region of subdural empyema with bilateral

retroorbital intraconal extension as well as worsening of periorbital swelling. Bilateral craniotomy, washout and debridement done by neurosurgical team and intraoperatively noted extradural collection with extensive granulation tissue with sclerotic and erosion of overlying bone. There was also area of ceasation and pocket of pus collection in epidural region. However the brain parenchymal was normal. HPE result had shown that patient has malignant PNET WHO grade IV. Patient was then referred to paediatric oncologist and chemotherapy was commenced by MSKCC protocol and patient had showed great improvement.

Conclusion: Intracranial peripheral dural primitive neuroectodermal tumour (P-PNET) is an extremely rare cause. In addition to that, an optic nerve meninges involvement in P- PNET has never been reported before.

39. Chemotherapy related optic neuritis

Main Author : Nur Aqilah binti Salleh
Co-Authors : Jemaima binti Che Hamzah, Safinaz binti Mohd Khialdin, Fuad bin Ismail
Institution : Universiti Kebangsaan Malaysia

Objective: To report a case of bilateral optic neuritis in a young girl following systemic chemotherapy for ovarian carcinoma.

Method: Case report

Results: A 12-year-old Iranian girl with underlying embryonal ovarian carcinoma presented with bilateral progressive blurring of vision four weeks after commencing chemotherapy. It was associated with eye pain during eye movement and eye redness. Ocular examination revealed reduced visual acuity of 6/24 and N12 bilaterally with no relative afferent pupillary defect (RAPD). Both optic discs were swollen. There was generalized constriction of both her visual fields. Radiological imaging of the orbits revealed swelling of both optic nerves with surrounding perineural fluid but no signs of malignant infiltration. Her vision improved after starting intravenous methylprednisolone. This was subsequently switched to oral prednisolone and slowly tapered over a period of 2 months.

Conclusion: Even though, the occurrence of optic neuritis after chemotherapy is rare, this diagnosis should be considered if vision deteriorates.

40. CN VI palsy secondary to pansinusitis

Main Author : Suriya A/P EH Qurut – MD (CSMU)
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Joseph Vijaya Alagaratnam – MBBS, MS (Ophthal) (UKM)
Sunder Ramasamy – MBBS (MAHE), MS (Ophthal) (UKM), FRCS (G), FICO, AM

Objective: To report a case of VIth cranial nerve palsy in a child secondary to pansinusitis

Method: Case report of a 6 year old girl

Results: Cranial nerve VI palsy is a disorder of abducens nerve function which innervates lateral rectus muscle, subsequently causing deficit of ocular abduction. Causes may be vasculopathic,

post-trauma, following raised intracranial pressure or post-inflammatory. We report an unusual case of a 6 year old girl who presented to us with sudden onset of diplopia and mild headache. Examination revealed an isolated left VIth cranial nerve palsy. Magnetic Resonance Imaging (MRI) showed features of pansinusitis with no other brain lesion. Rigid naso endoscopy was also performed, showed inflamed nasal mucosa and purulent discharge arising from osteomeatal complex. Treatment included intravenous and oral antibiotic, steroid and nasal decongestant spray. Patient subsequently showed complete recovery.

Conclusion: Pansinusitis, though rare, can be the underlying cause of children presenting with sudden onset VIth cranial nerve palsy.

41. Huge squamous cell carcinoma of the conjunctiva requiring exenteration

Main Author : Azlan Musa (MBBChBAO)
Co-Authors : Tengku Ain Fathlun Tengku Kamalden (D.Phil)
Ong Chin Tuan (FRCOphth), Tajunisah Iqbal (MOphth, FRCS)
Institution : University of Malaya

Objective: We aim to report a rare case of a huge and rapidly progressing squamous cell carcinoma of the conjunctiva

Method: Interventional case report

Result: 55 years old man initially presented to another hospital in 2013 with a hyperplastic conjunctival growth covering the whole cornea in the right eye. There were atypical cells and protruding crusted lesion nasally. At this time, MRI did not show any intraocular spread or bony erosion. He was planned for tumour excision and wide local excision with or without Lamellar Keratoplasty. He however defaulted treatment and follow-up.

2 years later, he presented to our centre with a large fungating mass OD that sluggishly grew for one year and grew more rapidly the following year. It was painful and had superficial bleeding points. The mass measured at an astonishing at 8cm(V) x 10cm(H) x 7cm(D). Scans done revealed that the mass has extending anteriorly and displacing the right globe. The right optic nerve was compressed and there were evidence of extraocular muscle involvement. There were also cervical lymphadenopathy. Tumour debulking and exenteration was done. Histology confirmed Squamous Cell Carcinoma of the conjunctiva with metastases to regional cervical lymph node.

Conclusion: This case is a rare demonstration of an invasive squamous cell carcinoma of the conjunctiva. It has rarely been reported to grow at this size and even rarely requiring exenteration.

42. Trans arterial liquid embolization of Barlow type D carotid-cavernous fistula

Authors : Syafiq NA, Azmi K, Kadir AJ, Fadhilah M
Institution : University Malaya Medical Centre

Carotid cavernous fistula (CCF) is an abnormal arterio-venous communication within the cavernous sinus. Barlow et al (1985) proposed a four-type classification; Type A (direct) while B, C and D are classified indirect. Unlike direct CCF, indirect type will have more subtle signs. This case illustrates a rare case of spontaneous complex indirect CCF (Barlow Type D) in a 64 year old

gentleman who presented with progressive chemosis and proptosis of the right eye. He developed progressive blurring of vision and subsequently secondary glaucoma. The first attempt to obliterate the fistula was failed and he developed central retina artery occlusion (CRAO), causing him to lose his vision. Second attempt of embolization using liquid embolic material was successful and resolution of the patient's signs and symptoms was observed after that.

43. Bilateral idiopathic optic perineuritis with different clinical presentation - A case series

Authors : Ling JL, Evelyn-Tai LM, Jessica MPT, Raja Azmi MN, et al.
Institution : Universiti Sains Malaysia

Objective: To report a case series of idiopathic bilateral optic perineuritis in young patients.

Methods: We reviewed three patients with bilateral idiopathic optic perineuritis with different clinical presentation, diagnosed on MRI features.

Results: Three young patients aged between 20 to 32 years presented with bilateral subacute loss of vision. Visual acuity ranged from finger counting to 6/18. One had a normal fundus examination, while the remaining two had bilateral swollen discs. Infective screen was negative in all three. MRI revealed optic nerve sheath enhancement in all of them with tram track and doughnut sign. Diagnosis of bilateral idiopathic optic perineuritis (OPN) was made in all 3 patients.

They were given high dose intravenous corticosteroids, followed by oral steroids that were tapered slowly over 3 months. The visual outcome after completion of treatment was excellent, as the optic nerve function in all three patients returned to normal.

Conclusion: Bilateral OPN cases are rare. They may present with variable clinical presentation, in which the diagnosis is confirmed by MRI features of typical enhancement of optic nerve sheath. However, patients need to be investigated to exclude any infective cause. OPN patients may benefit from a longer course of corticosteroids with slow tapering dose.

44. Orbital apex epidermoid cyst - A rare cause of compressive optic neuropathy

Authors : Koh YN, Cheong MY, Ho SF
Institution : Hospital Raja Permaisuri Bainun, Ipoh

Objective: To report a case of compressive optic neuropathy secondary to orbital apex epidermoid cyst

Method: Interventional case report

Summary: A 50-year-old gentleman presented with left eye acute painless vision loss for 2 weeks and left sided headache. He had history of Functional Endoscopic Sinus Surgery (FESS) done for nasal polyps 3 years ago. Ocular assessment revealed visual acuity of hand movement in left eye associated with relative afferent pupillary defect and 6/9 in right eye. Left optic nerve function was impaired with central scotoma. Extraocular movement and fundoscopy examination were normal bilaterally with pink disc. MRI brain and orbit showed left orbital epidermoid cyst or mucocoele is compressing on left optic nerve. This case was co-managed

with ENT team, started on IV Dexamethasone 8mg tds. Left eye vision was improved markedly from hand movement to 6/36 ph 6/18 on the immediate next day. Susequently, patient underwent decompression of lamina papyracea and optic nerve with marsupialization of left epidermoid cyst by ENT and neurosurgical team. Visual acuity subsequently improved to 6/7.5 with normal optic nerve function postoperatively.

Conclusion: Orbital apex epidermoid cyst is a rare cause of compressive optic neuropathy. Although rare, proper diagnosis and prompt management can be sight saving. The use of dexamethasone followed by surgical decompression should be considered in such cases.

45. A case of secondary extramedullary plasmacytoma of the orbit

Authors : Aimy Mastura ZY, Andrea BK, Othmaliza O, Norshamsiah MD, et al.
Institution : Pusat Perubatan Universiti Kebangsaan Malaysia

Aim: To report a rare case of secondary extramedullary plasmacytoma involving the orbit

Method: A case report for poster presentation

Results: A 56-year-old lady with an underlying Multiple Myeloma diagnosed in 2013 who received suboptimal treatment due to financial constraint, presented with a 3-week history of left eye swelling and proptosis, deteriorating vision, diplopia, reduced extraocular muscles movement and high intraocular pressure. The swelling progressed rapidly. A series of CT scan and MRI revealed an increasing mass growing intraorbital superior to the globe extending into the left frontal sinus and posteriorly pushing the optic nerve downwards and causing globe distortion. There was no evidence of infiltration into the globe or optic nerve. Histopathology report of the tissue biopsy concluded the diagnosis of plasmacytoma. A diagnosis of secondary extramedullary plasmacytoma involving the left orbit complicated by compressive optic neuropathy and secondary glaucoma was made. She was treated with intravenous Methylprednisolone followed by a course of oral Prednisolone and topical anti-glaucoma agents. Currently she has been started on 20 fractions of radiotherapy and will be followed by chemotherapy before making the decision for tumour debulking later.

Conclusion: Extramedullary plasmacytoma of the orbit is an extremely rare tumour. Secondary plasmacytoma can be a manifestation of multiple myeloma and is usually more aggressive. This patient is diagnosed with secondary extramedullary plasmacytoma as she has an underlying disease of multiple myeloma.

46. Case series of posterior reversible encephalopathy syndrome (PRES) in pregnancy: A rapid loss and recovery of vision

Authors : Kosyilya Arumugam MBBS (Manipal)
Rohana Taharin MS OPHTHAL(MALAYA)
Chui Yin Chua MMed OPHTHAL (USM)
Institution : Hospital Bukit Mertajam

Objective: To describe clinical, neuroradiological and evolutionary findings in obstetric patients with PRES.

Method: Retrospective case series

Result: We report two obstetric patients with preeclampsia and eclampsia which is complicated by PRES. Both women are multiparous (Gravida 2 and 3 respectively) and in their third trimester. They presented with sudden headache and bilateral blurring of vision. In addition, one had epileptic seizure. Bilateral visual acuity was counting finger in one patient and the other was only able to perceive light. Blood pressures were elevated at 185/115mmHg and 192/134 mmHg respectively and both had 4+ proteinuria. A clinical diagnosis of cortical blindness secondary to PRES was made. Both patients underwent emergency lower section caesarean section. In both patients, Computed Tomography imaging of the brain revealed hypodensity in the focal white matters at bilateral occipito-parietal and occipito–temporal regions. After delivery, their vision returned to 6/6 with no other functional or structural disability.

Conclusion: Posterior reversible encephalopathy syndrome (PRES), as the name implies, its clinical signs and symptoms are usually reversible with prompt treatment. In these two cases, the causative factor was toxemia in pregnancy and both women recovered rapidly following emergency delivery.

47. Extensive cavernous sinus thrombosis - Unusual cause and presentation

Authors : Nor 'Aqidah K, Siti Hajar MA, Sharifah Azean Azira SN, Mimi Marina MI
Institution : Hospital Teluk Intan

Objective: To report a rare cause and unusual presentation of extensive cavernous sinus thrombosis.

Method: Case report

Results: A 29 years old Malay lady, presented with right eye blurring of vision for four days duration associated with headache, vomiting and lethargic. It was preceded with fever and history of ear infection. She gave history of taking oral contraceptive pills for her family planning. She denied any history of trauma, no history of focal neurological deficit, no loss of appetite and loss of weight.

On examination, the right eye vision was 4/60 and left eye vision was 6/6. She had bilateral limitation in abduction, sluggish pupillary responds bilaterally and mild proptosis over the left eye. Fundus showed bilateral optic disc swelling. However her bilateral eyes were white and no neurological deficit seen. CT brain was performed and the result showed extensive cavernous sinus thrombosis with no evidence of space occupying lesion. She was started on anticoagulant, under physician care.

Conclusion: Cavernous sinus thrombosis is a rare condition with high rates of morbidity and mortality. A strong clinical suspicion of the complication, early radiological detection, aggressive treatment are required to prevent permanent neurological disability.

48. Optic nerve infarction with sphenoid bone infection: A diagnostic challenge

Main Author : Chong Soh Yee (MD)
Co-Authors : Chang Hui Xin (MD), Ng Hong Kee (MMed (OPH.))
Dato' Dr Jasvinder Singh (M.B.BS, MS(OPH.))
Institution : Hospital Raja Permaisuri Bainun, Ipoh

Objectives: To report a case of optic nerve infarction with underlying sphenoid bone infection which initially presented as atypical optic neuritis

Method: A case report

Results: A 35-year-old lady with no pre-morbid, presented with sudden left eye painless blurring of vision for 2 days. Left visual acuity was 6/9 and 6/6 on right eye. Other optic nerve function tests and examination were unremarkable. Her left vision deteriorated to hand movement the next day with positive relative afferent pupillary defect and reduced brightness on left side. Fundus examination showed hyperemic disc superiorly. Right eye examination was unremarkable. She was started on systemic corticosteroids with impression of left eye optic neuritis after infectious screening was negative. Blood investigations and computed tomography scan of brain was insignificant. Her left visual acuity further deteriorated to non-perception to light (NPL) 4 days later. Her diagnosis of optic neuritis was revised to possibility of Leber hereditary optic neuropathy or atypical optic neuritis. Lumbar puncture, visual evoked potential and magnetic resonant imaging (MRI) of brain and spine revealed no abnormality. Further consultation with neuro-ophthalmology and neurology teams revealed the possibility of posterior ischemic optic neuropathy. Another MRI scan was performed and suggestive of sphenoid bone congenital defect with sphenoidal infection broken through to optic nerve and lead to optic nerve infarction. She was treated with systemic antibiotic for a week. Subsequent review showed left visual acuity was NPL.

Conclusions: Atypical optic neuritis should be investigated exclusively to look for secondary pathology which includes sphenoid bone abnormality.

49. Pfieffer Syndrome

Main Author : Syaridatul Hikmah Kamarudin
Co-Authors : Choo May May, Azida Juana Abd Kadir
Institution : Universiti Malaya

A 12 month – old boy was diagnosed with Pfeiffer Syndrome which is a rare genetic disorder characterised by craniosynostosis, turribrachycephaly and maxillary hypoplasia resulting in proptosis, hypertelorism and a beaked nose. Systemic features include brachydactyly and syndactyly. The initial ocular problem was exposure keratopathy which developed 2 days after birth. This was treated with extensive lubricants and lid taping, which resulted in amblyopia. The patient underwent mid-face advancement procedure, complicated with positive afferent pupillary defect in the right eye. A fine balance needs to be made between prevention of corneal blindness versus the development of amblyopia. In addition, the potential adverse outcome of surgery on the vision have to be discussed and anticipated in a multidisciplinary environment.

50. Unilateral adult astrocytoma of optic nerve

Main Author : Tan CK
Co-Author : Wan Hazabbah Wan Hitam
Institution : Hospital Universiti Sains Malaysia

Purpose: To report a case of adult onset optic nerve astrocytoma

Method: Case report

Results: An 18 years old adult male with background history of right eye squint and amblyopia since young, presented with 2 months history of sudden onset right eye painless, progressive proptosis. There is no history of head trauma, no symptoms of raised intracranial pressure, no symptoms of thyroid malfunction and no history of loss of weight or appetite. There is no skin pigmentation and nodules under the skin. On examination, right eye vision is poor with visual acuity 6/120 and there is presence of non-axial proptosis of right eye with inferior dystopia. Conjunctiva is white and do not have cock screw vessels. Cornea is clear. Right eye relative afferent pupillary defect is present with limited extra ocular movement in all directions. No signs of thyroid ophthalmopathy. Fundus revealed hyperaemic, swollen optic disc with tortuous and dilated retinal vessels near optic disc. No choroidal folds. No bruit heard over the right eye. The left eye is unremarkable. Systemic examination revealed no signs of neurofibromatosis.

Computer tomography revealed a right sided, round, retro-orbital, intra-conal solid mass measuring about 2.5x2.4cm. Computer tomography guided biopsy showed glial tissues harboring sheets of hypercellular tumor tissue with mild to moderate pleomorphic nuclei and Rosenthal fibers are seen in the background. Diagnosis of astrocytoma of optic nerve is made.

Conclusion: Although the mean age of presentation for optic nerve glioma is within the first decades of life, ophthalmologist should not overlook the possibility of adult onset optic nerve glioma.

51. Optic neuritis occuring after intensive phase of anti-tuberculosis treatment

Authors : Nazihatul Fikriah AH[1,2], Wan-Hazabbah WH[1,2.]
Institution : [1]Universiti Sains Malaysia , [2]Hospital Universiti Sains Malaysia

Objective: To report a case of Optic Neuritis secondary to tuberculosis which developed in a pulmonary tuberculosis patient who was already on treatment.

Method: A case report.

