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Acknowledgements:
Acknowledgements of general support, grants, technical assistance, etc., should be indicated. Authors are responsible for obtaining the consent of those being acknowledged.

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Standard Journal Article
Rampal L and Liew BS. Coronavirus disease (COVID-19) pandemic. Med J Malaysia 2020; 75(2): 95-7.
Rampal L, Liew BS, Choolani M, Ganasegeran K, Pramanick A, Vallibhakara SA, et al. Battling COVID-19 pandemic waves in six South-East Asian countries: A real-time consensus review. Med J Malaysia 2020; 75(6): 613-25.

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Books and Other Monographs:
Personal Author(s)
Goodman NW, Edwards MB. 2014. Medical Writing: A Prescription for Clarity. 4 th Edition. Cambridge University Press.

Chapter in Book
McFarland D, Holland JC. Distress, adjustments, and anxiety disorders. In: Watson M, Kissane D, Editors. Management of clinical depression and anxiety. Oxford University Press; 2017: 1-22.

Corporate Author
World Health Organization, Geneva. 2019. WHO Study Group on Tobacco Product Regulation. Report on the scientific basis of tobacco product regulation: seventh report of a WHO study group. WHO Technical Report Series, No. 1015.

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World Health Organization. Novel Coronavirus (2019-nCoV) Situation Report 85, April 14, 2020. [cited April 2020] Accessed from: https://www.who.int/docs/defaultsource/coronaviruse/situationreports/20200414-sitrep-85-covid-19.

Online articles
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Ministry of Health Malaysia. Press Release: Status of preparedness and response by the ministry of health in and event of outbreak of Ebola in Malaysia 2014 [cited Dec 2014]. Available from: http://www.moh.gov.my/english.php/database_stores/store_view_page/21/437.

Other Articles:
Newspaper Article
Panirchellvum V. 'No outdoor activities if weather too hot'. the Sun. 2016; March 18: 9(col. 1-3).

Magazine Article
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The 13th Conjoint Ophthalmology Scientific Conference (COSC 2024) in conjunction with the 8th USM Ophthalmology Symposium

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Trends and indication of intravitreal anti-VEGF and Ozurdex in Medical Retina Subspeciality Centre, Hospital Shah Alam

Ashvini Devi Paramesvaran, Rajasudha Sawri Rajan, Roslin Azni Abdul Aziz

Department of Ophthalmology, Hospital Shah Alam, Selangor, Malaysia

ABSTRACT

Introduction: To observe the trend of usage of intravitreal injection (IVT) anti-vascular growth factor (anti-VEGF) and Ozurdex in Hospital Shah Alam (HSAS) over the period of 6 months, to identify the main indications of IVT usage, to understand the impact on Malaysian healthcare system from IVT usage and to ascertain the visual outcome of patients post IVT. **Materials and Methods:** A retrospective study of patients receiving IVT anti-VEGF and Ozurdex from July to December 2023 at Medical Retina (MR) Centre, HSAS in which the demographic data of patients, types of IVT, the trend of IVT usage over 6 months, indication of IVT, visual outcome post completion of loading dose of IVT and the impact on healthcare were analysed. **Results:** The total number of IVT used is 3426 cases with IVT Aflibercept (48%) and IVT Ranibizumab (47.4%) being the highest, followed by IVT Brolucizumab (2.7%) and IVT Ozurdex (1.9%). Among the IVT used, 57.15% were performed to treat diabetic macula oedema (DME), 32.3% for age related macular degeneration, 9.17% for retinal vein occlusion, 1.17% to treat choroidal neovascularization and <1% for other causes. This had shown great improvement in their visual outcome, with 55% improvement from their baseline vision and 87% the ability to prevent their vision from worsening. Despite receiving IVT, 13% had poor visual outcome, which is mainly due to the complication of the disease itself. The total cost incurred during this period was close to RM 1.7million. **Conclusions:** Ranibizumab and Aflibercept are the main IVT used in HSAS. The main macular disease requiring IVT treatment in HSAS is DME. In this study, patients who undergo proper Loading Dose, had 87% of the ability to prevent the vision from worsening. Given the positive impact of IVT injections on the visual outcomes for many macula diseases, the cost for the patients being treated is justified.