Results: A 63-year-old lady who was diagnosed as pulmonary tuberculosis (sputum AFB positive) was 4 months into treatment when she presented with painless blurring of vision on both eye of 4 days duration. The visual acuity reduced more markedly on her left eye. She also had scotoma involving upper part of her left visual field. On admission, patient had positive relative afferent pupillary defect over her left eye and fundus examination showed bilateral optic nerve swelling which was worse on the left. Both anterior segments were normal. An urgent CT scan showed no evidence of space occupying lesion and MRI examination was normal. She was started on intravenous methylprednesolon 250mg QID for 5 days and anti-tuberculosis (TB) treatment was continued. She was discharge with oral prednesolone of 1 mg perkg daily on tappering dose over 8 weeks. Her optic nerve functions improved markedly since the third day

of intravenous methylprednesolon and bilateral optic disc swelling reduced. Her anti TB treatment will be continue for a year.

Conclusion: Optic neuritis occuring in a patient who was already half way into treatment of anti-uberculosis is not common. It is important to differentiate between anti-tuberculosis drug induces optic neuritis and optic neuritis as a manifestation of extra-pulmonary tuberculosis as the treatment is different. Prompt treatment should be given to minimise damage and restore optic nerve function.

52. Solitary fibrous tumour - Orbital hemangiopericytoma: Case report

Authors : Dian Nadia A T, Yew C V
Institution : Hospital Serdang

Introductions: Orbital solitary fibrous tumor (SFT) is a rare tumor originating from the mesenchyme. Initially described in the pleura and subsequently in other mesenchymal structures but orbit remained as one of the uncommon extrapleural sites. The uncertainty of orbital SFT diagnosis on clinical or radiological evaluation alone requires histologic studies with immunohistochemical confirmation , CD 34 is the most specific diagnostic test.

Purpose: We described a clinical presentation, radiological findings, operative findings and pathological features of a patient with SFT and its literature reviews.

Methods: A case report and its literature review

Result: A 38 -year-old lady with background history diabetes mellitus presented with progressive and painless protrusion of the left eyeball associated with downward displacement since the past 2 years . Physical examination revealed 2 mm proptosis and 3 mm downward displacement of the eyeball. The visual acuity were normal and the fundus examination showed moderate non proliferative diabetic retinopathy in both the eyes. Ocular movements were normal other than restricted elevation in the left eye. She underwent complete excision along with the overlying capsule. The postoperative period was uneventful, with resolution of proptosis, eyeball displacement, and ocular movement restriction. At the time of last examination 6 months postoperatively, no evidence of recurrence was observed. The patient remains under close follow-up.

Conclusion: Although rare, orbital SFT should be included in the differential diagnosis of a well-circumscribed enhancing mass in any orbital tumor. Malignant or malignant transformation with recurrence were reported thus complete excision remains the preferred method and emphasize on proper follow up is important.

53. Late presentations of retinoblastoma

Authors : S. Ridhwah, M I Hazlita, M K Safinaz
Institution : Hospital Universiti Kebangsaan Malaysia

Background: Retinoblastoma is the commonest pediatric intraocular malignancy. 80% of retinoblastoma cases are diagnosed in children less than three years old. Bilateral cases of retinoblastoma usually presents within 14-16 months of age, whereas unilateral present at 24 to 30 months. It is rare in children above six years old.

Purpose: To report two late presentations of retinoblastoma

Method: Case report

Result: Case 1: 6-year-old Somalia girl, presented with a progressive protruding painless mass on her left eye for a year. Examination revealed lobulated pinkish mass occupying the whole left orbit. Orbital CT scan findings were suggestive of retinoblastoma or lymphoma. Enucleation was performed. Pathological report confirmed the diagnosis of retinoblastoma with orbital and optic nerve involvement. Unfortunately, she developed recurrence involving the optic nerve cut end 4 months after completing chemotherapy.

Case 2: 9-year-old Iraqi boy with history of left enucleated eye at age of 3. Patient was well until 3 months prior to presentation when he complained of right eye blurring of vision. Examination revealed anterior uveitis and a whitish retinal lesion with large feeder vessels and exudative retinal detachment. Fluorescein angiography showed diffuse vasculitis. Orbital imaging studies suggest of retinoblastoma. The retinal lesion responded to chemotherapy.

Conclusion: Retinoblastoma should be suspected in children with intraocular lesion despite presenting at an older age and having an atypical presentation.

54. Bilteral simultaneous optic neuritis with good recovery associated with positive myelin oligodendrocyte glycoprotein antibody

Authors : Yih Chian Yew [1], Jyh Yung Hor [2], Gaik Bee Eow [2]
Institution : [1] Department of Ophthalmology, Kuala Lumpur Hospital
[2] Department of Neurology, Penang Hospital

Introduction: Bilateral simultaneous optic neuritis (ON) is rare. Myelin oligodendrocyte glycoprotein (MOG) antibody is a recently re-discovered antibody implicated in certain cases of inflammatory central nervous system diseases, especially those with ON as part of presenting symptoms. We report a case of bilateral simultaneous ON in a man with good visual recovery with positive MOG antibody.

Case Report: A 48-year-old Indian gentleman presented with sudden onset of left eye blurring of vision. His visual acuity was 6/36 OS and 6/12 OD. However, examination revealed bilateral swollen optic discs, thus a clinical diagnosis of bilateral ON was made. Orbital CT revealed swollen optic nerves bilaterally. He was commenced on intravenous methylprednisolone 1g daily for 5 days followed by oral prednisolone 50mg daily for 2 weeks. By day 5, his visual acuity improved to 6/18 OS and 6/9 OD. One month later, his visual acuity further improved to 6/9 OS and 6/6 OD. His serum during acute attack was sent to United Kingdom for MOG antibody testing and the result was positive, confirming the diagnosis of MOG antibody-associated bilateral ON.

Discussion: Unlike ON caused by multiple sclerosis (MS) and aquaporin-4-seropositive neuromyelitis optica (NMO), MOG antibody-associated ON is frequently bilaterally simultaneous in onset, with milder severity, a better visual recovery, and is often monophasic. Long-term treatment to prevent relapses is therefore not necessary. Interestingly, while there is female preponderance in MS and NMO, female-to-male ratio for MOG antibody disease is approximately 1:1. This recent discovery shall add to the list of causes of ON.

55. Case series of Klebsiella Panophthalmitis in Hospital Kuala Lumpur 2015

Authors : Nurul Fatin F S [1,2] , Nor Azita A T [1]
Institution : [1] Hospital Kuala Lumpur, [2] University Malaya

Introduction: To report 3 cases of Klebsiella panophthalmitis with different comorbids, managements and outcomes.

Method: Case Report

Case Report: There were three patients ranging from 32 to 61 years old. All of them were female. Two cases involved the right eye. One patient was post partum 3 months with newly diagnosed Diabetes Mellitus and defaulted medication. She initially presented to us then further workout done revealed evidence of lungs cavitation, right gluteal abscess and left kidney abscess. Two patients were referred by the physician. One patient had psoariatic arthropathy and poorly controlled diabetis with recent admission for urinary tract infection. Interestingly, the other patient only had hypertension without any other immunocompromised factors but investigation noted that she had multiloculated liver abcsess. All of them were diagnosed with either endogenous endophthalmitis or panophthalmitis first then only subsequent investigations were done to find the primary source of infection. They received intensive and prolonged intravenous antibiotics with intravitreal antibiotics prior to surgery. All of them underwent evisceration due to progression of disease except for the young lady who refused and underwent repeated vitrectomy with silicone oil. However, the eye become pthysical. Culture and sensitivity of the vitreous came back as Klebsiella Pneumoniae for all patients. One patient with urosepsis succumbed to her illness.

Conclusion: Untreated endogenous endophthalmitis can progress to a blinding condition like panophthalmitis. Systemic workout need to be done in order to find source of infection. Klebsiella sp is a virulent organism that commonly cause endogenous endophthalmitis which often requires evisceration due to disease progression.

56. Orbital decompression in a toddler with orbital lymphangioma

Main Author : Arvinth Rajagopal
Co-Authors : Visvaraja Subrayan, Prepagaren Narayanan, Mimiwati Zahari
Institution : Universiti Malaya

Objective: We report a case of orbital lymphangioma with acute bleed in a toddler who had a severe upper respiratory tract infection

Method: Case Report

Results: A 14 month old boy, suspected to have lid haemangioma and had been followed up since birth pending Magnetic Resonance Imaging to rule out orbital extension presented with sudden onset unilateral left eye proptosis for 2 days. He had a non-axial proptosis of the left eye with generalised periorbital bruising. No relative afferent pupillary defect. Anterior segment and fundoscopy examinations were normal. Magnetic resonance imaging brain was done for the child revealing an lymphangioma with an acute bleed. Ultrasonography of the abdomen ruled out any evidence of neuroblastoma. Blood investigation done was normal. An endoscopic orbital decompression via the nasal route was carried out.

Conclusion: Lymphangiomas of the orbit are normally benign in nature. However, they are well known to cause sudden onset of proptosis because of bleeding. It is important to rule out the possibility of neuroblastoma with orbital spread in sudden unilateral proptosis especially in the unwell toddler.

57. Coincidental pituitary macroadenoma in a case of orbital hemangioma

Authors : Syamil S, N Omar
Institution : Universiti Putra Malaysia, Hospital Serdang

Introduction: Orbital hemangioma is benign vascular tumour comprising approximately 4.3% of all orbital neoplasm but its coexistence with suprasellar pituitary macrodenoma is even rarer.

Objective: To report a rare case of orbital hemangioma with coincidental pituitary macroadenoma.

Method: Case Report

Result: A 50 year-old lady with no underlying medical illness presented with difficulty at near adaptation for 2 months. She related a history of slight protrusion of the right eye since 11 years ago. Examination revealed good vision in both eyes with relative afferent pupillary defect (RAPD) in the right eye. There was right eye proptosis of 6 mm. The intraocular pressure, extraocular muscle function, colour vision, visual field test and endocrinology investigation were normal. Contrast-enhanced computed tomography (CECT) showed a well-defined mass in the right orbit and another separate well-defined lobulated mass in the sella region. MRI showed displacement of the pituitary gland without compression of the optic chiasm, suggestive of optic nerve sheath meningioma and pituitary adenoma. Surgical excision of the tumours was performed and histopathology revealed orbital hemangioma and non-functional pituitary macroadenoma.

Discussion: Cavernous hemangioma of the orbit is the commonest intraorbital tumour of the orbit among adults. It typically presents with painless, chronic progressive proptosis. Non-secreting pituitary macroadenoma comprises 10-15% of all intracranial tumours. It has never been reported to coexist with optic nerve hemangioma.

Conclusion: Pituitary macroadenoma can silently coexist with optic nerve hemangioma. MRA may be superior to CT and MRI in diagnosing orbital hemangioma. Surgery is indicated in suitable cases.

PAEDIATRIC OPHTHALMOLOGY

58. Outcome of surgery for infantile Esotropia in Hospital USM

Authors : Qi Zhe Ngoo, Evelyn Tai Li Min, Norihan Ibrahim, Mohtar Ibrahim, et al.
Institution : Universiti Sains Malaysia

Background: Infantile esotropia is an inward misalignment of the eyes that occurs within the first 6 months of life. The aim of surgery in infantile esotropia is to align the eyes and promote the development of stereopsis.

Objective: To document the outcome of surgery for infantile esotropia in HUSM from November 2011- July 2015.

Method: Retrospective review of all patients with surgery for infantile esotropia performed between November 2011 to July 2015.

Result: There were a total of 30 patients. The mean age of presentation was 6.8 years old. Females formed the majority (64.3%). Most patients had a constant esotropia (96.7 %). Three quarters of patients had very large angles of deviation ($\geq$ 50 PD). Stereopsis was absent in all patients. At 6 months post-op, approximately 80% had good post-operative alignment (within 10 PD deviation), 15% had under-correction, and the remainder over-correction. Two surgeries were complicated by suture granulomas, while one patient developed a conjunctival cyst. There were no repeat operations.

Conclusion: Surgery for infantile esotropia has a good post-operative outcome. Early surgical correction is essential for development of stereopsis.

59. Harlequin itchthyosis

Authors : Nanthini Selvaraja, Yeoh Boon Juan, Ajit Kumar Majumder
Institution : Hospital Tawau

Purpose: Harlequin ichthyosis is a rare and most severe form of autosomal recessive congenital ichthyosis characterized by a profound thickening of the keratin layer in fetal skin. The affected neonate is born with a massive, horny shell of dense, platelike scale and contraction abnormalities of the eyes, ears, mouth, and appendages. We aim to report a case of harlequin ichthyosis with ocular manifestations.

Method: Case report

Result: We treated a premature baby boy born with harlequin ichthyosis. Upon examination, there were generalized hyperkeratosis with skin cracking, facial dysmorphism, hypoplastic digits in all 4 limbs and bilateral upper lid ectropion. The child was started on artificial tear drops to prevent exposure keratitis. However, at three weeks of life, the child developed bilateral conjunctivitis with purulent discharge. Culture and sensitivity results showed heavy growth of pseudomonas aeruginosa. Child was started on gentamicin eye drop and fucithalmic ointment. Upon completion of two weeks of antibiotics the conjunctivitis was resolved. Child was discharged home at two months of life. Parents defaulted subsequent follow up visits and the child succumb death at 4 months of life due to pneumonia.

Conclusion: Ophthalmic management for Harlequin ichthyosis often requires replacement therapy of tears to prevent exposure keratitis and its complications. Ectropion correction have also been reported to be beneficial to these children. In the event of an infection, aggressive antibiotic management is crucial to prevent further ocular complications.

60. Unilateral high myopia in unilateral threshold ROP treated with cryotherapy

Main Author : Lo Yee Lin, MD[1]
Co-Authors : Rafidah Md. Saleh, MD[1,2] Maimunah Abdul Muna'aim, MD[1,2]
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Institution : [1] Hospital Serdang, [2]Universiti Putra Malaysia

Introduction: Treatment is indicated in threshold ROP to prevent severe loss of vision. Despite the proven benefit of cryotherapy in the management of ROP, it can lead to ocular and systemic adverse effect. This report highlights the adverse effect of cryotherapy in threshold ROP.

Case report: A male infant was born at 28 week of gestation with birth weight of 1200 g. He was screened for ROP from 4 weeks post natal age. Serial examination revealed progressing severity of ROP in both eyes until he reached a high risk pre-threshold ROP in his right eye and threshold ROP in his left eye. Treatment was decided upon but the laser was unfortunately unavailable at that time. Cryotherapy was performed for the threshold ROP in the left eye at the age of 8 weeks. The pre-threshold ROP in the right eye was subjected to further observation. Subsequently, ROP in both eyes regressed without cicatrisation. The patient was followed up over 8 years and refractions were performed serially. Refraction result showed that the treated eye developed steadily increasing myopia over the years while the untreated eye was completely emmetropic.

Discussion: Although cryotherapy can be effective, laser photocoagulation is preferred for its lesser damaging effect. This case demonstrated the detrimental effect of cryotherapy to the treated eye leading to the progressive myopia as the child grew, while the untreated eye remained emmetropic.

Conclusion: Cryotherapy for threshold ROP could induce progressive myopia in ex-premature children.

61. Refractive outcome following pan retinal photocoagulation for retinopathy of in Hospital Serdang

Main Author : Lo Yee Lin, MD[1]
Co-Authors : Rafidah Md. Saleh, MD[1,2] Maimunah Abdul Muna'aim, MD[1,2]
Nazri Omar, MD, PhD[1,2]
Institution : [1]Hospital Serdang, [2]Universiti Putra Malaysia

Purpose: To investigate the refractive outcome among babies diagnosed and treated for threshold ROP. Comparison with untreated pre-threshold ROP was also conducted.

Methods: This was a retrospective, non-interventional clinical-based study. Following approval from the IRB, medical records of babies diagnosed and treated for threshold ROP in Hospital Serdang from December 2005 to December 2013 were reviewed. Treatment consisted of laser PRP or cryotherapy was given in cases of threshold ROP. The babies then observed for regression and later refracted at serial interval to know their refractive status.

Results: A total of 32 patients were included in this review. The gestational age (GA) was 29.0 weeks ± 2.9 weeks (mean ± standard deviation, SD). The birth weight (BW) ranged from 600 g to 1800 g with an average of 1111.47 g ± 332.87 g (mean ± SD). There were 20 (62.5%) males and 12 (37.5%) females. The average follow up period was 2.59 years ± 0.5 years (mean ± SEM). Twenty-three (71.9%) babies had follow up of at least a year. The refractive errors identified

among these babies were myopia (37.8%), hyperopia (25.1%), astigmatism (100%), anisometropia (17.4%) and amblyopia (47.8%). However, these refractive errors did not seem to be associated with GA, BW or treatment load.

Conclusion: Treatment of threshold ROP while necessary to prevent visual loss could predispose to refractive errors in premature babies. A larger study is recommended to illicit the risk factors for refractive errors.

62. The prevalence of strabismus and associated refractive errors in the state of Sabah

Main Author : Gan Yuen Keat
Co-Authors : Chua Shee Wen, Muhammad Danial, Shuaibah Abdul Ghani
Institution : University Malaya, Queen Elizabeth Hospital

Strabismus is a common childhood ocular disorder that can have a lasting impact on individuals if not corrected appropriately, whether functionally or psychologically. Prevailing data shows that concomitant exotropias are commonly identified with myopes, while concomitant esotropias were frequently identified with hyperopes. To gain better insight into the aforementioned, we conducted a retrospective observational study to look at the prevalence of strabismus in the state of Sabah and its association with refractive error. Strabismus accounts for up to 7%(66 cases) of the total number of patients seen in the Sabah Women and Children Hospital based on the census taken from May to December 2015. Analysis of these cases ranging from 6 months to 12 years old, revealed that out of the total number of squint patients, 53% were exotropic and 43% esotropic. Among the exotropic cases, 71% were hyperopic and 20% myopic, whereas in the esotropic group, 79% were hyperopic and 19% myopic. Our data not only underscores the association between strabismus and refractive errors, but we also found that exotropics in our population were mainly attributed to hyperopia, contrary to prevailing data of other regions. Taking these findings into consideration, there is a need to determine the possible causes that could attribute to this occurrence.

63. Segamat Paediatric Eye Disease Study (SEGPAEDS)

2nd Prize

Main Author : Lakana Kumar Thavaratnam (MS Ophthalmology)
Co-Authors : Fiona Chew (MS Ophthalmology),
Jamalia Rahmat (Paediatric Ophthamologist)
Joseph Alagaratnam (Paediatric Ophthalmologist)
Institution : Hospital Kuala Lumpur

Objective:

- To explore the burden of eye diseases in preschool children.
- To evaluate the patterns of refractive errors, amblyopia and strabismus in preschool ethnic groups.
- To compare the differences in the prevalence and cause of VI in the various ethnic groups.
- To know the pattern of ocular diseases in this preschool age group.

Methods:

- Kindergartens within a 30 kilometre radius of Segamat town were identified and respective kindergarten principals and parents were approached for consent.
- Examination of all subjects commenced with visual acuity screening with Log Mar charts, followed by ocular motility and cover test.
- Should visual acuity be worse than 0.1, a manifest tropia was noted or any other ocular abnormality was present, cycloplegic refraction followed by a full ocular examination was performed.

Results:

- A total of 233 children were recruited as study subjects
- Visual impairment was documented in 5.2%(12/233) subjects
- Amblyopia was documented in 6.9% (16/23) of subjects
- 22.3%(52/233) of subjects required ophthalmologic intervention
- 12.7% (13/102) of the parents were aware their child had an ocular problem. However 46.1% (47/102) of children had symptoms suggestive of an ocular condition (p: 0.040)
- 94.1%(96/102) subjects had never had an ophthalmological assessment before.

Conclusion: The practical approach would be to screen children in the first year of kindergarten at the age of 5.This study gave evidence that a significant number of children (22.3%) would need an ophthalmological intervention with 6.9% already having amblyopia. It strengthens the need for our country to start screening at the age of 5 years in kindergarten by an optometrist.

64. Childhood cataract surgery: A comparative study between Aphakia and Pseudophakia

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Mamunur Rashid, Assoc Prof & Head, Dept of Medicine, Quest International University

Institution : AIMST University

Objective: This is a comparative study that illustrates the management of childhood cataract and compares the post-operative complication and visual outcome between aphakic and pseudophakic patient group.

Materials and method: It consists of primary and secondary data which was experimented on 250 eyes with cataract of 160 children in Bangladesh within the period of January 2012 to January 2014. In patients up to 8 years, irrigation and aspiration, including primary posterior capsulorrhexis with anterior vitrectomy were done. However, after 8 years, I/A were done without PPC and AV. Consequently, all were evaluated and followed up for 1 year.

Result: The most common postoperative complication is posterior capsular opacity which was observed in 22 (49%) pseudophakic eye below 1 year and 30(25%) pseudophakic eye after 1 year of age. The final visual acuity of 82% bilateral and 53% unilateral pseudophakic patient reached 6/60 or better whereas only 50% of bilateral and 32% unilateral aphakic patient's visual acuity reached to the same level with spectacle or contact lens correction.

Conclusion: Primary intraocular lens implantation after childhood cataract surgery definitely results in better visual acuity compared to aphakia. Nevertheless, careful planning and improved technique must be taken to implant IOL especially in younger children because younger eyes are

more prone to have serious postoperative complication requiring reoperation. Furthermore, proper postoperative care and regular follow-up are also significant part of childhood cataract management. This paper would unlock further frontiers for prospective researchers in this area and contribute to eradicate the curse of childhood blindness from all over the world.

POSTERIOR SEGMENT & UVEITIS

65. Review of Bartonella Henselae infection with ocular manifestation in HUSM

Main Author : Fatishah Amir
Co-Authors : Shatriah Ismail, Zunaina Embong
Institution : Universiti Sains Malaysia

Objective: To describe demographic, ocular manifestations and final visual outcome in Bartonella Henselae infection in Hospital USM for 3 years review.

Method: This is a retrospective case review, involving clinical records of 8 patients (12 eyes) with ocular Bartonellosis over 3 year period from June 2012 till Nov 2015 at Hospital Universiti Sains Malaysia, Kelantan.

Main outcome measures: Demographic and clinical data.

Results: There were 2 males and 6 females recruited. The mean age was 31.4 year old (ranged from 14 to 47 years of age) treated as ocular Bartonellosis. All patients (100%) had history of cat exposure, and 2 patients (17%) had cat scratched. Four of them had bilateral simultaneous ocular manifestations. Fifty per cent presented with generalised reduced vision and the remaining 50% had central or peripheral scotoma. Fever was documented in 75% (6 patients) and 38% (3 patients) had lymphadenopathy. The presenting acuity was worse than 6/12 in 58 % of the patients.

Majority had swollen optic disc, 83% had macular oedema, and neuroretinitis was documented in 50% of the involved eyes. Four patients (50%) had IgM serology positive, while all patients had IgG serology positive for Bartonella infections. Ninety per cent were treated with Tablet Azithromycin and the other patient was prescribed with Oral Doxycycline for the 6 weeks. Oral corticosteroid was commenced in 58.3% eyes with poor visual acuity. One patient developed relapsed after completing the treatment. 75% had final visual acuity better than 6/12.

Conclusion: Swollen disc, macula oedema and neuroretinitis are the main presenting signs. Majority had satisfactory final visual acuity. Oral Azithromycin and Doxycycline work well in our patients with Bartonella infection.

66. Acute Retinal Necrosis - Review of eight cases

Main Author : Loh Chow Chin
Co-Authors : Hanizasurana Hashim, Nor Fariza Ngah
Institution : Hospital Selayang

Purpose: To report eight cases of patients diagnosed with acute retinal necrosis (ARN).

Methods: Retrospective analysis of 8 cases with confirmed ARN between April 2012 and August 2015.

Results: Total of 8 patients (9 eyes) with PCR positive ARN cases were analysed. Patients' age ranging from 38 to 80 years old, with median age of 46. Only one case presented with bilateral involvement. Two eyes presented with good vision (≤ 6/12), and the other 7 eyes had vision poor than 6/12. Vision improved in two patients (3 eyes) while 3 eyes had their vision sustained. Vision was worsened in 3 eyes, 2 were due to RRD and 1 had resistant to acyclovir resulting in extensive progression.

Confirmative PCR showed that 4 cases were due to CMV, 3 VZV, and 1 HSV. None has prior chicken-pox/varicella skin infections. Three cases were immunocompromised and all had CMV as the caused for ARN (1 is SLE on systemic steroid, 1 found to have underlying colonic carcinoma and 1 severe anaemia due to CKD).

Conclusion: 1. Good visual outcome is promising with timely and correct treatment.
2. A CMV caused should always warrant a thorough workout for underlying immunocompromised state.

67. Bilateral dengue neuroretinitis: A 17-month review

Main Author : Lim I-Liang, MD (USM)
Co-Authors : Nor Fadzillah Abdul Jalil, MMED Ophthalmology (USM)
Raja Norliza Raja Omar, MS Ophthalmology (UKM)
Angela Loo Voon Pei, FRCSI (IRE)
Institution : Pusat Perubatan Universiti Malaya

Objective: To report the progress of a case of bilateral dengue neuroretinitis 17 months after presentation.

Method: Case Report

Results: A 25-year-old Chinese lady complained of sudden bilateral painless reduced vision for two days. It was associated with bilateral central scotomas. At that time, she was at day 12 of dengue fever. The dengue infection was confirmed by the positive results of dengue IgM and dengue nonstructural protein 1 antigen test. Her right vision was 6/60 and left vision was 6/36. There was also impairment of both optic nerve functions. The bilateral fundus examination showed macular striae with the addition of dot hemorrhage and exudate on the left. There was a central scotoma for both eyes on visual field test and Amsler chart.

A course of steroid was commenced and continued for a total of 47 days on tapering dose. The optic nerve functions of her eyes eventually improved. 17 months after presentation, both vision improved to 6/6. However, the bilateral fundus assessment revealed a macular scar on each eye. On serial Amsler charts, bilateral doughnut-shaped central scotomas persisted which was evidenced by the Octopus visual field test and, in which she has adapted well for her daily activity.

Conclusion: As in many parainfectious cases with optic neuritis, profound loss of visual function occurred with nearly complete recovery. Lim *et al* reported that after the acute dengue episode, 3 out of 5 of their patients showed partial recovery of vision.

68. Simultaneous presentation of central retinal artery occlusion and arteritic anterior ischemic optic neuropathy in a patient with giant cell arteritis

Authors : Ooi ST, Khoo CL, Nor Anita CO
Institution : Hospital Sultanah Nur Zahirah, Kuala Terenganu

Objective: To describe a rare case of giant cell arteritis (GCA) with simultaneous ocular presentation of arteritic anterior ischemic optic neuropathy (AAION) and central retinal artery occlusion (CRAO).

Method: Case study

Result: 70 years old Malay male, no co-morbids, presented with intermittent left eye blurring of vision for 2 weeks. He developed bilateral frontal and temporal headache, jaw claudication and scalp pain before sequential bilateral eye blindness. A day before admission his left eye progressed to blindness before right eye sudden onset loss of vision. Both eyes' visual acuity showed no-perception-to-light and demonstrated absolute afferent pupillary defect. Right eye optic disc was normal, macula pallor with cherry red spot. Vessels were segmented with no emboli seen. Left eye optic disc was swollen with segmental pallor at inferior half. Macula and retina were normal. Bilateral temporal arteries were engorged and tender. Erythrocyte sedimentation rate (ESR) raised (86) and C-reactive protein (CRP) was markedly raised (182.23). GCA was diagnosed clinically. High dose intravenous methylprednisolone and oral aspirin started immediately. Left temporal artery biopsy shows features of arteritis; however GCA cannot be excluded. Following 3 days of methylprednisolone, his visual acuity did not improves, however other symptoms resolved. He was switched to oral prednisolone and discharged. Upon follow-up, his visual acuity remains same, ESR and CRP were reduced.

Conclusion: This case describes a rare ocular presentation of CRAO and AAION simultaneously in GCA. Ocular involvement has poor visual outcome. Prompt diagnosis and treatment is important to preserve the visual acuity.

69. Elizabethkingia Mengoseptica Endogenous Endophthalmitis: A first in Malaysia

Main Author : Amalina Bt Juares Rizal (MBBS)
Co-Author : Hanizasurana bt Hashim (MBBS, MS (Opth), Fellowship in Medical Retina and Uveitis)
Institution : Universiti Malaya/Hospital Selayang

Objective: To report the first case of *Elizabethkingia Meningoseptica* endogenous endophthalmitis in Malaysia

Method: Case report

Case report: We report a 69 year old Malay lady with long standing diabetes, hypertension, peripheral vascular disease and end stage renal failure (ESRF) on haemodialysis who was admitted for catheter-related bloodstream infection. Blood culture results revealed an *Elizabethkingia Meningoseptica* infection. After one week in the Nephrology ward, she developed right eye (RE) redness with pain and blurring vision. Examination showed she had RE early endogenous endophthalmitis and severe nonproliferative diabetic retinopathy (DR) and left eye (LE) proliverative DR. She was treated with ocular and systemic antibiotics and responded favourably to treatment. However, she developed the same symptoms for the LE after one month and later, recurrent infection in RE after 2 months. Fortunately, due to early diagnosis and

good response to treatment, the patient did not have to go for vitrectomy.

Conclusion: *Elizabethkingia meningoseptica* bactaraemia can cause a rare but serious endogenous endophthalmitis. Therefore, screening for endophthalmitis for all *E. menigoseptica* bactaraemia may help in early detection and management to provide the best possible visual outcome.

70. Ophthalmic artery occlusion following particle neuro-embolization of internal maxillary artery: A case report

Main Author : Ng Wei Loon
Co-Authors : Balwant Singh Gendeh, MBBS (India), MS (ORL-HNS)UKM
Jemaima Che Hamzah MS (Ophthal) UKM, PhD(Aberdeen)
Norshamsiah Md Din, MS (Oph), PhD(UK)
Institution : Pusat Perubatan Universiti Kebagsaan Malaysia

Purpose: To report a case of iatrogenic ophthalmic aretry occlusion after Embozene® embolization of the internal maxillary artery.

Method: Case report.

Case Report: A 22-year-old gentleman presented with left nasal obstruction and epistaxis for 2 years. He was diagnosed with nasopharyngeal carcinoma and subsequently underwent embolization of the maxillary branch of the left external carotid artery (ECA) using microspheres (Embozene® Microspheres - 250µm, CeloNova BioSciences Inc., San Antonio,TX) before endoscopic tumour excision. He complained of sudden painless profound visual loss OS two hours after embolization. Visual acuity OS was no light perception. Fundus examination showed pale disc and retina with no cherry red spot. Arterial narrowing and segmentation were seen in all quadrants. A diagnosis of left opthalmic aretry occlusion was made and immediate management was commenced including ocular massage and lowering of intraocular pressure. However, the visual loss remained. Retrospective review of digital subtraction angiogram showed anastomosis between the left ophthalmic artery and anterior deep temporal artery as a potential route for microspheres migration

Conclusion: Embolization of the ECA system may result in inadvertent embolization of the ICA system leading to iatrogenic blindness. Pre-operative angio-architecture understanding and diligent selection of embolic material are helpful in preventing this adverse event.

71. Acute retinal necrosis syndrome

Authors : Dezhao Sai[1,2], Qi Zhe Ngoo[2] Kiet Phang Ling[1], Adil Hussein[2]
Institution : [1.] Hospital Sultanah Aminah Johor Bharu
[2.] Universiti Sains Malaysia

Objective: To report a case of acute retinal necrosis (ARN) syndrome in a bortezomib-based therapy patient with acyclovir prophylaxis

Method: Case report

Results: A 61 years old Malay man with plasma cell leukemia, diabetes mellitus and hypertension, presented with 4weeks history of blurring of vision, photophobia and slight pain

on the left eye. He had been under chemotherapy for plasma cell leukemia for the past 5 months consisted of bortezomib, cyclophosphamide and dexamethasone. Acyclovir prophylaxis was given to prevent reactivation of ARN. On examination, the left eye had visual acuity of 6/12 and the right eye had visual acuity of 6/9. There was no relative afferent pupillary defect. The left eye revealed high intraocular pressure of 44mmHg with 1+ of cells in the anterior chamber. Fundus showed a well-demarcated necrotic retina at the peripheral extended from 10-12 o'clock. It was associated with vitritis. The right eye had insignificant finding. A clinical diagnosis of left ARN syndrome was made and treated with intravenous acyclovir and followed by oral dose. The ARN initially showed slow recovery to the antiviral therapy until the bortezomib was withheld and replaced by other substituent. Interestingly, his condition dramatically improved. The left eye vision improved to 6/9 after 3 months of follow up with no complication.

Conclusion: Reactivation of the VZV is common during the course of bortezomib treatment. Although the risk can be reduced by acyclovir prophylaxis, it may still occur. Hence, regular ocular examination is remained important.

72. A case of extensive central serous retinopathy secondary to nephrotic syndrome

Authors : Tang SF, Bastion MLC
Institution : National University of Malaysia Medical Centre (UKMMC)

Objective: To report a case of extensive central serous retinopathy secondary to nephrotic syndrome that resolved after sequential ultrafiltreation (SU).

Method: Case report

Results: 63-year-old gentleman with underlying diabetic nephropathy and congestive cardiac failure presented with symptoms of anasarca and blurring of vision for one month duration. He was diagnosed nephrotic syndrome secondary to diabetic nephropathy based on his 24 hour urine protein, urine protein creatinine ratio, serum albumin and serum lipid level. Ocular examination reviewed bilateral extensive central serous retinopathy which was confirmed by optical coherence tomography (OCT). He was started with intravenous Bumetanide and fluid restriction of 500ml/day. However, his anasarca was not improved. Subsequently, he was started on SU via femoral catheter. After two episode of SU, his anasarca symptoms improved and his blurring of vision was resolved. OCT macula showed near total resolution of bilateral extensive central serous retinopathy.

Conclusion: Nephrotic syndrome is a rare cause of central serous retinopathy that need not be missed. SU is an effective and safe treatment modality in this scenario.

73. An unusual case of combined central retinal vein stasis and cilio-retinal artery occlusion

Authors : Eunice Jin Hui Goh
Lim Eugene (MBBS, MMed (Int Med), FAMS Rheum),
Kong Yong Goh (MBBS, FRCS, FRCOphth, MMed, FAMS (Ophth)
Institution : Yong Loo Lin School of Medicine, National University of Singapore

Objective: To report a case of combined central retinal vein stasis and cilio-retinal artery occlusion.

Method: Case report.

Results: A 37-year-old healthy Lebanese male presented with an acute onset of blurring of vision for three days in the left eye. On examination, his visual acuity was 6/6-1 in the right eye and 6/9+2 in the left eye. His intra-ocular pressures and colour vision were normal. An automated perimetry confirmed the presence of a left supero-central scotoma. On slit lamp bio-microscopy examination, the left fundus revealed inferior macular edema with tortuous retinal veins. He was diagnosed with a left combined cilio-retinal artery occlusion with a central retinal vein stasis. Emergency treatment was done as for an acute arterial occlusion. His macular edema and visual field defect resolved after 4 weeks.