Keywords: IVT, anti-VEGF, ozurdex

Preliminary results of the comparison of 23G Ultravit™ and 27G Ultravit™ vitrectomy on patient comfort and ocular surface disease

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ABSTRACT

Introduction: We aim to compare patient comfort and the impact on ocular surface disease between the 23G Ultravit and 27G Ultravit vitrectomy techniques. **Materials and Methods:** This was a preliminary retrospective study where all cases that underwent 23G and 27G vitrectomy surgery at HUKM between October 2021 and November 2023 were included. Main outcome measures were as follows: pain score, visual acuity (VA), intraocular pressure (IOP), tear break-up time (TBUT), tear meniscus height (TMH), and Ocular Surface Disease Index (OSDI) on one-week post-operative follow up. **Results:** 29 patients were included in the study where 20 cases went on 23G vitrectomy and nine cases went on 27G vitrectomy system for various diagnosis. One-week post-op pain score follow-up showed that three patients (0.15%) in 23G group and one patient (0.11%) in 27G group had a pain score 1/10 while the rest claimed to have no pain. Mean IOPs were 14.06mmHg (3.02) in the 23G group and 13.66mmHg (3.24) in the second group, with mean TBUT 8.62s (5.80) in 23G group and 11.61s (5.48) in the 27G group. Mean TMHs were noted to be 0.276µl (0.15) and 0.26µl (0.06) in the 23G and 27G groups consecutively, with OSDI mean scores were 12.77 (12.63) in 23G group and 22.56 (17.69) in 27G group. Statistical analysis showed no significant differences between two groups ($p>0.05$) in terms of pain score, VA, IOP, TBUT, TMP and OSDI on 1-week post-operative follow-up. **Conclusion:** Both 23G and 27G vitrectomy procedures demonstrated comparable outcomes, suggesting that either gauge can be effectively utilised without compromising patient comfort or risk of ocular surface complications.

Keywords: Ultravit™, gauges, ocular surface disease, patient comfort, vitrectomy

Paediatric traumatic cataract in Hospital Raja Perempuan Zainab II: the clinical profiles and visual outcomes

Ahmad Anwaar Muhammad Saifullah[1], Hazirah Mohd Marzuki[1,2], Nur Shirlyna Irma Ngah[1,3], Mohd Ilham Ismail[1,4], Zamri Nordin[1], Ng Kwang Sheng[2]

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ABSTRACT

Introduction: Traumatic cataract is a preventable cause of acquired childhood blindness and makes up to 15–40% of all paediatric cataract cases in Malaysia. Understanding the nature of paediatric traumatic cataracts is important for prevention and management. This study aims to describe the clinical profile and visual outcomes at 6 months post operation in paediatric patients with traumatic cataract who underwent cataract extraction with or without intraocular lens (IOL) implantation. **Materials and Methods:** A retrospective record review was done involving 11 patients (11 eyes) with traumatic cataracts who underwent surgery in Hospital Raja Perempuan Zainab II, Malaysia, from January 2014 until December 2023. The demographic data, clinical features, mechanisms and extent of injuries, and the visual outcomes at 6 months post operation were reported. Good outcome was defined as having a best corrected visual acuity of 6/12 or better at 6 months post operation. Patients with incomplete medical records or those who did not complete at least 6 months of postoperative follow up were excluded. **Results:** Twenty-two patients were identified but only 11 were included after considering the exclusion criteria. Eleven eyes of 11 patients with the mean age 9.09 (4.13), range 3-15 years old were analysed, with eight males and three females. All patients had no underlying systemic or ocular comorbidities. Almost all patients (10, 90.9%) presented with visual acuity of 6/60 or worse and one presented with visual acuity of 6/36. The predominant injury was penetrating injury (8, 72.72). Most of the ocular trauma occurred at home. Seven patients had lens aspiration and IOL implantation at the same setting, three patients underwent plain lens aspiration with subsequent secondary IOL implantation, and one patient was left aphakic. Eight patients (72.7%) had good final visual outcome (6/12 or better). Three patients had poor visual outcome; one patient was left aphakic due to significant cornea scarring, one patient had amblyopia and one had significant cornea scarring with post-traumatic endophthalmitis. **Conclusion:** 72.7% of the patients achieved good visual outcome of 6/12 or better, comparable to studies in other countries (50-80%). A similar study done at another local centre but only had 34.48% of patients achieving good outcome, which was mainly due to significant corneal opacity and amblyopia, similar to this current study. Early detection and intervention are important to prevent amblyopia. As the traumatic event mostly occurred at home, precautions should be made to provide a safe environment for children, including avoiding furniture with sharp edges and safely storing sharp items.