To rule out embolic causes, he was seen by a cardiologist but had no significant findings. He was then referred to a rheumatologist to investigate for autoimmune causes. Hereditary and autoimmune causes for thrombophilia were done and the only positive result was homozygosity for the 677C>T mutation of the 5,10 methylene tetrahydrofolate reductase (MTHFR) enzyme gene. MTHFR enzyme is an important enzyme to breakdown homocysteine in the body which is atherogenic and pro-thrombotic. With his increased thrombotic tendency, he was treated prophylactically with lifelong anti-platelet therapy (aspirin). Full anticoagulation would be considered should he develop another thrombotic episode.

Conclusion: The effect of the homozygous 677C>T mutation on the 5,10 MTHFR gene may have led to an increased thrombotic tendency.

74. A case series of spontaneous closure of full-thickness macular hole

Authors : Tan H H, Ling K P, Haslina M A
Institution : Hospital Sultanah Bahiyah, Alor Setar

Aim: To report 2 cases of spontaneous closure of full-thickness macular hole (FTMH).

Methods: Case series

Results: Case 1- A 56-year-old Chinese man with right proliferative diabetic retinopathy and retinitis proliferans with traction affecting the macula developed FTMH whilst he was undergoing panretinal photocoagulation. His visual acuity dropped from 6/18 to 6/36. The traction affecting the macula was however relieved (captured via optical coherence tomograph (OCT). He was treated with more laser and a series of OCT was done. 16 months later, there is spontaneous closure of FTMH. Visual acuity is 6/24.

Case 2- A 43-year-old Malay man presented with right macular off rhegmatogenous retinal detachment (RRD). Vitrectomy and gas tamponade wias done and intraoperatively there was no macular hole. His vision improved from counting finger to 6/36 but 4 months after surgery there was a drop in vision to 1/60. A FTMH was noted and confirmed via OCT. He refused surgery. 9 months after the diagnosis of FTMH, his vision improved to 6/36 and OCT showed spontaneous closure of FTMH with remnant of subfoveal fluid. 4 months later, the amount of fluid decreased further and his vision improved to 6/24.

Conclusion: Spontaneous closure of FTMH is rare. We have 2 cases of spontaneous closure, one in a patient with relieved traction from tractional macular detachment, 16 months after diagnosis and the other one is FTMH which developed after vitrectomy for RRD, spontaneous closure after 9 months.

75. Silent occlusive retinal vasculitis in a patient with systemic tuberculosis

Main Author : Nadia Y
Co-Authors : Maizan Y, Zuraidah M
Institution : Hospital Sultanah Nur Zahirah, Kuala Terengganu

Introduction: Retinal vasculitis in patients with systemic Tuberculosis is uncommon. It may be secondary to tuberculous infection or as a result of a hypersensitivity reaction to tuberculoprotein.

Objective: To report a rare case of asymptomatic occlusive retinal vasculitis in a patient with systemic Tuberculosis.

Method: Case report

Result: A 25 year-old Malay gentleman was referred for eye assessment upon diagnosis and initiation of anti-Tuberculosis treatment. At that point, eye assessment was normal. 3 months later on eye follow up the visual acuity was 6/6 bilaterally, no colour and visual field defect, no relative afferent pupillary defect and both anterior segments were unremarkable. The right fundus was normal. However, left fundus showed presence of neovascularization at peripheral end of the superotemporal vessels with streak of preretinal hemorrhages adjacent to it. Otherwise, there was no sheathing or perivascular cuffing. The optic disc and macula was normal with no evidence of vitritis, choroiditis or retinitis. Fundus fluorescein angiography showed multiple areas of capillary fallout at superotemporal quadrant with leakage from retinal neovascularization. Pan retinal photocoagulation was initiated and patient was started on oral prednisolone 30mg (0.5mg/kg) daily with tapering dose weekly for 6 weeks. Subsequent follow up showed regression of the neovascularization. Patient remained asymptomatic ever since he attended the eye clinic.

Conclusion: This case demonstrates ocular Tuberculosis can develop silently. It also highlights the importance of eye screening in patients with systemic Tuberculosis despite patient having good vision and being asymptomatic. Eye screening should not focused on detecting side effects of anti-Tuberculosis drugs only but also to detect disease-related ocular manifestations of systemic tuberculosis. Early detection of sight–threatening ocular manifestations can prevent untoward blindness.

76. The good eye can be the bad eye and vice versa

Authors : PF Neoh (MD USM), Evelyn Tai LM (MD USM),
Vanessa N Mansurali (FRCS)
Institution : Universiti Sains Malaysia

Objective: To report a case of incidental early detection of choroidal melanoma in an asymptomatic eye

Method: A case report

Results: A 65-year-old lady with no medical disease complained of occasional flashes of light over her left eye for 2 months. She did not have blurring of vision, scotoma or floaters. No history of ocular trauma or surgery. She was referred for ocular assessment when she underwent her refractive assessment at the optometrist. On examination, best corrected visual acuity in both eyes was 6/9. Both eyes anterior segments were normal, with normal intraocular

pressure. Both pupils were equal with no relative afferent papillary defect. Left eye fundus examination was normal. On contrary, the "normal" right eye fundus examination revealed a huge, well-circumscribed hypo-pigmented elevated choroidal mass with inferior retinal detachment and macula sparing. B scan ultrasonography of the right eye showed a mushroom-shaped intraocular mass. Computed tomography scan showed an intraocular lesion. Comprehensive systemic examination and investigations to rule out distant primary malignancy were unremarkable. A provisional diagnosis of right eye primary choroidal melanoma was made. Despite good vision in the affected eye, she underwent right eye enucleation in view of the large intraocular mass. The diagnosis was confirmed by histopathological examination.

Conclusion: Large choroidal masses are often symptomatic, but our patient was an exception, likely due to the inferior location of the mass. Time constraints in a busy clinic should never be an excuse for an incomplete eye examination i.e. only examining the eye with the visual complaint. This case reinforces the importance of comprehensive and bilateral eye assessment in aiding early detection of a possible sight or life-threatening ocular disease.

77. Clinical Presentation and Outcome of Vitrectomy in Patients with Persistent Vitreous Hemorrhage Secondary to Proliferative Diabetic Retinopathy

Authors : Evelyn Tai LM[1], Goh Y[2], Nik NF[2], Wan-Hazabbah WH[1], et al.
Institution : [1]Universiti Sains Malaysia, [2]Hospital Sultanah Bahiyah, Alor Setar

Introduction: Vitreous hemorrhage is a common complication of proliferative diabetic retinopathy. It is attributed to traction on fragile new retinal vessels which are adherent to the posterior hyaloid face. As vitreous haemorrhage obscures the media, it impedes monitoring of the underlying retinopathy.

Objective: To report the clinical presentation and visual outcome of vitrectomy in patients with persistent vitreous hemorrhage secondary to proliferative diabetic retinopathy in type 2 diabetes mellitus.

Methods: This was a retrospective study in Hospital Sultanah Bahiyah, Alor Setar. Inclusion criteria was patients with persistent vitreous hemorrhage secondary to proliferative diabetic retinopathy in type 2 diabetes mellitus who underwent vitrectomy with adjuvant endolaser from January to December 2014, with follow-up for at least one year.

Results: Forty eight cases of vitrectomy were performed for persistent vitreous hemorrhage. Of these, 32 fulfilled the inclusion criteria. The mean age was 48.5 years. Males comprised two-thirds of the sample. The mean duration of diabetes mellitus prior to presentation was 12 years. Associated systemic diseases included hypertension, stroke and chronic kidney disease. The right eye was predominantly involved (71.9%). The visual acuity on presentation was worse than 6/60 in the majority (87.5%). One year post operation, the majority (71.9%) had a visual acuity of 6/60 or better.

Conclusion: Vitrectomy generally improves the visual outcome in type 2 diabetes mellitus patients with persistent vitreous hemorrhage. Clearing of the hemorrhage not only improves the vision, it also allows better visualization of the fundus in order to monitor and treat the progression of diabetic retinopathy.

78. Spontaneous hemorrhagic retinal detachment as a cause of acute intractable Glaucoma - A case report

Authors : Salwa Tharek, Raja Norliza Raja Omar, Nor Fadzillah bt Abd Jalil, Lai Yin Peng
Institution : Hospital Melaka

Objective: We report a case of intractable acute angle closure glaucoma resulting from spontaneous hemorrhagic retinal detachment.

Method: Case report

Summary of report: A 58-year-old man with underlying diabetes mellitus and atrial fibrillation on warfarin presented with sudden blindness and pain.The left vision was perception of light with presence of RAPD and right vision was 6/9. The left eye was injected with generalized corneal edema. The left eye IOP was 58mmhg with shallow anterior chamber and right eye IOP was 14 mmHg. There was minimal cataract and the lens was not intumescent. The posterior segment was hazy due to vitreous hemorrhage. B scan showed dense vitreous opacity with suspicious choroidal detachment and effusion.The orbit magnetic resonance imaging showed left eye subretinal hemorrhage with retinal detachment and the presence of vitreous hemorrhage. He was treated with four topical and systemic antiglaucomatous agents and subsequently, pthysical changes was observed.

Conclusion: Intractable acute angle closure glaucoma is a rare and catastrophic complication resulting from spontaneous hemorrhagic retinal detachment. Anticoagulant usage has been strongly correlated with this complication in previously reported cases.

79. Dual infection of the retina – "Out of the ashes and into the fire"

Authors : Premala Devi-S[1,2], Raja Norliza RO[2], Zunaina E[1], Wan Hazabbah Wan Hitam[1]
Institution: : [1] Universiti Sains Malaysia, [2]Hospital Melaka

Objective: To report 3 rare cases of dual retinal infection of *Bartonella henselae (B.henselae)* and *Toxoplasma gondii (T.gondii)*

Methods: Case series

Results: All 3 patients presented to Hospital Universiti Sains Malaysia in 2015. All 3 patients had history of contact with cats, however only one was scratched by cats. Each patient presented with painless blurring of vision ranging from 10 to 30 days. The first patient had dense vitritis, the second patient had bilateral optic disc swelling and the third patient had unilateral optic disc swelling. None had significant neuroretinitis. Serological analysis showed Ig G for B.henselae and T.gondii were strongly positive in all 3 patients. All patients were treated with oral azithromycin for 6 weeks duration. Two patients required additional steroid therapy due to poor vision at presentation. All patients showed good final visual outcome.

Conclusion: Dual retinal infection of B.*henselae* and T.*gondii* does not present with typical neuroretinitis features. Therefore, high index of suspicion and early recognition is important. Prompt treatment with systemic antibiotics and corticosteroids provide promising visual outcome for this vision-threatening condition.

80. A rare case of bilateral primary intraocular lymphoma

Authors : Poh Fong She, Ming Jew Ong, Rohana AR, Roslin Azni AA, et al.
Institution : Hospital Sultan Ismail, Johor Bharu

Objective: To report a rare case of bilateral primary intraocular lymphoma

Method: Case report

Results: A 68 years old Malay man with history of benign prostatic hypertrophy, presented with gradual onset painless loss of vision in both eyes for few months. At presentation, visual acuity of right eye was non light projection while the left eye was counting finger. Examination showed bilateral panuveitis. Right eye revealed extensive subtotal exudative retinal detachment involving macula with retinal haemorrhage at posterior pole extending to inferonasal region. Left eye showed a large subretinal mass measuring about 12 disc diameters at about 3 disc diameters temporal to fovea. Blood investigations to rule out infections (FBC/ESR/VDRL/CMV/HIV/TB) and secondaries (PSA/AFP/LDH/CEA/CA19-9) were normal. CT and MRI scan of orbits and brain showed normal results. Right eye vitreous biopsy showed atypical lymphoid cells admixed with histiocytes. Diagnosis of both eyes primary intraocular lymphoma was made. Patient was started on intravitreal methotrexate (400µg in 0.1mL) twice weekly for the first month, weekly for the second month, fortnightly for the third month, followed by monthly injections for another 6 months. After two months of treatment, his vision remained the same. However, the subretinal mass was smaller. There was no ocular toxicity observed.

Conclusion: Primary intraocular lymphoma is a rare and devastating condition. Biopsy remains one of the hallmark procedures in diagnosing primary intraocular lymphoma. Optimal treatment of intraocular lymphoma has not been established, thus further study is required to evaluate its efficacy and safety.

81. Charles Bonnet Syndrome

Authors : Wilson Wong Jun Jie, Pall Singh, Linda Teoh
Institution : The Tun Hussein Onn National Eye Hospital

Purpose: The ever increasing number of patients with low vision as a result of age-related macular degeneration, glaucoma and other ocular diseases necessitate an increase in awareness of Charles Bonnet Syndrome (CBS) among ophthalmic care providers.

Methods: Case report

Results: We describe an elderly lady who has been under our follow-up for her advance primary open angle glaucoma and age related macular degeneration. She presented with seeing multi-coloured flashes of light. Clinical examination did not yield any new clinical findings. Her symptoms persisted and initially this bewildered most of the junior doctors. A review by our senior ophthalmologist in combination with a neurologist confirmed the diagnosis of Charles Bonnet Syndrome.

Conclusion: CBS is an under reported condition. Often times, patients do not report or seek help for these visual hallucinations for the fear of being diagnosed with a psychotic disorder. The low level of awareness of CBS among medical professionals means that there is a risk of an incorrect diagnosis and thus leading to inappropriate therapy. Therefore, it is imperative that ophthalmologists are sensitive to this clinical entity so that a prompt diagnosis and subsequent treatment can be instituted.

82. A rare presentation of dengue posterior scleritis with choroidopathy

Main Author : Ng Christina WK
Co-Authors : Shelina OM, Nor Fariza N
Institution : Hospital Selayang

Objective: To report a case of dengue posterior scleritis with choroidopathy, which believed to be the first case after PubMed and Google Scholar search.

Methods: Case report

Results: A 65-year-old gentleman diagnosed with dengue fever presented with left blurred vision, metamorphopsia and periorbital pain one week later. Examination revealed counting finger vision, fibrinous serous detachment at macula with a pseudohypopyon and features suggestive of choroidopathy and scleritis on fundus fluorescein angiography and B-scan ultrasound. Dengue IgM was positive. He was treated with oral prednisolone 1mg/kg and tapered weekly. The lesion resolved and vision improved to 6/9 after 6weeks.

Conclusion: Posterior scleritis with choroidopathy is a rare manifestation associated with dengue. Even though dengue eye disease is usually self-limiting, high dose steroids may be indicated in patients with sight-threatening maculopathy. Corticosteroids had brought instant response and rapid recovery as evident in this case.

83. Knobloch syndrome phenotype in a patient of South Asian descent

Main Author : Yong Zheng WAI, MBBS
Co- Authors : Leo John, M. Narendran Muthukrishnan, FRCS (Glasgow)
Manoharan Shunmugam, FRCOphth
Institution : General Hospital Kuala Lumpur

Objective: To describe phenotype of Knobloch syndrome, which is a rare genetic syndrome in a South Asian descent patient.

Methods: A 9-years-old Indian boy with bilateral axial high myopia (-16D) presented with a total right (exudative/rhegmatogenous) retinal detachment with 2 prior failed surgeries but no phthisis. Fundus examination and complete physical examination was done.

Result: Physical examination revealed occipital alopecia, crowded teeth and high arch palate. Fundus examination showed white fibrillar vitreous condensation, a punched-out atrophic macular lesion and diffuse retinal pigment epithelial degeneration resulting in prominent choroidal vasculature.

Conclusion: This is the first documented presentation of the Knobloch syndrome in a patient of South Asian descent.

84. Screening of diabetic retinopathy using non-mydriatic fundus camera

Authors : Zunaina Embong, Goh Qun Yuan, Christine Anne Tan Bee Suan, Izleanna-Sofea Mohamad-Nordin
Institution : Universiti Sains Malaysia

Objectives: To determine the percentage of diabetic retinopathy among diabetes mellitus patients that referred to Diabetic Centre Hospital Universiti Sains Malaysia (USM) for screening of diabetic retinopathy using non-mydriatic fundus camera.

Methods: This is a cross sectional study conducted in Hospital USM. All diabetic patients that referred to Diabetic Centre Hospital USM for screening of diabetic retinopathy between October 2014 and December 2014 were included. Non-mydriatic fundus camera was used for screening of diabetic retinopathy.

Results: A total of 231 diabetic patients were screened. Majority of the patients had type 2 diabetes mellitus which accounts 99% (n = 229). About 1% (n = 2) has type 1 diabetes mellitus. The percentage of diabetic patients has diabetic retinopathy is only 9% (n = 21) and 78% (n = 180) of diabetic patients have no diabetic retinopathy. Out of 21 patients that have diabetic retinopathy, 86% (n = 18) had non proliferative diabetic retinopathy, 10% (n = 2) had diabetic maculopathy while 4% (n = 1) had proliferative diabetic retinopathy.

Conclusion: Early detection of diabetic retinopathy depends on educating patients with diabetes as well as their families, friends, and health care providers about the importance of regular eye examination even though the patient may be asymptomatic.

85. Severe ocular leptospirosis in the military: A case review

Author : Gan Yuen Keat
Co-Authors : Florence Santiagu, Sheena Mary Alexander
Institution : University Malaya, Queen Elizabeth Hospital, Kota Kinabalu

Ocular leptospirosis is a late complication of systemic leptospirosis which are caused by Spirochaetes. Its wide spectrum of clinical presentation, varying disease severity, and prolonged interval between the systemic and ocular disease poses a diagnostic challenge to ophthalmologists. Humans are usually infected through direct or indirect contact of damaged skin or mucous membranes with the urine and blood of infected animals. These routes of transmission are commonly prevented by having good sanitation, personal hygiene, and eradication of infected animal reservoirs. We discuss a case of a military personnel treated for uveitic leptospirosis and the need for high index of suspicion in these unique occupational risk groups where virtually all forms of conventional prevention methods for the disease are non-existent compared to civilians groups.

86. Multifocal central serous chorioretinopathy - A case series

Authors : Muhammad Najmi Khairudin, Hon Seng Wong
Institution : Pusat Perubatan Universiti Kebangsaan Malaysia

Objective: To highlight the responses of a case series of multifocal central serous chorioretinopathy to laser treatment.

Method: Case series

Result: Central serous chorioretinopathy (CSCR) is a chorioretinal disease, characterized by serous detachment of the neurosensory retina with focal and multifocal area of leakage at the level of retinal pigment epithelium predominantly affecting the macular area. The high spontaneous remission rate favours conservative management and lifestyle modifications as first-line therapeutic options. Persistent serous detachment warrants further treatment with laser or photodynamic therapy. We reported four cases of multifocal CSCR with foveal involvement, who presented with progressive blurring of vision; all cases have positive risk factors such as smoking and stressful lifestyle. Three patients have bilateral disease in which two of them received focal argon laser treatment for extra-foveal leakage and one received photodynamic therapy for sub-foveal leakage. One patient who has unilateral disease was also given focal extra-foveal argon laser treatment. The patient with unilateral disease achieved anatomic success post laser therapy and regained normal visual acuity. All the three patients with bilateral disease did not achieve anatomical neurosensory retina attachment even at 3 to 6 months post laser therapy. Their latest visual acuity maintained similar as at presentation. OCT and FFA findings of two of the bilateral disease showed areas of retinal pigment epithelium (RPE) atrophy and one is associated with pigment epithelium detachment.

Conclusion: Argon laser and photodynamic therapy are known as the treatment options of CSCR in cases of persistent and prolonged neurosensory detachment. Despite good prognosis, final anatomical success and visual acuity may vary among cases. Cases with RPE abnormalities showed poor response to treatment and poorer prognosis.

87. A rare case of choroidal metastasis secondary to renal cell carcinoma presenting as exudative retinal detachment

Main Author : Hor SM, MD (UPM)
Co-Author : Wong HS, MD (UKM), MS (Opthal)(UKM), Fellowship in Medical Retinal & Uveitis (Sydney)
Institution : Hospital Universiti Kebangsaan Malaysia

Objective: Renal cell carcinoma accounts for approximately 2.5% of all adult cancers. This tumor frequently metastasis to lung, liver, bone and subcutaneous tissue. Choroidal metastasis is uncommon. Here we describe a case of exudative retinal detachment secondary to renal cell carcinoma metastasis.

Method: A case report

Results: A 42-year-old Chinese man, known case of renal cell carcinoma with lung metastasis, had left eye blurring of vision for one month duration, which was worse upon waking up in the morning and cleared up after 1-2 hours. On examination, visual acuities were 6/6 in both eyes. No relative afferent pupillary defect. Left fundus showed inferonasal retinal detachment without macular involvement. No retina break, retinitis or choroidal lesion seen. Right eye examination unremarkable. Optical tomography of left eye showed subretinal fluid inferonasal to optic disc. Fundus fluorescein angiography of left eye showed a hypofluoresence lesion in early phase but had diffuse pin point leakage in late phase at the inferonasal quadrant, underneath the exudative detachment. Indocyanine green showed early hypofluoresence with late pin point hyperfluoresence in the same quadrant. A clinical diagnosis of exudative retinal detachment due to choroidal metastasis secondary to renal cell carcinoma was made. He was planned for cyber-knife radiotherapy of his left eye.

Conclusion: This case described the importance in recognising the rare presentation of exudative retinal detachment masquerading as choroidal metastasis secondary to renal cell carcinoma and its angiography features.

88. Bilateral macula detachment in a pre-eclamptic mother

Authors : Norihan I, Tai E, Mohtar I, Adil H
Institution : Universiti Sains Malaysia

Objective: To report a rare case of macula detachment in a postpartum mother presenting with pre-eclampsia.

Method: Case report

Results: A 33-year-old Malay lady with multinodular goitre (clinically euthyroid) and severe pre-eclampsia post emergency lower segment caesarian section was seen on day 4 postop after she developed sudden onset of bilateral painless blurring of vision, which worsened over 24 hours. The reduced vision was described as a central scotoma, more severe on the right eye than the left. There were no associated floaters, flashes of light, or metamorphopsia.

Ocular examination revealed right eye visual acuity 4/60 (pinhole 6/18), and left eye 5/60 (pinhole 6/18). Both eye visual acuity deteriorated to counting fingers on the next day. Relative afferent pupillary defect (RAPD) was absent. Anterior segment examination was unremarkable, with normal intraocular pressure. Fundus examination revealed bilateral macula detachment. Optical Coherence Tomography of the macula demonstrated detachment of the neurosensory retinal layer. Ophthalmology management was conservative as the mainstay of treatment is blood pressure optimization. Near complete resolution of subretinal fluid was achieved after 2 weeks, along with improvement in vision.

Conclusion: Sudden onset of exudative retinal detachment in a post-partum mother is an uncommon presentation of hypertensive disorder in pregnancy. Optimization of the blood pressure is often sufficient for complete resolution of this condition.

89. Silent occlusion - Effects of systemic lupus in the eye

Authors : Andrea BK, MBBS (MAHE), Hazlita MI, MS (Ophthal) (Mal), PhD(London), Wong Hon Seng, MS (Oph) (UKM), Fellowship in Medical retina & Uveitis (Sydney)
Institution : Hospital Canselor Tuanku Mukhriz (PPUKM)

Objective: To report a case of ocular ischaemia secondary to vasculitis initially presumed due to uncontrolled diabetes

Method: Case Report

Case Summary: A 39 year old lady was found to have signs of impending central retinal vein occlusion in her left eye (LE) evidenced by tortuous veins, scattered dot, blot and flame shaped haemorrhages with peripapillary cotton wool spots. Her vision however was good at 6/6, N5. Patient is a known diabetic on insulin and is obese. Two months prior she was diagnosed with right eye (RE) ocular ischaemic syndrome. RE vision is vague PL with a positive right relative afferent pupillary defect. There is rubeosis iridis in the RE. Gonioscopy shows normal angles. A

white cataract obscures the RE fundus view however B-scan shows a flat retina with vitreous haemorrhage indicating retina proliferative changes consistent with ischaemia. Systemic examinations were unremarkable. Fluorescein angiogram of the LE revealed poor vascular filling associated with peripheral vasculitis. Blood investigations revealed a positive serum ANA. Based on these findings she was diagnosed as a left occlusive vasculitis with impending CRVO probably secondary to systemic lupus.Patient was then referred to the rheumatology team and was pulsed with intravenous methylprednisolone under strict diabetic monitoring. Her left eye vision has remained stable.

Conclusion: Ocular ischaemia can be due to various causes. Thorough clinical assessment and investigations are crucial to arrive at the correct diagnosis. Occlusive vasculitis may present silently thus a high level of suspicion is required particularly in young patients.

90. PORT - A rare presentation of toxoplasmosis in the eye

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Hazlita MI, MS (Ophthal) (Mal), PhD(London)
Wong Hon Seng, MS (Oph) (UKM), Fellowship in Medical retina & Uveitis (Sydney)
Institution : PPUKM (Hospital Canselor Tuanku Muhriz)

Objective: To report a case of punctate outer retinal toxoplasmosis (PORT) in an immunocompromised patient

Method: Case report

Case Summary: An 80 year old Indian lady, with underlying ocular lymphoma, on maintenance chemotherapy, presented with right eye (RE) painless and progressive blurring of vision for three months. Vision on presentation was RE 6/60, N 24, left eye (LE) 6/36, N18. RE anterior examination revealed a pseudophakic eye with anterior chamber cells of 2+, giant cells on the intraocular lens and vitritis 2+ with sheaths of vitreous condensation. Funduscopy showed retinitis inferior and nasal to the optic disc. The LE, already proptosed due to the primary ocular lymphoma, later also developed occasional anterior chamber cells with vitritis. Retinitis was seen present adjacent to an old scar temporal to the macula.

Fundus Fluorescein Angiography (FFA) showed hot discs in both eyes and a pin point lesion in her left eye. Vitreous tap done showed no malignant cells. Viral screening was done which produced negative results. Serum toxoplasma investigations yielded positive results for Toxoplasma IgG but Toxoplasma IgM was equivocal. She was subsequently treated with oral Azithromycin 500mg OD which showed immediate positive response.

Conclusion: The immunocompromised state of an individual can give rise to many devastating opportunistic diseases. PORT is such an example, which is seen mainly in immunocompromised individuals. Fast and precise diagnosis is of utmost importance in treating and preventing complications of the disease.

91. Dengue-related optic neuropathy and foveolitis

Authors : Bin Hoo Teo, Krishnalatha A/P Buandasan, Francesca Martina Vendargon
Institution : Hospital Sultanah Nora Ismail, Batu Pahat

Purpose: To describe a case of sudden onset blurring of vision of both eyes with bilateral optic disc swelling and maculopathy following dengue fever.

Method: Case report

Result: A 38 year-old lady eight days after being diagnosed with Dengue fever presented with sudden onset painless blurring of vision of her right eye (RE). RE visual acuity was 6/60 and left eye visual acuity was 6/9. Anterior segment examination was normal in both eyes (BE). Fundus examination revealed bilateral optic disc edema with dot retinal hemorrhages and cotton wool spots over the macula. There was macular edema (about 2 disc diameter) with a yellowish-orange discrete lesion on the RE fovea. RE colour desaturation also reduced compared to the left. She was treated with intravenous methylprednisolone 1g OD for 3 days, followed by oral prednisolone (1mg/kg/day) tapered over six weeks. Her visual acuity improved significantly (6/6) for BE after three days of treatment despite having persistant paracentral scotoma. At 2 months review, visual acuity remained 6/6 for both eyes. The scotoma RE was getting smaller while colour vision still decreased over RE. Both optic discs and macula appeared normal.

Conclusion: Dengue fever is endemic in South-East Asia. A myriad of ocular findings associated with dengue was reported. We, as ophthalmologist in this region, should be aware of diverse ocular presentations associated with dengue. Further studies are essential to elucidate the mechanism of dengue-related ocular complications as well as the best modality of management in these patients.

92. Outcome of vitrectomy for tractional retinal detachment in type 2 diabetes mellitus

Authors : Ling JL[1], Evelyn-Tai LM[1], Goh Y[2], Wan-Hazabbah WH[1], et al.
Institution : [1]Universiti Sains Malaysia, [2]Hospital Sultanah Bahiyah, Alor Setar

Introduction: Tractional retinal detachment (TRD) is a late complication of proliferative diabetic retinopathy. It occurs due to traction at the sites where fibrovascular membranes are attached to the posterior vitreous.

Objective: To report the outcome of vitrectomy in type 2 diabetes mellitus patients with TRD

Methods: We conducted a retrospective study of all type 2 diabetes mellitus patients with TRD who underwent vitrectomy at Hospital Sultanah Bahiyah Alor Setar between January to December 2014, who had a year of follow-up post-operatively.

Results: A total of 135 vitrectomies were performed for diabetic complications. Of these, 83 patients had vitrectomy for TRD, of which 70 fulfilled the inclusion criteria. The mean age was 51 years, with equal gender distribution. Approximately 60% were on insulin. Other systemic conditions included hypertension (90.0%), chronic kidney disease (30.0%) and ischaemic heart disease (8.6%). The majority (90.0%) had TRD involving the macula. Initial visual acuity was better than 6/18 in 6 patients (8.6 %), between 6/18 and 6/60 in 14 patients (20.0 %) and 6/60 or worse in the remainder. At 1 year follow up, the retina was flat in all patients. The visual

acuity had improved in 49 patients (70.0%), remained the same in 10 (14.3%), and worsened in the remainder.

Conclusion: Tractional retinal detachment carries a significant visual morbidity. Although vitrectomy can usually achieve anatomical integrity of the retina, the functional outcome is less assured. Intensification of primary prevention and screening for complications of diabetic retinopathy may be warranted to reduce the visual complications of the disease.

93. Ocular toxoplasmosis; A silent threat to all age

Authors : Gurusamy SM ,Ng SL, Saidin NM, Foo JML
Institution : Hospital Taiping

Introduction: Toxoplasmosis has always been a challenge to the medical world and the ophthalmology fraternity took nearly 50 years to make a connection between posterior uveitis and toxoplasmosis. It is a zoonotic infection caused by parasite ; *toxoplasma gondii* with hosts mainly in cats.

Objective: To report case series of ocular toxoplasmosis in Ophthalmology Department Hospital Taiping over a span of 6 months in year 2015 involving 3 male patients from different extremes of ages.

Method: Case series

Result: Ages of the 3 patients ranged from the youngest age of presentation of 5 years old to 46 years old. All presenting with the history of mere blurring of vision with no definite contact with cats. The diagnosis was made purely based on clinical assessment and treatment were initiated, which was then confirmed with two fold serological investigations. Similiarity of presentation of no systemic involvement with high clinical suspicion was the main stay of initiation of treatment. All patients responded to medication and had dramatic recovery with good visual potential.

Conclusion: Accurate and prompt treatment influences the post intervention visual prognosis . As the most common findings are neuroretinitits in early stage and scarring in older cases raises suspicion of the treating doctor in initiation of medication. Serological parameters are usually used as adjuncts to the diagnosis.

94. White dots syndrome - Which one is it?

Authors : Hanisah AH, Ayesha MZ, Hazlita MI, HS Wong
Institution : Universiti Kebangsaan Malaysia Medical Centre

Objective: To report a rare case of unilateral *acute posterior multifocal placoid pigment epitheliopathy (APMPPE).*

Method: Case report

Results: A 23 year old,Chinese lady presented with acute left eye blurring of vision associated with paracentral scotoma and photopsia. She had history of flu one week prior to presentation. There was no fever or any neurological symptoms. She denied contact with tuberculosis patient.On examination, visual acuity was 6/9 OD and 6/18OS.Left eye anterior segment examinations were normal. Fundus examination revealed multiple yellow-white subretinal

placoid lesions of variable size involving macula and peripheral retina. There were no other signs of inflammation. Right eye and systemic examinations were unremarkable. Viral serology showed positive HSV 1 and 2 IgM. Other infectious markers were negative. Mantoux test showed anergy.Optical Coherence Tomography showed disruption of the photoreceptor layer at the area involved and thickened choroid. Humphrey Visual Field showed multiple area of scotoma consistent with the lesions. Fundus fluorescein angiogram of the left eye showed patches of early hypofluorescence with late hyperfluoresence. The multiple hypofluoresence lesions were more prominently seen in Indocyanine Green Angiography. APMPPE *was the most probable diagnosis in this patient.* She was started on immunosuppressive dose of oral prednisolone which was then tapered slowly. After 2 weeks, her left eye vision improved to 6/9 vision with complete resolution of subretinal placoid lesions. After 5 month of follow up, the right eye remained unaffected.

Conclusion: APMPPE is classically described as a bilateral disease with a good visual acuity outcome, however this case highlighted the rare presentation of unilateral disease.

95. Endophthalmitis in Hospital Muar: A case series

Main Author : Tan Shao Sze
Co-Authors : Ngim You Siang, Ng Hui Ruan, Nor Areen Binti Abdul Wahab
Institution : Hospital Pakar Sultanah Fatimah, Muar

Objective: To report the etiology, clinical presentation and visual outcome of patients with endophthalmitis in Hospital Muar within a 1-year period.

Methods: A retrospective review of case records of patients who were diagnosed and treated for endophthalmitis in a secondary hospital from 1 Jan 2015 - 31 Dec 2015.

Results: A total of 11 case records of patients were reviewed. 5 patients had systemic predisposition including diabetes and sepsis. 2 were from post-operative cataract surgery including 1 referred from a private centre, 2 were due to trauma, 3 were secondary to corneal ulcer, 3 were endogenous, and 1 was of unknown etiology. Of those endogenous in origin, 1 was femoral-catheter related, 1 was from upper limb cellulitis and 1 from perianal abscess. 9 patients were treated with intravitreal antibiotics. 5 patients had positive cultures from blood, cornea or vitreous including 1 methicillin-resistant *Staphylococcus aureus* (MRSA). Only 1 patient underwent pars-plana vitrectomy. 3 patients underwent evisceration and 1 patient underwent enucleation of the affected eye. Visual outcome in 10 patients remained poor (3/60 or worse). Only 1 patient reported a best-corrected visual acuity (BCVA) of 6/18.

Conclusion: Endophthalmitis is an uncommon but potentially visual-threatening condition which has various etiologies and presentations. Post-operative endophthalmitis tend to have better visual prognosis compared to other causes, however in most cases the visual outcome remains poor.

96. Sludgy vessels but leaky piping

Main Author : Kenneth Rohan Lee C K
Co-Authors : Nor Fadhilah M, M.Med (Ophth)
Visvaraja Subrayan, FRCOpth, FRCS
Institution : University Malaya

Objective: To report an unsual primary presentation of bilateral exudative retinal detachment with underlying polycythaemia rubra vera.