Keywords: Paediatric

The key informant strategy to determine the prevalence and risk factors of strabismus in school children in East Coast Malaysia: a community-based study

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ABSTRACT

Introduction: Strabismus is a common childhood visual disorder. It can significantly affect visual development and academic performance if untreated. Early detection and intervention are crucial, but access to specialised eye care is often limited in resource-constrained settings. This is where key informant (KI) method plays a vital role. The key informant method gives less biased estimates of prevalence of childhood blindness/severe visual impairment than institutional based studies for the blind studies conducted in 2017. Teachers may be particularly effective KIs due to their relatively high educational attainment or their experience working with children. This study aimed to determine the prevalence of strabismus and its associated risk factors among school children in Kelantan, Malaysia, using the KI method. **Materials and Methods:** A cross-sectional study was conducted from June 2022 to December 2023 involving school children aged 7 to 18 years. Physical education teachers from each school were trained online as KIs to identify children with strabismus. One month after the training, the research team visited district education offices to examine the children identified by the KIs. **Results:** A total of 468 KIs were trained. The diagnoses of strabismus by KIs were in complete agreement with those by specialists. Strabismus was confirmed in 301 school children, with a mean age of 12.26 years (1.42). Among them, 157 (52.2%) were male, and 144 (47.8%) were female. The majority of cases were exotropia (244 cases, 81.1%), followed by esotropia (43 cases, 14.3%) and vertical gaze palsy (14 cases, 4.7%). The prevalence of childhood strabismus was 18.9%. Logistic regression analysis showed no significant association between strabismus and gender, parental education level, or prematurity. However, a positive family history of strabismus increased the odds by 5.2 times (OR 5.20, 95% CI: 2.337 to 7.009, $p < 0.001$). A family income exceeding RM3000 was associated with a 45% lower likelihood of strabismus (OR 0.55, 95% CI: 0.33 to 0.92, $p = 0.021$). **Conclusion:** This study highlights the effective use of the KI method for identifying strabismus among school children. The high level of agreement between KIs and specialist diagnoses underscores the reliability of this approach. Importantly, the study found a positive family history was a strong risk factor, significantly increasing the likelihood of strabismus. Conversely, higher family income was associated with a reduced risk. These findings suggest that targeted interventions focusing on children with a family history of strabismus and those from lower-income families could be beneficial in managing and preventing strabismus in this population.

Keywords: Key informant, strabismus, risk factors of strabismus

Dancing eyes, hidden danger: unveiled medulloblastoma in a young girl

Suppiah Khirutikkaa[1,2], Boon Hooi Tan[1], Sok Lin Ng[1], Ngoo Qi Zhe[2]

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ABSTRACT

Medulloblastoma is the most common malignant paediatric brain tumour originating in the cerebellum, predominantly affecting children. It grows rapidly and potential spread within the central nervous system (CNS). Patient is an 8-year-old girl presented with complain of left eye (LE) convergent squint for two weeks. Otherwise, no other constitutional symptoms. On examination, both eyes (BE) best corrected vision 6/15. Relative afferent pupillary defect negative. Presence of gaze evoked horizontal jerk nystagmus in left gaze. Extraocular muscle movement revealed limited abduction of LE. BE intraocular pressures were 17 mmHg and anterior segments were unremarkable. BE optic disc was blurred with elevated margin graded Frisen grade 3, retina flat and macula normal. Urgent contrast-enhanced computed tomography (CT) Brain scan was done noted to have 3.2 cm x 3.4 cm x 3.1 cm posterior fossa mass with obstructive hydrocephalus without midline shift. Urgent magnetic resonance imaging done noted evidence of cerebellum and spinal leptomeningeal cerebrospinal fluid seeding. She underwent urgent ventriculoperitoneal shunt placement followed by midline suboccipital craniotomy, C1 laminectomy and tumour debulking surgery. Histopathology result reported poorly differentiated neoplastic cells arranged in sheets and syncytial pattern, with frequent mitosis and apoptotic bodies suggestive of medulloblastoma and strong positivity for synaptophysin suggestive of CNS WHO grade 4 and followed by radiotherapy and chemotherapy. High index of suspicion for brain tumours especially in children presenting with acute ocular symptoms especially nystagmus even without other neurological, is essential for timely diagnosis and management.