Case report: A 48 year old gentleman with hypertension and ischaemic heart disease presents with complaints of bilateral blurring of vision for 2 years. He is a heavy smoker of 35 pack years and presents with a right visual acuity of 6/60, left eye of HM and a positive left RAPD. Anterior segment showed slightly tortous bilateral conjunctival vessels. Anterior chamber was deep, quiet with bilateral nuclear sclerosis. Fundi revealed pink discs with shallow chronic inferior retinal detachments extending to the macular region and pigmentary changes in the periphery. Venous tortousity seen bilaterally. Patient was pink with no cervical lymphadenopathies. The ESR was 8mm/hr, Infective screen (syphilis, retroviral, tuberculosis) was negative but a positive speckled pattern of antinuclear antibodies of 1:4 titre was found. The haemoglobin was 21.7 g/dl with haematocrit of 0.65 but normal white blood cell and platelet counts. A contrasted Computed Tomography of the Brain was normal with no findings of aneuryms, fistulae within the internal carotid branches. The Fundus Fluoroscein angiography showed a delayed perfusion and paramacular leakages and venous tortousity.

Conclusion: A probability of low flow central venous obstruction leading to bilateral 'missed' central retinal venous occlusion as a result of polycythaemia rubra vera.

97. Malignant hypertension - Serial images from presentation to resolution

Main Author : Jung Se Ji (MBChB)
Co-Author : Ian Yeo
Institution : Singapore National Eye Centre

Case presentation: A 42-year-old Chinese gentleman presented with sudden onset of blurring of vision for a week. Patient was diagnosed with hypertension four years prior to presentation and was not on antihypertensive therapy. On examination, visual acuity on right eye was counting fingers at 30cm and left eye was 6/9 with pinhole. Intraocular pressure on air puff was 19mmHg in right eye and 20mmHg in left eye. On biomicroscopy examination, bilateral papilloedema, cotton wool spots, flame- and blot-shaped haemorrhages and subretinal fluid at the macula were noted along with chronic hypertensive changes, including venous tortuosity and arteriovenous nicking. Physical examination revealed a blood pressure of 193/120mmHg. Patient was immediately referred to emergency department and was prescribed amlodipine 5mg OM and telmisartan 20mg OM. Symptoms slowly improved as hypertension was controlled. One month after presentation, visual acuity improved gradually to 6/12 in right eye and 6/9 in left eye. Fundus photographs and optical coherence tomography scans were done to appreciate the progression of events.

Discussion: Malignant hypertension is a rare condition, which may present with an ophthalmic symptom. Although this is not common in a middle-aged man, it is important to keep malignant hypertension in the differentials. Other differentials of papilloedema also need to be excluded. This is an emergency situation and needs to be diagnosed promptly to manage the patient ideally.

98. Conservative management of premacular subhyaloid haemorrahge in a patient with aplastic anaemia: A case report

Main Author : Aliff Irwan Cheong, MBBS
Co-Authors : Norlina Ramli MMed (Ophthal), FRCOphth(UK)
Nurliza Binti Khaliddin MMed (Ophthal), MRCS (UK)
Institution : Universiti Malaya

Purpose / Objective: To report a case of conservative management of premacular subhyaloid bleed in aplastic anemia patient.

Method: Case report

Case presentation: Subhyaloid haemorrhage is a known complication in patients with haemorrhagic disorders. Management depends on how incapacitated the patient is from the visual loss. A 60-year-old man, newly diagnosed with acquired aplastic anemia, presented with sudden reduction of vision in both eyes of 3 weeks duration, worse in left eye. He had a prior history of fatigability and breathlessness on 4 weeks prior. He received a platelet transfusion on two occasions. A few days later he noticed the drop in vision. Best corrected Visual acuity was 6/24 OD and 2/60 OS. Anterior segments are unremarkable and pupil reflex normal. On funduscopy; extensive superficial and pre-retinal haemorrhage were present in the posterior pole. A subhyaloid bleed was evident on left macula region with a double ring sign measuring 3.6mm x 2.16mm. Spectral Domain Optical Coherence Tomography noted internal limiting membrane cleavage plane as the site of haemorrhage. Refusing any surgical interventions, he opted for conservative management. The last follow up 8 weeks after presentation, subhyaloid bleed had reduced to 2.4mm x 1.2mm and his visual acuity improved to 6/9 OD and 6/60 OS.

Conclusion: Primary aim of treatment is removal the premacular haemorrhage, however treatment choice must be tailored depending individuals. Conservative management usually results in of spontaneous reabsorption. YAG Laser posterior hyaloidotomy was an option however patient refused. Vitrectomy of preretinal haemorrhage was not a feasible option in a patient with low platelets.

99. Dengue maculopathy: A case report

Authors : Jaya Vani Ettikan, Leow Sue Ngein , Sureshkumar
Institution : Hospital Sultanah Aminah, Johor Bharu

Objective: To report a case of bilateral dengue maculopathy

Method: Case report and literature review

Case History: 28 years old Chinese lady whom was treated as Dengue fever presented with sudden onset of blurring of vision of both eyes on day 7 of her illness. On examination her vision was 5/60 OD and 6/60 OS. Fundus examination showed macula edema bilaterally. Optical coherence topography showed both eyes retinal pigment epithelium elevation with fluid collections. Fundus fluorescein angiography showed multiple areas of leakage from venous during late venous phase. She was diagnosed as both eyes dengue maculopathy and was treated with oral prednisolone. Upon completion of her treatment her vision improved.

Discussion: Dengue maculopathy is a complication of dengue fever. Even though it is rare, it causes morbidity among the working age group. It ranges in severity and can be debilitating as in this case with severe vision loss. Patient usually manifests around day 7 after the febrile illness and it corresponds with the nadir of thrombocytopenia. There is a risk of residual visual impairment and there is no definite treatment. The pathology of dengue maculopathy is immunogenic in origin and hence the use of high dose steroids hastens the recovery especially in bilateral severe involvement.

Conclusion: With the rising incidence of dengue fever, one could postulate that the morbidity related to dengue maculopathy would be significant. Further studies related to predictors of dengue maculopathy such as the level of thrombocytopenia and timeframe of manifestation may identify patients at risk and hence, the possibility of early prevention with steroid.

100. Multiple serous detachment in ocular tuberculosis

Authors : ALS Lim (MD, M.Surg. Ophthal, UKM), M Ihsan J (MBBS)
Institution : Hospital Queen Elizabeth I, Kota Kinabalu

Objective: To report a case of multiple serous retinal detachment in a case of ocular tuberculosis.

Method: Case report

Results: A 40 year old lady who works as a nurse in the chest clinic, presented with bilateral painless blurring of vision for 4 days which was associated with photophobia and floaters. There was no chronic cough, haemoptysis or constitutional symptoms. She did not have any past history of ocular trauma or intraocular surgery. Her vision was 6/120 OD and 6/60 OS. Examination showed that there were non-granulomatous panuveitis with bilateral disc swelling. In addition, there were multiple serous retinal detachment involving the posterior pole of both eyes. There was no vasculitis, retinitis, choroiditis or granuloma seen. Fundus fluorescein angiogram showed multiple pin-point hyperfluorescence over the posterior pole of both eyes which suggestive of choroiditis. Uveitic work up revealed positive Mantoux test, 12mm. However, her chest X-ray was clear and erythrocyte sedimentation rate was 16 mm/hr. Otherwise, her other infective screening for syphilis, leptospirosis, bartonellosis, meliodosis were all negative. Autoimmune screening was normal as well. Her blood pressure fell within normal range. She was treated as presumed ocular tuberculosis (TB) with anti-TB drugs and topical steroids. She responded well with complete resolution of panuveitis after 3 weeks of anti-TB treatment. Her vision improved to 6/7.5 bilaterally. Anti-TB regime were prescribed to her for 9 months.

Conclusion: TB is a great imitator. In this case, it presented as an atypically case of multiple serous retinal detachment with bilateral disc swelling. It is crucial to screen for TB in all cases of inflammatory eye conditions.

101. Evaluation of enterior segment parameters before and after scleral buckling surgery for retinal detachment

3rd Prize

Main Author : Andrew Tsai
Co-Authors : Chee Wai Wong, Marcus Ang, HM Htoon, et al.
Institution : Singapore National Eye Cente

Purpose: To evaluate changes in anterior segment parameters following scleral buckling (SB) surgery for retinal detachment

Methods: This was a prospective, observational, non-interventional study of fourteen eyes with retinal detachment. AS-OCT was performed preoperatively and at various time points up to 12 months after surgery. The Zhongshan Angle Assessment Program was used to analyze the AOD (angle opening distance), TISA (trabecular iris space area), ACW (anterior chamber width), ACV (anterior chamber volume) and ACD (anterior chamber depth).

Results: Participants ranged from 29 to 77 years old with a male preponderance (64%). All patients were phakic. Repeated measures analysis with linear mixed model adjusted for age, gender, time, intraocular pressure (IOP) and other anterior segment biometric parameters showed that AOD250, AOD500 and AOD750 showed significant decrease post SB surgery and remained stable through 12 months ($p=0.001$, $p=0.003$ and $p<0.001$ respectively). Similar trends were observed for TISA500 and TISA750 ($p=0.002$ and $p<0.001$ respectively). Mean IOP increased from 10.9±5.1 mmHg (pre-operatively) to 17.4±4.2 mmHg at month 1; it then decreased but never returned to baseline. At month 12, mean IOP was 14.6±4.4 mmHg.

Conclusions: There is significant narrowing of anterior segment parameters which was mirrored by a slight rise in IOP up to 1 year after SB surgery. Clinicians should be aware of these changes especially in eyes which are anatomically predisposed to angle closure.

102. Bilateral posterior scleritis - Do not miss it!

Authors : Wu SY[1,2] , Hanizasurana H[1] , Loo AVP[2]
Institution : [1] Hospital Selayang, [2] University Malaya

Purpose: To report a case of Bilateral Posterior Scleritis with Recurrent Optic Disc Swellings, Bilateral Exudative Retinal and Choroidal Detachments.

Methodology: Case Report

Results: 58-year-old lady, with Grade 3 Stage 1 breast carcinoma, whom underwent surgical excision, completed chemotherapy and radiotherapy, currently in remission, presented with right blurred vision, floaters and dim illumination. She had bilateral optic discs swelling 10 months prior, and was treated with systemic steroids. Upon this presentation, right vision 6/24 left 6/18. Pupils were reactive with no Relative Afferent Pupilary Defect. Anterior segment was quiet and unremarkable. Fundus examination showed bilateral hyperemic swollen optic discs with dilated tortuous vessels. There were bilateral exudative retina and choroidal detachments. Optic nerve function test was impaired. Cranial nerves, neurological and systemic examinations were otherwise unremarkable. There were no palpable breast lumps, lymphadenopathy or organomegaly. Urgent MRI orbit showed bilateral intraocular mural masses measuring 4mmx7mm (right) and 4mmx3mm(left) with thickened detached choroidals. B scan showed

thickened sclera of 2.87mm(right) and 2.83mm(left). Flourescein Fundus Angiography showed bilateral hot discs and multiple pin-point hyperflourescence suggestive of bilateral posterior scleritis. She was treated with systemic steroids. Her vision and optic nerve function improved. With these findings, secondary metastases from the breast was a less likely diagnosis. There were no recurrence during follow ups.

Conclusion: Bilateral exudative retinal detachment in patients with treated breast carcinoma is challenging. One should never conclude that it must be due to metastases. Instead, thorough investigations is needed to rule out other treatable causes such as posterior scleritis.

103. Rhegmatogeneous retinal detachment associated with active cytomegalovirus retinitis; can we avoid vitrectomy (case report and discussion)

Main Author : Wanni G
Co-Authors : Mushawiahti M, Amin A, Bastion MLC, et al.
Institution : Hospital Universiti Kebangsaan Malaysia

Objective: To report a case of active retinitis related retinal detachment treated with sclera buckle.

Method: Case report

Case summary: Cytomegalovirus is the most common ocular opportunistic infection in acquired immunodeficiency syndrome. Retinal detachment occurs in 17-34% of CMV retinitis patient. A 41-year-old patient known case of retroviral disease presented with both eyes progressive blurring of vision and floaters for a month. Best corrected visual acuity of the right eye was 6/9, and left eye was 6/18. Clinical examination was highly suggestive of active CMV retinitis. Vitreous sampling was also positive for Cytomegalovirus. He was treated medically with bilateral Ganciclovir 2mg intravitreous injection and Tab. Valganciclovir 900mg BD for 6 weeks.

Retinitis improved with treatment. However, at 3 weeks on antiviral, he was found to have superior retinal detachment sparing the macula in the right eye. Both eyes vision were good, 6/9. Retinitis was still fairly active with extensive area of retinitis and haemorhages. There were combination of peripheral and fairly posterior retinal tear. He underwent sclera buckling procedure with subretinal fluid drainage and intraocular gas injection. 2 months post surgery, his visual acuity remain good at 6/12. The detached retina was completely resolved and retinitis continue to respond to treatment.

Vitrectomy has always been the best option for retinitis related retinal detachment. However, in this particular case, few issues has to be considered. Young patient, no vitreous detachment, active necrotic retinitis, high risk of scarring and extremely good vision. Scleral buckle was opted due to those factors. This author is highlighting the possible role of sclera buckle only as the primary procedure in retinitis related RD is a possible option.

Key words: cytomegalovirus retinitis, AIDS, rhegmatogeneous retina detachment, sclera buckle

104. Early treatment of neuroretinitis with topical non steroidal anti inflammatory drug

Authors : Shirlyna N, Adil H
Institution : Universiti Sains Malaysia

Objective: To report the good and fast outcome of neuroretinitis patient treated with topical non steroidal anti inflammatory drug(NSAID).

Method: Case report.

Result: A 14 years old Malay boy presented with left eye progressive painless reduced vision for 5 days duration. The reduced vision was affecting central vision and associated with metamorphopsia. Patient also had daily contact with cats. There was history of fever 2 weeks prior to reduce vision associated with axillary lymph nodes swelling. Ocular examination revealed visual acuity of right eye 6/6 and left eye 6/24 (pinhole same). Relative afferent pupillary defect (RAPD) was present. Anterior segment examination was unremarkable, with normal intraocular pressure. Fundus examination showed signs of neuroretinitis including optic disc swelling and hyperemia. Focal retinitis was seen at temporal to the optic disc. The macula is edematous and the exudates were seen as macula star. Optical Coherence Topography of macula showed gross macula edema. Patient started on Nepafenac ophthalmic solution only on left eye prior to results of blood investigation. There was marked improvement within three days with improvement of visual acuity to 6/9 and OCT macula showed marked improvement of macula edema. Results of blood investigation for infective causes are still pending.

Conclusions: Usage of topical NSAID in early treatment for neuroretinitis appeared to be safe and beneficial while deciding for definitive treatment.

105. Central retinal artery occlusion in acute dysbarism injury

Authors : Ahmad Razif Omar[1,3], Wan Hazabbah WH[1,3],
Tuan Hairulnizam T Kamauzaman [1,2]
Institution : [1]Department of Ophthalmology, Universiti Sains Malaysia
[2]Department of Emergency Medicine, Universiti Sains Malaysia
[3]Hospital Universiti Sains Malaysia

Objective: To report a rare case of exclusively central retinal artery occlusion in acute decompression illness after scuba diving activity.

Method: Case report

Results: A 29-year-old gentleman, presented with sudden onset right eye painless, blurring of vision soon after rapid ascent in scuba diving at 30 feet depth. It was associated with instantaneous headache with no other neurological deficit and joint pain. On physical examination, his right eye acuity was 6/60 with RAPD positive grade II. Optic nerve function was slightly decrease. Posterior segment examinations revealed cherry red spot with palish macula. However no focal arterial narrowing and optic nerve lesion seen. Hyperbaric oxygen therapy (HBOT) started within 24 hours of illness and the vision had remarkably improved from 6/60 into 6/7.5 with no RAPD after completed 2 cycles Hyperbaric Oxygen Therapy (HBOT).

Conclusion: Exclusively ocular symptom is a rare presentation in decompression illness. In this case, central retinal artery insult with classic signs of central retinal artery occlusion occurred without any neurological and musculoskeletal involvement. However, it was reversible to premorbid condition by HBOT alone.

106. Traumatic necrosis of the retina

Authors : Swee Ying Choo, MS Ophth, Anis Baidura Azal, MBBS,
Joseph Alagaratnam, MS Ophth, Manoharan Shunmugam, FRCOphth.
Institution : Hospital Kuala Lumpur

Objective: To report a case of traumatic liquefactive necrosis of the retina

Method: Case Report

Result: We report an uncommon case of non-infective (liquefactive) necrosis of the retina following blunt trauma. A 5-year-old Sabahan girl was referred to our paediatric vitreoretinal unit at Hospital Kuala Lumpur for a traumatic subclinical rhegmatogenous retinal detachment in her right eye. On examination, her visual acuity was 6/36 (BCVA 6/24) in her right eye and 6/6 in the left. There was no relative afferent pupillary defect. The retinal findings showed an area of loss of retinal tissue at the superotemporal quadrant of the retina, measuring 6 Disc Diameter (DD) x 5 DD, with a surrounding rim of subretinal fluid, choroidal rupture at temporal macula and vitreous haemorrhage inferiorly. She was subsequently examined under general anaesthesia and a barricade laser around the area of retinal tissue loss was performed. One month post trauma, the commotio retinae and vitreous haemorrhage resolved and her vision improved. To date, she is still being followed up without the need for vitrectomy or any buckling procedure.

Conclusion: Acute non-infective retinal necrosis can occur with ocular trauma and should be monitored closely for progression. The nature of the break formation means there is no traction on the retina and so conservative management suffices with good prognosis if the macula is spared as was the case with this patient.