Recombinant tissue plasminogen activator as an alternative treatment for severe post operative inflammation following uneventful phacoemulsification

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ABSTRACT

To report a case on the use of intracameral recombinant tissue plasminogen activator (r-TPA) in a patient with severe post-operative inflammation following uneventful cataract surgery. A 61-year-old man with diabetes mellitus and hypertension, presented with painful blurring of vision, twelve days after an uneventful phacoemulsification. Ocular examination revealed left visual acuity 4/60, shallow anterior chamber with fibrinous reaction and 360-degree posterior synechiae formation causing papillary block glaucoma. His initial intraocular pressure (IOP) was 36 mmHg with corneal oedema, thus difficult fundus visualization. B-scan was clear from any signs of endophthalmitis. Intensive treatment with topical steroids and IOP-lowering agents does not improve the condition much. Subsequently, patient underwent anterior chamber wash out with synechiolysis but still not much improvement of the inflammatory reaction. Thus, intracameral r-TPA was injected. Post injection, fibrinolysis caused improvement of the anterior chamber reaction and release of pupillary block. The use of intracameral recombinant tissue plasminogen activator is an alternative treatment in the management of patient with severe post operative inflammation complicated with pupillary block glaucoma following uneventful cataract surgery.

Aqueous misdirection in an anterior chamber intraocular lens eye with underlying primary angle closure glaucoma: a diagnostic challenge

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ABSTRACT

This case illustrated a diagnostic challenge between pupillary block or an aqueous misdirection in an anterior chamber intraocular lens (ACIOL) eye with underlying primary angle closure glaucoma (PACG). A 65-year-old Indian gentleman presented with a left eye blurring of vision for 2 weeks. Examination revealed visual acuity of perception of light in the left eye with intraocular pressure (IOP) of 70 mmHg. Left eye cornea was hazy with shallow anterior chamber (AC) and iridocorneal touch over the periphery. The pupil was mid-dilated, a small peripheral iridotomy (PI) was seen at 1 o' clock. ACIOL was stable but a posterior synechiae was adherent to the edge of the optic. Initial diagnosis of pupillary block due to small PI treated with laser PI to enlarged it. Post PI laser, IOP was still high at 60 mmHg with more shallowing of AC. Diagnosis of aqueous misdirection was made and proceeded with anterior chamber reformation, pars plana vitrectomy, surgical PI, and air tamponade. Post-operatively vision was hand movement with IOP of 10 mmHg. The AC was formed, ACIOL stable with patent PI at 10 o'clock and fundus showed optic disc pale of 0.9 cupping. Aqueous misdirection estimated incidence ranging from 0.06% to 2% in post-procedural contexts. Suspicions should be raised when the PI was patent, but IOP was high with flat AC. Early intervention with medical management of controlling intraocular pressure, topical cycloplegic and YAG hyloidectomy before proceeding to pars plana vitrectomy ensure reversal of flow and save vision.

Dealing with silicone oil complication

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ABSTRACT

Silicone oil (SO) is chemically inert, stable for an extended period of time, with a specific gravity (slightly less than water), transparent, with a refractive index similar to that of the vitreous and easy to remove with high surface tension and viscosity. A 38-year-old gentleman with high myopia and history of left eye treated rhegmatogenous retinal detachment (RRD) in 2015 presented with right eye (RE) RRD with macula off in February 2022. He underwent trans-pars plana vitrectomy (TPPV)/ endolaser (EL)/ SO 5000 cs endotamponade infusion. Unfortunately, one week post removal of SO he had RE retinal re-detachment and immediately went for scleral buckle (SB)/phacoemulsification/ Intra-ocular Lens implantation/ TPPV/ EL/ SO. However, post-surgery he developed SO induced raised IOP with a range of 24-40mmHg even though already on four anti-glaucoma and oral acetazolamide. Trans-scleral cyclophotocoagulation laser 180 degree inferiorly and second attempt of SO removal done nevertheless IOP persistently on the higher site. Hence, he underwent RE glaucoma drainage devices (GDD) implantation and anterior chamber (AC) washout. Post GDD implantation, his IOP were under controlled (IOP range 15–18 mmHg) with one anti-glaucoma. Complications that come up from the use of SO in vitreoretinal surgery are generally temporary and benefit from adequate management, whether medical or surgical. Removal of SO from the eye is usually performed promptly within 3 to 6 months of its placement to avoid or reverse these complications.