107. Postpartum ocular Behcet's Disease: A case report

Main Author : Nurulhuda A
Co-Authors : Azian A, Haniza Surana H
Institution : Hospital Selayang

Objective: To report a case of probable Behcet's disease (BD) presenting with bilateral panuveitis during postpartum period

Method: Case report

Summary of the result: A 28-years old lady experienced gradual bilateral blurring of vision at 2 weeks post-delivery. She only sought treatment 2 months later as her right vision suddenly worsened. She has no known medical illness. At presentation, her right vision was 6/60 and left vision was 6/36. There were bilateral panuveitis with 360 degree posterior synaechiae. There was also left cystoid macular oedema. Uveitic and infective screenings were unremarkable. She was treated for bilateral uveitis, however she responded slowly to oral prednisolone and reactivation of bilateral intermediate uveitis with right hypopyon occurred while on tapering dose of prednisolone.

Subsequently, diagnosis revised as she started to develop multiple oral ulcers, pustular-like rashes and erythema nodosum following an episode of flu.

Fundus fluorescein angiography revealed bilateral hot optic disc, small vessel vasculitis with areas of capillary non-perfusion. T. mycophenolate mofetil was added and her case was co-managed with rheumatology and dermatology team for probable Behcet's disease. Bilateral intraocular inflammation reduced with resolution of left macular oedema. Her vision improved to 6/36 on the right and 6/18 on the left.

Conclusion: Pregnancy is not proven to alter the nature of BD. Its presentation as uveitis in postpartum is rare. As a vaso-occlussive disease, timely treatment improve visual and systemic outcome. Management is challenging as most patients require second line immunosuppression which is not safe for breastfeeding mother

108. Parinaud's oculoglandular syndrome secondary to cat scratch disease

Authors : Munirah AR(MD), Mushawiahti M (MS(Ophthal) , Hazlita I (MS(Ophthal)
Institution : National University of Malaysia Medical Centre

Objective: To illustrate a case of Parinaud's oculoglandular syndrome secondary to Cat scratch disease.

Method: Case report

Result: A 14 years old healthy Malay girl presented with left eye redness associated with tearing, pain and left periauricular swelling for one week. She had one day history of fever prior to that. Her family has a cat at home. There were no cough, loss of weight or loss of appetite. Examinations over left eye revealed a visual acuity of 6/24 with pin hole 6/9 , granulomatous nodular swelling with central creamy white abscess over nasal aspect of the conjuctiva and chemosis over temporal aspect. There was a firm, well defined, tender periauricular lymph node swelling about 10 cm in size. Serology sent for Bartonella Hensalae shows elevated IgG and IgM of recent infection. Investigations revealed negative for tuberculosis and syphilis. She was treated with 2 weeks course of oral ciprofloxacin and topical maxifloxacin. Subsequently after 2 weeks, the central conjunctiva abscess resolved leaving mild injected conjunctiva. The periauricular lymph nodes regressed to 2 cm in size and visual acuity improved to 6/9.

Conclusion: Parinaud's oculoglandular syndrome is an atypical form of Cat scratch disease which occurs in 3-7% of cases. It presents as unilateral granulomatous conjunctivitis with ipsilateral periauricular or submandibular lymph nodes swelling 1-2 weeks after exposure to an infected cat with Bartonella Hensalae. Common other organism relates to Parinaud's oculoglandular syndrome are Mycobacterium tuberculosis, Sporotrichum schenckii and Trepenoma pallidum. In mild cases it can resolve by itself by 4 weeks but in severe case a systemic antibiotic is needed for treatment.

109. Rare manifestation of bilateral retinal pigment epithelial detachment in systemic lupus erythematosus

Authors : Tan H H, Ling K P, Haslina M A
Institution : Hospital Sultanah Bahiyah, Alor Setar

Purpose: To report an unusual ocular manifestation associated with systemic lupus erythematosus (SLE).

Methods: Case report.

Results: A 53-year-old man who known case of SLE treated with oral prednisolone and hydroxychloroquine. He presented with both eyes blurring of vision with center scotoma. Fundus examination revealed a bilateral large pigment epithelial detachment (PED). Optical coherence tomography (OCT) supported the diagnosis of PED. Multiple intravitreal ranibizumab (0.5mg/0.05ml) injections were administered in both eyes indicated by occurrence of the subretinal fluid with enlargement of the PED whereby Indocyanine green angiography (ICG) revealed no evidence of leakage or polyps. There was some or near complete resolution of the subretinal fluid after each injection of intravitreal lucentis but refractory when he developed flare up of the systemic disease. His visual acuity was 4/60 on the right eye and 6/24 on the left eye with presence of large PED in his last follow up. Photodynamic therapy was not given considering of risk of retinal pigment epithelial rip.

Conclusions: PED is rare manifestation in SLE and worsening of the PED is an indicator for active disease.

110. The great pretender

Authors : Faisal A Hassan (MBBS Manipal), ALS Lim (MD, M.Surg Opthl UKM)
Institution : Hospital Queen Elizabeth, Kota Kinabalu

Objective: To report a case of neurosyphilis with ocular manifestation in a late latent congenital syphillis.

Method: Case Report

A 9 year old girl, presented with 1 month history of peripheral corneal oedema. Initially, she treated as stromal keratitis secondary to viral cause. There was no response to her treaatment and in one week her vision worsened to 6/12 OD and 6/15 OS, with injected conjunctiva. Her left cornea developed diffused patchy opacities, while her right eye developed new eccentric corneal oedema involving the stromal layer. There were inflammatory cells in the anterior and posterior segments. Bilateral fundus examination showed fibrosis at the optic disc margins, with vasculitic lesions. However there were no pigmentary changes noted over the retina. Systemic review found that she had low grade fever and generalized lymphadenopathy for 4 days duration. Uveitic work up showed positive VDRL and TPHA, in both blood serology and CSF. Clinically she had a palpable spleen of 2cm, but no other signs of frontal bossing, saddle nose or Hutchinson's teeth. She was then treated as neuro-syphilis, with IV C-penicillin for 2 weeks. Her vision improved to 6/6 bilaterally and resolution of panuveitis upon completion of treatment. Contact tracing came back wit positive syphilis serology among her family members.

Conclusion: Ocular syphilis is capable of manifesting as various forms of ocular inflammation. Ophthalmologists should have high degree of suspicion for syphilis in a case of ocular inflammation of unknown etiology, especially in the paediatric age group.

111. Outcomes of surgery for primary proliferative vitreoretinopathy with retinal detachment

Authors : Kelvin Teo, MMed (Ophth), Shu Yen Lee, FRCSEd(Ophth)
Institution : Singapore National Eye Centre

Purpose: To report the anatomical and functional outcomes of surgery of primary proliferative vitreoretinopathy (PVR) with retinal detachment and to investigate features associated with anatomical and functional outcomes.

Methods: The study included 71 eyes who underwent surgery for primary PVR between Feb 2009 and December 2013. Outcome measured included best corrected visual acuity and absolute anatomical success defined as retina attached after only 1 surgery.

Results: The followed up at a median of 11.6 months. Visual acuity of 20/200 or better was recorded in 19(26.7%) patients at 6 months postoperatively. Postoperative visual acuity improved in 40(56.3%) eyes, remained stable in 20(28.1%), and worsened in 11(15.5%) eyes. Six-month follow-up data were obtained for all 71 eyes; absolute anatomical success in 48(67.6%) eyes and 68(95.7%) remained attached at last follow up. Clinical factors significantly affecting chance of absolute anatomical success included; duration of symptoms ($p=0.048$), anterior PVR ($p<0.01$), PVR >6 clock hours ($p=0.03$) and complete retinal detachment on presentation ($p=0.03$). Factors significantly associated with final vision of worse than 20/200 included; PVR >6 clock hours ($p<0.01$) and complete retinal detachment ($p<0.01$). Factors significantly associated with worse final vision included; PVR >6 clock hours ($p<0.01$), pre-operation choroids ($p=0.047$) and pre op visual acuity ($p=<0.01$).

Conclusions: In the management of primary PVR with retinal detachment, a majority of patients can achieve anatomical success, however because of the complexity and pre-existing damage to the retina, many do not achieve good functional outcomes.

112. Honey – A miracle for macular problems in post-menopausal women?

Authors : Premala-Devi S[1,2], Noorlaila B[1,2], Raja Norliza RO[2], Zunaina E[1]
Institution : [1] Universiti Sains Malaysia , [2] Hospital Melaka

Objective: To compare mean macular thickness with and without honey supplement in post-menopausal women.

Methods: This is a prospective randomised controlled trial whereby 60 post-menopausal women were selected and randomised into 2 groups; honey and no honey supplementation. Baseline macular thickness was measured using Cirrus HD-OCT and these parameter was repeated 3 months post intervention.

Results: The mean global macular thickness was significantly thicker in post-menopausal women with honey supplement at 3 months post intervention ($p = 0.002$).There was also significant difference in the mean change of global macular thickness at 3 months post intervention between the groups ($p < 0.001$).

Conclusion: Honey which exhibit estrogenic effect, anti-inflammatory effect and a good antioxidant showed beneficial and protective effect in improving macular thickness in post-menopausal women.

113. Pattern of uveitis in tertiary centre in Malaysia

Authors : Hanisah AH, Nazima SA, HS Wong, Hazlita MI
Institution : UKM Medical Centre

Objective: To identify the pattern of uveitis in UKM medical centre Kuala Lumpur Malaysia.

Methods: A retrospective study was performed on the patients with uveitis referred to the UKM Medical Centre from 2013 to December 2015. The clinical data including category, aetiology, gender,age of the patients at uveitis presentation and characteristic of uveitis were observed.

Results: A total of 101 uveitic patient were included in this study. The mean age was 39±17 years old. There was no significant sex predominance (male 53.5%; female 46.5%). Malays race had was the highest affected with total of 53.4% compared to Chinese (36.6%), Indian (8.9%) and other (1%).60% had bilateral involvement and 36% had unilateral involvement. The most common types of uveitis were panuveitis (44%), followed by anterior uveitis (21%), posterior uveitis (17%) then intermediate uveitis (15%). Around 69% was due to non infective and 29% due to infective causes. Idiopathic was the most common aetiology (28.7%). Tuberculosis (13.9%) was the second highest and also the most common infective cause of uveitis. Behcets disease (11.9%) and Vogt Koyanagi Harada Syndrome (10.9%) are the 2 most common causes which associated with system disease. In total, 60.4% of the patient had recurrence and 37.6% did not have any episode of recurrence.

Conclusion: Uveitis in PPUKM is mainly noninfective in nature where the underlying cause is mostly unknown. Nearly a third of cases are infective related where tuberculosis is the main cause.

114. Polypoidal choroidal vasculopathy , National Unversity of Malaysia experience

Main Author : Nazima Shadaht Ali
Co-Authors : Hazlita Dato' Mohd Isa, Wong Hong Seng
Institution : Pusat Perubatan UKM, Hospital Canselor Tunku Muhriz

The objective of this study is to determine the prevalence, demographic features and pattern of polypoidal choroidal vasculopathy (PCV) among patients attending the ophthalmology clinic in HUKM. All patients attending the clinic from 2011 till 2015, with clinical and angiographic findings suggestive of PCV were recruited in this study.

From this study, 97 eyes from 90 patients were diagnosed as having PCV. Mean age of patients with PCV was 70.3 years, with a male preponderance (63% of patients). Involvement was mostly unilateral (93.2% of patients), and polypoidal vascular lesions were located mainly in the macula (86.7% of eyes). Retinal manifestations of PCV were characterized by pigment epithelium detachment (44.35), subretinal macular hemorrhage (55.7% of eyes), subretinal fibrovascular proliferations (34% of eyes) and serous macular detachment (25.8% of eyes). Mean visual acuity was 1.1 (logMAR unit).

As a conclusion, PCV is quite a common occurrence amongst our patients and most of them present with poor vision. The findings from our study are similar to other studies on PCV in Asian population, in which it is more prevalent among male and most patients.

115. Case Report: A rare case of juvenile x-linked retinoschisis with vasoproliferative tumour of the ocular fundus

Authors : Swee Ying Choo, MS Ophth, Tashna Evali, MD, Shu Yee Seow, MBBS, Sunder Ramasamy, MS Ophth, et al.
Institution : Hospital Kuala Lumpur

Objective: To report a case of Juvenile X-linked Retinoschisis (XLRS) with Vasoproliferative Tumour of the Ocular Fundus (VPTOF) in a single eye

Method: Case report

Results: We report a case of an 8-month-old infant, who was referred to Paediatric Retinal Unit, Hospital Kuala Lumpur for the management for suspected bilateral eye familial exudative vitreoretinopathy. His parents first noticed the child was not having eye contact since birth, not focusing on and not reaching out for objects placed in front of him as he grew. On examination, the child was following light very briefly but not maintaining fixation. An examination under anaesthesia showed normal anterior segments with bilateral total retinoschisis involving the macula. There was no break in the outer leaf detected. In addition, there was vasoproliferative tumour in his right retina, which was evident by with telangiectatic, dilated tortuous vessels with pre-retinal haemorrhage and intra-retinal exudates . B-scan showed no sub-retinal mass. Electroretinogram revealed negative deflection in the right eye and a flat tracing in the left. Fundus fluorescein angiography for the right eye showed dilated feeder vessels with a rich network of capillaries within the tumour (features of VPTOF). There were areas of retinal vessel leakage and multiple areas of capillary fall-out (features of XLRS). We proceeded with an orbital floor triamcinolone injection, combined with right retinal photocoagulation. Two weeks post treatment, there was marked improvement in the right fundus.

Conclusion: This case presents a diagnostic dilemma and highlighted the rare occurrence of a VPTOF in a patient with XLRS.

PUBLIC HEALTH, EPIDEMIOLOGY AND MISCELLANEOUS

116. Effectiveness of eye course in improving the general ophthalmology knowledge among non-ophthalmology practitioner

Authors : Chong Soh Yee (MD), Ivan Cheng En Yoo (MD), Ng Hong Kee (MMed), Chong Mei Fong (MSurg)
Institution : Hospital Raja Permaisuri Bainun, Ipoh

Objectives: To compare the mean test score before and after the eye course and to study the factors affecting the mean test score.

Methods: Cross sectional study with convenient sampling. A set of 20 objective structured clinical examination (OSCE) questions with best answer given to participant before and after attended an one day eye course in Hospital Raja Permaisuri Bainun Ipoh.

Results: A total of 33 participants who fulfilled the inclusion criteria were analysed. Majority of participants were graduated from oversea (54.5%). The mean score of pre-test was 12.2 +/- 2.3 and increased significantly to 16.5 +/-1.7 in post-test score. The number of ophthalmology cases seen per month was correlated with mean pre-rest score (r= 0.398; p=0.022). Participants who had previously attended an eye course achieved mean pre-test score of 13.7 +/- 2.2, which was not significantly higher compared to those who had not attended before (11.8+/-2.2; p=0.059).

Conclusions: Our study showed that eye course could improve general ophthalmology knowledge. However, a refresher course and frequent application in real clinical setting are necessary to sustain the knowledge gained.

117. A clinical audit to evaluate and reduce cancellation rate of cataract surgery during preoperative assessment in Hospital Bukit Mertajam

Authors : Kosyilya Arumugam MBBS (Manipal)
Rohana Taharin MS OPHTHAL (MALAYA)
Chui Yin Chua MMed OPHTHAL (USM)
Institution : Hospital Bukit Mertajam

Objective: To evaluate and reduce cancellation of cataract surgery during preoperative assessment in Hospital Bukit Mertajam due to the high backlog of cataract cases in Northern Malaysia.

Method: This prospective observational study was conducted between December 2014 and August 2015. A total of 407 patients, who were listed for elective cataract operation and aged more than 12 years old, were included. Checklist was used to collect data and to evaluate the common causes of preoperative cancellation. Post evaluation, remedial measures which involved counseling and written information in four major languages to tackle the common cancellation causes (namely unoptimised diabetes, hypertension, cardio-respiratory problems, skin and lid pathologies), were given to patients prior to preoperative assessment from March 2015 to July 2015. Post remedial data was collected in August 2015 using the same checklist.

Results: There were a total 48% of cancellations during preoperative assessment. The most common causes of cancellation were uncontrolled diabetes mellitus, hypertension and meibomitis. Post remedial data showed a reduction of preoperative cancellation rate to 17%, with meibomitis showing the greatest improvement from 16% to 6%.

Conclusion: Through these simple remedial measures, cancellations during preoperative assessment can be reduced and hence we are able to maximise the capacity of cataract surgeries in Hospital Bukit Mertajam.

118. Impact of diabetic retinopathy related visual impairment towards patients' daily life

Main Author : Tikambari E
Co-Authors : Uthayarany M, Wong Chi Lun
Institution : Kulim Hospital

Objective: Assess impact of diabetic retinopathy(DR) related visual impairments on socio-economic and daily life of diabetic patients in Kulim district

Method: An investigator-administered questionnaire was conducted among all DR patients followed up in Kulim Hospital ophthalmology clinic from June till December 2015.

Result: Despite the education level, half of the patients were roughly aware of DR but only 26% has undergone routine DR screening. Only 7 patients have tertiary education and among them 2 were surprisingly unaware of DR ending up in advance diabetic eye disease(ADED). Kulim is an under developed town with most population falling into moderate socioeconomic group. This could be a reason for the poor health consciousness.

Our patients categorized into non-proliferative DR(NPDR) 45%, proliferative DR(PDR) 36%, and ADED 18% either in one eye or both. 52% have diabetes for 6-15 years while 38% been suffering longer. 96% are in their middle and old age with 41% retirees and 24% housewives. There were 30 working candidates and 57% of them have reported work performance deterioration. Majority(55 patients) declared unaffected family life, but 47 patients have failed in their family responsibilities and 27 others are dependant for their daily life activities. Social life survey revealed, 73% are unable to do their favourite activities, 29 patients have poor relationship or friendship, while a few suffer emotional disturbances. Patients with severe visual impairment and blind eye were studied in detail and found to have impaired quality of life in almost all aspects.