Favourable outcome of presumed fungal orbital apex syndrome

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ABSTRACT

Orbital fungal infection in immunocompetent individuals is uncommon and may clinically mimic non-specific orbital inflammatory disease. We report a case of atypical left orbital apex syndrome secondary to presumed fungal infection. A healthy 23-year-old Malay gentleman presented with left eye (LE) gradual onset reduced vision associated with restricted eye movement for 3 weeks. Ocular examination showed LE visual acuity of counting finger and positive relative afferent pupillary defect. There was left partial ptosis and anisocoria with restriction of extraocular movement (EOM) of the LE in all gazes. Right eye examination was unremarkable. Systemic examination revealed extensive tinea infection involving the scalp, trunk and both upper and lower limbs. His skin scraping grew Tricophyton mentagrophytes. MRI orbit and brain showed increased enhancement involving left orbital apex, superior orbital fissure and cavernous sinus. A diagnosis of left orbital apex syndrome secondary to presumed fungal infection was made. Systemic fluconazole was started for his tinea infection. His LE vision gradually improved to 6/9. His optic nerve function and EOM also showed marked improvement. He refused biopsy of the orbital lesion and systemic fluconazole was continued. Serial MRI after one month of antifungal showed signs of improvement and resolution of the presumed fungal left orbital and cavernous sinus lesion. Thorough assessment is mandatory in orbital apex syndrome. Prompt diagnosis and right treatment may lead to a favourable outcome.

A severe case of bilateral fungal endogenous endophthalmitis with unfavourable outcome

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ABSTRACT

Endogenous endophthalmitis is uncommon and challenging condition. The case usually has poor visual outcome. We report a case of a 73-year-old woman, presented to emergency department for sudden painful blurring of vision over both eyes for 3 days. She denies any history of trauma. She also had productive cough 2 weeks prior to presentation and was treated with oral antibiotic. Upon initial presentation, the visual acuity was projection of light of all quadrants for both eyes. In the right eyelids swollen, with injected conjunctiva. There was severe anterior segment inflammation with no fundus view. B-scan performed noted loculation. She was covered for pneumonia concurrently as the white blood cell count was raised and clinically there was crepitation over left lung. Abdominal ultrasound showed no abscess and no vegetation from ECHO. Vitrectomy and intravitreous antibiotic injection were performed for both eyes under the impression of endogenous endophthalmitis. Culture revealed fungal of Pyrrhoderma noxium over the right eye and Nigrospora species over the left eye. The culture taken from aqueous and vitreous humour sampling. However, blood culture showed no growth. Following vitrectomy, her eyes condition did not improve, leading to blindness. Early and accurate diagnosis, with immediate treatment, plays a crucial role in managing cases of fungal endogenous endophthalmitis. Despite intensive antifungal treatment visual outcomes tend to be unfavourable in most cases of this condition.

Mystery behind red eyes: a case of granulomatosis with polyangiitis

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ABSTRACT

Granulomatosis with polyangiitis (GPA) is a multi-system necrotizing vasculitis that affects small to medium-sized vessels. We report a case of an atypical presentation of bilateral eye conjunctivitis and limbitis, which led to the diagnosis of GPA. A 53-year-old woman with recurrent chronic sinusitis and a history of functional endoscopic sinus surgery presented with bilateral eye redness, pain and tearing for one week. Her visual acuity was 6/9 OD and 6/12 OS. Her left eye showed subtle proptosis, periorbital swelling extending to the upper cheek and bilateral conjunctival injection with limbitis. Extra-ocular muscle movements were full. Fundus examination was normal. Imaging revealed left eye mild proptosis, enlarged left lacrimal gland, extraconal inferomedial collection, and mucosal thickening at sinuses. Intravenous antibiotic was initiated. However, there was no improvement, and extraconal collection drainage was done. Intraoperatively there was only extraconal necrotic tissue. Biopsy revealed chronic dacryoadenitis, negative for fungal stain and acid-fast bacilli, no malignancy seen. Further blood test showed a positive antineutrophil cytoplasmic antibody (C-ANCA), with an elevated C-reactive protein, a reducing haemoglobin level, with microscopic haematuria and proteinuria. She subsequently developed right foot drop and was diagnosed as GPA. She improved significantly with corticosteroid and cyclophosphamide therapy. This case poses a diagnostic challenge due to the unusual initial ophthalmic presentation and demonstrates the importance of timely clinical suspicion to reach the correct diagnosis and treatment.

Follicular conjunctivitis: rare presentation of ocular bartonellosis

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ABSTRACT

Cat scratch disease is a disease caused by gram negative bacteria Bartonella henselae. About 5–10% of cases develop ocular bartonellosis which typically presents with an array of posterior segment findings, neuroretinits and Parinaud oculoglandular syndrome. We describe an atypical case of ocular Bartonellosis with bilateral chronic follicular conjunctivitis without any systemic or posterior segment involvement. A 14-year-old Malaysian girl with underlying bronchial asthma, eczema and allergic conjunctivitis presented with 3-months history of bilateral eye discomfort and redness with conjunctival follicle and was treated as chronic allergic conjunctivitis. However, her symptoms persist despite on treatment. She has progressively developed bilateral eye limbitis and ocular examination revealed visual acuity 6/9 OU. Slit lamp examination showed bilateral fine follicles over superior palpebral conjunctiva, conjunctiva was mildly injected with limbitis with clear cornea IOP were 16 mmHg for both eyes. Funduscopy were normal for both eyes. Systemic examination showed unremarkable and showed no lymphadenopathy. Blood investigations showed raised Bartonella henselae IgM titre. Patient was started on oral Azithromycin for total of 21 days and topical steroid eye drops, and she showed significant improvement with treatment. Although atypical, cases of non-specific follicular conjunctivitis have been reported. Diagnosis is often arrived by high titer of antibody to Bartonella henselae. Ocular bartonellosis is generally self-limiting, however cases of severe progression have been reported, early treatment is shown to speed recovery.

Traumatic macular hole: observe or treat it?

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ABSTRACT

Traumatic macular hole (TMH) is a full-thickness defect of neuroretina at the fovea following a mechanical ocular blunt injury. It is usually associated with other retinal pathologies, including commotio retina, diffuse retinal oedema, retinal haemorrhage, and choroidal rupture. Closure of TMH can be achieved spontaneously or by surgical intervention. A healthy 13-year-old boy presented with right eye (RE) alleged blunt trauma by shuttlecock while playing badminton. Post trauma complaining of RE blurring of vision and redness. Vision on presentation was 5/60 with traumatic hyphaemia, mydriasis, and uveitis. Unfortunately, he had a RE traumatic macular hole with subretinal bleed/oedema. After further consultation with parents, he underwent surgical intervention RE trans pars plana vitrectomy (TPPV) / internal limiting membrane (ILM) peeling/ endo-laser (EL)/ silicone oil (SO). 6 months post-surgery, slight vision improvement seen from 5/60 to 6/48. TMH management is a controversial decision whether to operate or simply observe these TMH especially in the younger population. The vision prognosis is the same with spontaneous closure or surgery as the final BCVA depends upon the degree of photoreceptor and RPE cell disruption rather than the size of the hole.

Spotlight on paediatric retinoblastoma-related cataracts: a case series

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ABSTRACT

Retinoblastoma is the most common intraocular malignancy in children. This case series is to describe the occurrence of retinoblastoma-related cataract in 3 patients. Three patients diagnosed with bilateral retinoblastoma at ages 3 months, 7 months and 1.5 years received systemic chemotherapy (IVC), intra-arterial chemotherapy (IAC), intravitreal chemotherapy (IvitC), photocoagulation and cryotherapy. In one patient, the cataract developed concurrently with retinoblastoma, while two others developed cataracts 4- and 6-years post-diagnosis due to eye-preserving therapies. Prior to cataract formation, both the latter cases underwent multiple IAC and IvitC treatments. All patients exhibited central lens opacification, which progressed to white cataracts. Notably, in one case, there was evidence of a wedge-like cortex opacity with lens capsule wrinkling, indicating potential iatrogenic injury from intravitreal injection. The tumour in the patient with the initial cataract manifestation enlarged despite treatment, coming into contact with the posterior surface before transforming into a white cataract. Three patients underwent lens aspiration and intraocular lens implantation for thorough examination. Postoperative visual outcomes remained stable in two patients, while one required enucleation due to disease recurrence. Retinoblastoma-related cataracts, though rare, can significantly impair vision and complicate monitoring. Their development is multifactorial, necessitating a comprehensive understanding to optimise management strategies for affected children.