Conclusion: The severity of visual impairment has direct effect onto patients' socio-economic and family life, irrespective of the diagnosis.

119. Effects of acacia honey and honey cocktail supplementation for type 2 diabetes mellitus

Authors : Zunaina E[1], Siti-Amrah S[2], Wan-Nazirah WY[2], Shaiful-Bahari I[3]
Institution : [1]Department of Ophthalmology, Universiti Sains Malaysia
[2]Department of Pharmacology, Universiti Sains Malaysia
[3]Department of Family Medicine, Universiti Sains Malaysia

Objectives: To compare the effects of Acacia honey and honey cocktail supplementation on glycaemic control (fasting blood sugar and HbA1c) and anti-inflammatory marker (IL-6) in type 2 diabetes mellitus.

Methods: This is a prospective randomized control trial in Hospital Universiti Sains Malaysia from 2014 to 2015. Type 2 diabetic patients were recruited and randomized into 3 groups (Acacia honey group, honey cocktail group and control group). The honey groups were given honey supplementation for 6 months. Baseline fasting blood sugar (FBS), HbA1c and IL-6 were measured and these parameters were repeated at 3 months and 6 months follow-up.

Results: A total of 24 diabetic patients were recruited in the study (Acacia honey: 10 patients, honey cocktail: 9 patients and control: 5 patients). There was no mean difference of HbA1c and FBS between groups based on baseline, 3 months and 6 months follow-up. There was a significant difference of IL-6 between Acacia honey-control group and honey cocktail-control group of the 6 months follow-up.

Conclusion: Honey supplementation has beneficial effect as an anti-inflammatory in diabetes mellitus.

TRAUMA

120. A pencil in an orbit

Authors : Raja Nor Farahiyah RO (MBBS UM)
Wan Mariny WMK (MS (Ophthal) UM)
Radzlian O (MS (Ophthal) UKM)
Institution : Serdang Hospital

Purpose: To report a case of intraorbital foreign body

Introduction: Penetrating orbitocranial injuries caused by intraorbital foreign body are rare and may cause serious morbidity and mortality.

Objective: To report a case of intraorbital foreign body in a young child.

Method: Case report

Result: We report the case of a 4 year-old girl who sustained a right traumatic optic neuropathy with frozen eye due to accidental fall from a sofa while holding a pencil. The pencil, which penetrated intraorbitally leads to anatomical and functional consequences. CT scan of the orbit and brain revealed the presence of an intraorbital foreign body, 5 cm long and 0.8 cm wide, penetrate the superior orbital fissure with impingement to the ipsilateral temporal lobe. In our patient, early surgical removal of the foreign body had improved the morbidity. However, right eye vision and globe function cannot be reversed.

Conclusion: Intraorbital foreign body can cause significant vision loss in an intact globe.

121. Foreign body in the anterior chamber

Main Author : Arvinth Rajagopal
Co-Authors : Koay Chiang Ling, Nurliza Khaliddin, Mimiwati Zahari
Institution : Universiti Malaya

Objective: We report a case of foreign body in the anterior chamber following a penetrating nail injury to the eye

Method: Case Report

Report: A 19 year old Bangladeshi gentleman presented with complaints of worsening left eye pain and redness after being hit by a nail over the left eye 2 days ago. He was not wearing eye goggles. Following trauma, the nail came out spontaneously without causing any eye

discomfort. On examination, vision in the affected eye was 6/36. Slit lamp examination revealed a small self-sealed corneal laceration wound, aqueous flare in the anterior chamber with hypopyon. Intraocular pressure and fundoscopy were normal. B scan showed no vitritis. CT scan orbits revealed a foreign body in the left globe. Gutt Moxifloxacin 2 hourly was started for the patient following which the hypopyon showed improvement after 2 days. An anterior chamber washout was performed to remove the foreign body. A metal foreign body in the anterior chamber with intact anterior capsule of the lens was seen. Post-operatively, patient was started on Gutt Moxifloxacin and Ceftazidime hourly, Gutt Econopred 4 hourly and Gutt Homatropine tds. Patient responded very well with visual acuity of 6/9 on discharge.

Conclusion : A foreign body in the anterior chamber does not commonly occur following high velocity trauma. In our patient, it was difficult to ascertain the foreign body clinically as anterior chamber reaction following delayed presentation camouflaged the underlying foreign body. Prompt detection and treatment can prevent endopthalmitis.

122. Management of lid laceration secondary to dog bite during rabies outbreak

Authors : HT Chan (MBBS), CL Wong (MS), Vanessa N Mansurali (FRCS)
Institution : Hospital Pulau Pinang

Objective: To report a case of lid laceration secondary to dog bite during rabies outbreak in Penang.

Method: A case report.

Results: A 14 years old boy was bitten by a neighbour's dog over the left eye. Examination revealed lacerated left lower lid and lower canaliculi with bite mark over the lower tarsal plate. After discussion with infectious disease team, he underwent left eye lower lid toilet and suturing and canaliculi repair with intravenous and topical antibiotic coverage. He received 4 doses of rabies vaccination over 14 days period. The dog had no signs of rabies infection and was released after 10 days of observation at the veterinary department. Post-operatively, his wound healed well with good cosmesis and no complaint of excessive tearing.

Conclusion: Lid injuries secondary to animal bite is best treated with primary suturing and repair for an optimal functional and cosmesis outcome. The decision regarding the use of rabies vaccine and immunoglobulin, antibiotics, and primary wound closure should be decided together with infectious disease team. We would like to highlight the importance of wound cleansing as thorough wound cleansing alone without other post exposure prophylaxis has been shown to markedly reduce the likelihood of rabies

123. Corneal bee sting

Authors : Puspadevi Armugham, Poh Fong She, Saraswathy Ramasamy, Ong Ming Jew
Institution : Hospital Sultan Ismail, Johor Bahru

Objective: To report a rare case of corneal bee sting

Method: Case report

Results: Corneal bee stings are rarely reported. We present a case of corneal bee sting with retained stinger. A 54-year-old patient presented with left eye pain and blurring of vision 24 hours after he was stung. On presentation, his left eye visual acuity was 6/60.There was periorbital oedema, conjunctival hyperemia and chemosis. Two small stingers were embedded in the depth of corneal stroma at 10 o'clock position 1 mm from the limbus. There was corneal infiltrate about 1 mm x 1mm at the site of stingers. There was surrounding corneal oedema extending to paracentral cornea. Anterior chamber activity was about 2+.The lens was clear. Intraocular pressure was 14mmHg. Fundus examination was unremarkable. Right eye was normal with visual acuity 6/6.Patient was started on intensive topical steroids and antibiotics. Surgical removal was attempted, however it was not successful due to the corneal oedema. Patient was treated conservatively. At one week his vision was 6/24. At one month his vision improved to 6/12 with a peripheral corneal scar.

Conclusion: Corneal bee sting injury is an uncommon ocular trauma, but can result in severe sight threatening complications. Surgical removal of bee sting is usually recommended due to possible penetrating toxic ad immunologic effects. However, conservative treatment with topical steroids and antibiotics play a major role too.

124. Optic nerve avulsion

Authors : Norjeehan Maaris (MBBS), Nandini V (MBBS, MS Oph)
Institution : Ministry of Health Malaysia

Objective: To report a case of optic nerve avulsion in ocular trauma.

Method: Case report

Results: A 15 year teenager sustained a motor vehicle accident in December 2015 . He was seen in the emergency department and referred to the eye clinic in view of ocular trauma. He complained of right sudden loss of vision and left eye pain, swelling and redness. The right visual acquity was no perception to light and left was 6/9. There was a positive RAPD. A CT brain, face and orbit showed fracture of floors and lateral walls of both orbits and multiple comminuted fracture of facial bones. Right eye anterior segment was normal while left eye periorbital hematoma and subconjunctival hemorrhage. Right fundus showed optic nerve avulsion, viterous hemorrhage and cherry red spot. Left fundus was unremarkable.

Conclusion: Optic nerve avulsion is a rare presentation of ocular trauma. Recognizing this condition is important, as there is no role of steroid therapy in this case. In this case, optic nerve avulsion occurred in the normal looking eye instead of externally injured eye.

125. Front to back ocular injury from vaping-related explosion

Authors : Muhammad Najmi Khairudin, Mae-Lynn Catherine Bastion
Institution : Pusat Perubatan Universiti Kebangsaan Malaysia

Objective: To report the ocular complications of an e-cigarette related explosion

Method: Retrospective review of a case

Result: An 18 year-old Malay man who was attempting to improve his vaping experience presented with history of explosion injury involving the right side of his face. This involved the

right eye and nose. He had been modifying the tank of the e-cigarette, changing the original coil to a home-made copper coil with the intention of a better experience. However, as soon as he had connected the modified coil to the battery, an explosion occurred and hit the right side of his face with high pressure and velocity. Immediately he complained of pain and blurring of vision. Visual acuity at presentation was counting fingers. There was no relative afferent pupillary defect. He sustained right upper eyelid and conjunctival laceration wounds. He also had right eye grade one chemical and thermal injury; traumatic mydriasis, anterior uveitis and cataract with zonulyisis, extensive commotio retina and Burlins oedema. The lacerations were repaired. He was treated conservatively with topical steroids and antibiotics. Serial follow up revealed improving commotio and Burlins oedema but worsening cataract.

Conclusion: Vaping is a new fad that is trending amongst the smoking community. This case highlights the extensive ocular injury from thermal, chemical and blunt force which can occur following an explosion involving tamperment to a vaping machine.

126. A case of hair dye induced corneal toxicity

Authors : Guna Asha Devi Subramaniam MD (Ukr)
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Rohana Bt Taharin MS Opthal (MALAYA)
Yeap Thye Ghee MD, MS Opthal (UKM)
Institution : Hospital Bukit Mertajam

Objective: To report a case of Corneal Ulcer caused by an accidental contact to Hair Dye.

Method: Case Report

Results: A 42 year old gentleman presented with sudden onset of bilateral eyes pain, redness and blurring of vision after having an accidental direct contact to a hair dye while hair grooming at a saloon a day prior to the symptoms. Patient claimed he vaguely irrigated his eyes immediately following exposure. Examination revealed visual acuity of light perception bilaterally. Both eyelids were oedematous, while the conjunctivas were chemosed and congested. There was a central corneal infiltrate measuring 7.0mm x 9.2mm and 6.4mm x 8.6mm on the right and left eye respectively with diffuse corneal oedema. Hypopyon were present measuring 2mm in height bilaterally. Patient was diagnosed to have bilateral corneal ulcer with corneal toxicity secondary to hair dye. He was admitted with immediate commencement of intensive topical and systemic antibiotics. Corneal scraping for culture reported as no organism grown. Patient showed response to the antibiotics and the ulcer healed with vision on the right eye 6/9 and left eye counting figure with bilateral central corneal scarring.

Conclusion: Although hair dyes have been approved cosmetically safe, the chemical components are still deemed hazardous especially when in contact to the eye. As in this case, the active ingredient para-phenylenediamine(PPD) had caused severe corneal toxicity. Adequate advice should be placed on labels for immediate first aid eye care of intensive eye irrigation to be taken when in contact with the chemicals to prevent untoward effect to the eyes.

127. Corneal Bee Sting Controlled With Intensive Topical Steroids and early surgical intervention

Main Author : Ang Wen Jeat
Co-Authors : Chua SM, Alice GKC, Fadzillah
Institution : Hospital Melaka, Universiti Sains Malaysia

Objective: To report an unusual case of bee sting keratopathy with retained stinger.

Method: Case report.

Summary of report: A 26 year-old gentleman presented with right eye foreign body entry prior to hospital visit. He complained of excruciating pain, redness, photophobia, tearing and blurring of vision. On examination, visual acuity of the left eye was 6/6 and hand movement. On the right eye, there was generalized conjunctival congestion. The corneal was oedematous with pronounced striate keratopathy and a bee stinger with surrounding infiltrates located at 2 o'clock. It was deeply embedded in the stroma 1mm away from the limbus. Pupils were reactive with absence of relative afferent pupillary defect. There was flare seen in the anterior chamber with no hypopyon nor cataract present. The posterior segment could not be visualized due to severe corneal edema, however, B-scan was normal. We started the patient on intensive topical dexamethasone and the bee stinger was removed under general anaesthesia on the day of presentation. Post-operatively, patient was administered with topical moxifloxacin and topical dexamethasone. Three days later, there was resolution of cornea infiltrates with significant improvement of corneal clarity.

Summary: Early surgical intervention with intensive steroids can curtail the toxic effects of bee sting and hence, improving the visual outcomes.

128. A large leaking descemetocele secondary to pseudomonas keratitis presenting initially as traumatic corneal laceration

Authors : Logeswary K, Aida ZMZ, Jemaima CH
Institution : University Kebangsaan Malaysia

Objective: To report an atypical presentation of Pseudomonas keratitis.

Method: Case report

Results: A 47-year-old healthy Indonesian gentleman, presented with blurring of vision on the left eye associated with pain and redness. Three days prior to presentation, he had history of foreign body entering the eye after drilling onto the ceiling. The eye was immediately irrigated with tap water, but he started to rub his eye due to itchiness. A general practitioner prescribed him some eye drops; however, his symptoms worsened and subsequently referred to our center. On presentation, his visual acuity was 6/6 OD and hand movement OS. A 'corneal laceration wound' measuring 0.5 x 3.5mm with a large stromal abscess measuring 9 x 5mm on the left eye. Anterior chamber was flat. Emergency corneal T&S with anterior chamber reformation was performed and a large descemetocele was noted. Cyanoacrylate corneal glue was applied on the area. Corneal scrapping revealed pseudomonas aeruginosa. Postoperatively, bandage contact lens with intensive topical broad spectrum antibiotic, oral antibiotic, Doxycycline and vitamin C was used. Due to financial constraint; patient was subsequently referred to government tertiary eye centre for penetrating keratoplasty.

Conclusion: This case highlights the rapid progression of pseudomonas keratitis, presented with a large *descemetocele*, which can be mistaken as an infected corneal laceration wound. Cornea glueing with cyanoacrylate glue is a viable temporary method for large *descemetocele*s awaiting definitive surgery.

129. The painful eye movement post-trauma

Main Author : LS Khaw
Co-Authors : Vanessa Naseem Mansurali, Ruly, Najwa
Institution : Penang General Hospital

Objective: To report interesting presentation and sequela in a case of orbital wall fracture

Method: Case report

Results: A 43-year-old gentleman, who was allegedly assaulted, presented with painful restricted upgaze of the left eye, with binocular vertical diplopia during upgaze. Ocular examination revealed visual acuity of 6/36 with presence of relative afferent pupillary defect. In the primary position of gaze, left eye noted to have hypotropia. Anterior segment examination showed clear cornea with anterior chamber reactivity, associated with circulating red blood cells. Ocular motility was severely restricted in superior gaze, with vertical diplopia in superior and superotemporal gaze. Fundus examination showed dome shape indentation superotemporally with choroidal folds. Berlin's oedema was visualized over the posterior pole, with no obvious choroidal rupture. Fellow eye examination was normal.

Computed tomography of the face and orbit revealed depressed comminuted fracture of the supero-lateral orbital rim. Multiple bone fragments appear to be impinging on the supero-lateral aspect of the left globe. Patient underwent open reduction internal fixation of left orbital roof fracture. Depressed bony fragments was elevated and fixed with titanium plate. Postoperatively patient achieved full recovery of ocular motility, with good vision of 6/12, relative afferent pupillary defect were absent.

Conclusion: This is a rare presentation of bone fragment compressing on the globe post-trauma that restricts ocular movement, and leads to choroidal folds and blurred vision. Restricted extraocular muscle movement was due to compression by depressed orbital rim fragments rather than muscle entrapment. Management involves elevation of orbital roof fragments to alleviate impingement on the globe without extensive exploration of the fracture. In this case, it is unnecessary for extensive orbital roof exploration which risks injury to superior oblique muscle, putting the patient at risk of Brown's Syndrome.

130. Open globe injury following motor vehicle accident – An 8 year review

Authors : Syamil S, Maimunah AM, N Omar
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Introduction: Open globe injury is a recognised complication of motor vehicle accident (MVA) despite enforcement of law for restrain device such as the seat belt and airbags. Epidemiology, clinical features and outcome of such injury is under-reported among local population.

Patients and methods: Consecutive cases of open globe injury following MVA in Hospital Serdang from January 2006 to December 2013 were analysed.

Results: There were 21 patients treated for open globe injury following MVA. Three patients (14.28%) had bilateral involvement thus 24 eyes were included in this review. The age was 31.1 years ± 3.0 years (mean ± SEM). There were 19 (79.2%) males and 5 (20.8%) females. In 22 (91.7%) cases, the offending object was broken windscreen glass. Injury was classified as penetrating in 15 (62.5%), perforation in 7 (29.2%) and rupture in the remaining 2 (8.3%) of cases. Most injury was associated with uveal prolapsed (21 cases, 87.5%) and hyphaema (16 cases, 66.7%). Vitreous loss was recorded in 8 cases (33.3%) while retinal detachment in 6 cases (25.0%). Although the final logMAR spectacle-corrected vision improved significantly from the presenting logMAR vision, corneal scarring and retinal detachment could result in significant visual loss.

Conclusion: Open globe injury following MVA is an important cause of irreversible visual loss.