Mixed occlusive phase: a rare manifestation of HIV infection

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ABSTRACT

Central retinal artery occlusion (CRAO) and central retinal vein occlusion (CRVO) are critical ophthalmic conditions that can serve as manifestations of human immunodeficiency virus (HIV) infection. Although uncommon, their occurrence in HIV-positive patients highlights the profound impact of the virus on the vascular system and overall immune function. A 26-year-old gentleman with no co-morbidity presented with right eye sudden painful visual loss for 1 day, which was preceded by a 2-week history of headaches and a 1-week history of fever, vomiting, and diarrhoea. Right eye examinations revealed visual acuity of hand movement with a positive relative afferent pupillary defect. Right eye fundus examinations showed optic disc swelling with extensive disc haemorrhages, tortuous retinal vessel, blot haemorrhages at all quadrants. Two days later, retina appeared pale and prominent at inferior macula. Left eye was unremarkable. A diagnosis of Right eye CRAO and CRVO was made. Systemic examination noted small and matted lymphadenopathy over left inguinal region. Investigations revealed positive HIV and toxoplasma immunoglobulin G. Computed tomography of the brain showed white matter oedema in the bilateral cerebral hemisphere at the frontal, parietal and occipital lobes. He was treated as cerebral toxoplasmosis by medical team. Antiretroviral therapy, intravenous ceftriaxone, oral Bactrim, topical steroid, and right eye laser pan retinal photocoagulation were initiated. 1 month later, right eye optic disc appeared pale with resolved disc haemorrhage whereas visual acuity remains the same. A simultaneous CRAO and CRVO in a young patient with no systemic comorbidities raises suspicion of other causes such as inflammation and infection. A prompt systemic examination and investigation are crucial to unveil the life-threatening cause.

Navigating optic neuritis in pregnancy: balancing visual health and maternal safety

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ABSTRACT

Optic neuritis, an inflammatory condition of the optic nerve, can lead to sudden vision loss or visual disturbances. Managing optic neuritis during pregnancy presents unique challenges due to the potential risk to both the mother and the foetus. A 33-year-old Chinese woman, gravida 2 para 1 at 30 weeks of gestation, presented with one month blurring of vision of the right eye. Initial presentation showed visual acuity of 6/60 of the right eye with negative relative afferent pupillary defect. Optic nerve function test reduced to 70% and Bjerrum shows enlarged blind spot over the right eye. Posterior segment showed hyperaemic disc with blurred margin superonasally and normal vessels. Physical examinations were unremarkable. Infective screening was normal, ANA, dsDNA, Aquaporin 4 Receptor Antibody and MOG Antibody were negative. MRI brain and orbit showed mildly oedematous and increased intensity of right optic nerve (4.6 mm) compared to left (3.2 mm). During follow-up, her vision improved to 6/9 without any intervention however her contrast sensitivity remained reduced. Observation without the use methylprednisolone may be appropriate in pregnant women with optic neuritis and a favourable visual outcome. This conservative approach avoids potential risks associated with steroid use during pregnancy, while still allowing for close monitoring and timely intervention if necessary.

Misfortune has no smell but there is light at the end of the tunnel: vision restoration post-trauma

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ABSTRACT

Ophthalmic trauma represents a significant challenge in clinical ophthalmology, encompassing a range of injuries that can lead to devastating consequences if not promptly managed. A-36-year-old healthy gentleman involved in an alleged motor vehicle accident presented with left eye (LE) pain, bleeding, and sudden blurring of vision. Examination showed left upper and lower lid laceration wound involving lid margin. His vision was 6/6 over the right eye and perception to light over LE. Relative Afferent Pupillary Defect was negative with intraocular pressure of 17 mmHg. Right eye examinations were unremarkable. Computed tomography (CT) scan done showed left medial and inferior orbital wall fractures with orbital fat entrapment. Globe preserved. No foreign body (FB) seen. Intraoperatively there were multiple wooden pieces found piercing the lateral canthal tendon extending posterior to globe. Removal of intraorbital FB and lids laceration repair performed. Patient later underwent left orbital floor reconstruction with titanium mesh. CT scan repeated post operation noted there were no FB. Pre and post operation's Hess Chart showed under action of left medial rectus and overaction of right eye lateral rectus. However, patient's LE vision recovered to 6/6 with improving residual diplopia. Despite limitations in visualizing wood pieces, CT scans remain crucial in trauma patients. In cases where wooden FBs may not be clearly visualised, it is imperative for clinicians to maintain a high index of suspicion and anticipate potential risks associated with undetected FBs.

Myelin oligodendrocyte glycoprotein antibody-associated disease – a rare cause of bilateral acute visual loss: a case report

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ABSTRACT

Myelin oligodendrocyte glycoprotein antibody-associated disease (MOGAD) is an inflammatory disorder of the nervous system characterised by immune-mediated demyelination predominantly targeting the optic nerves, brain and spinal cord. Patients typically present with sudden severe visual loss, altered mental status and focal neurological features. We report an uncommon case of MOGAD presenting as acute bilateral visual loss. A 30-year-old Burmese male presented with a day history of acute painless bilateral blurring vision. There were no other associated ocular or neurological symptoms. At presentation, there was no light perception in the right eye with relative afferent pupillary defect. The left eye was seeing 6/24 at presentation however deteriorated to no light perception within the next 2 days. Both optic discs were hyperaemic. Serum and cerebrospinal fluid (CSF) infective markers were negative. Magnetic resonance imaging of the orbit revealed bilateral optic nerve peri-neuritis with right retrobulbar optic neuritis. The patient was started on oral followed by intravenous steroid treatment for a total of 8 days with slow response. Vision improved to hand movement over right eye and counting finger over left eye. The patient was tested positive for serum anti-MOGAD antibodies and subsequently underwent plasma exchange. Young patients with acute rapidly progressive bilateral visual loss should be investigated for uncommon inflammatory causes such as MOGAD. Anti-MOG antibody detection in serum or CSF is diagnostic. Early treatment with high dose corticosteroids followed by maintenance is crucial to prevent relapse and residual neurological disability.

Pregnancy associated central serous chorioretinopathy: its clinical profile

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ABSTRACT

Central serous chorioretinopathy (CSC) is characterised by localised serous detachment of the sensory retina at macula. We report a clinical analysis of 4 pregnant ladies diagnosed with CSC in Hospital Putrajaya. Diagnosis based on clinical features and optical coherence tomography (OCT). Three Malay women and one Chinese woman, with average age 33.5 years old, developed unilateral CSC at mean gestational age of 30-week gestation. Two were primigravida while the other two multigravida. Visually symptomatic with central reduce in vision with a mean vision at presentation was 6/12 and 6/6 during subsequent visit. One patient had varied symptom of diplopia. They had shallow serous elevation of sensory retina involving fovea with varied central retinal thickness at first presentation; mean of 450.5 µm and subsequent visit 288.75 µm. Pigment epithelial detachment observed in three of these cases. Mean choroidal thickness during first presentation was 381.5 µm and subsequent visit 336.75 µm. Due to the contraindications associated with pregnancy and patients will, all patients were treated conservatively. There were two cases with resolution after pregnancy, while the other two still having subretinal fluids during the latest review. CSC is male preponderance, uncommon in pregnancy but typically occurs at third trimester where choroidal thickness and increased plasma cortisol levels occurs causing changes leading to CSC. Subretinal hyper-reflective fibrins are typical findings of CSC in pregnancy while pigment epithelial detachments are often observed within the subretinal areas. Acute CSC is typically a self-limited process. Half-dose photodynamic therapy considered in persistent or recurrent case after delivery.

Isolated oculomotor nerve palsy secondary to internal carotid artery aneurysm: timely intervention for a reversible visual outcome

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ABSTRACT

Intracranial aneurysms cause 34–56% of isolated oculomotor nerve palsies, which is not uncommon. We describe the importance of prompt recognition and management to prevent life and vision-threatening complications. A 57-year-old gentleman with underlying diabetes, hypertension and dyslipidaemia, presented with a three-day history of left eye (LE) ptosis and diplopia. There was associated headache a month ago. Right eye (RE) visual acuity (VA) on presentation was 6/7.5, while LE VA was 6/10. Examination showed left complete ptosis with a "down-and-out" displacement of the eye. LE was only able to abduct. There was anisocoria whereby the pupil size of RE was 2 mm and LE was 7 mm. Relative afferent pupillary defect was absent. The assessments of anterior and posterior segments were unremarkable. Initial contrasted computed tomography (CT) scan of brain and orbit was normal. However, with high index of suspicion of intracranial aneurysm, CT angiography (CTA) was done and showed saccular aneurysm from the terminal segment of left internal carotid artery with mass effect to the left temporal lobe. Clipping of aneurysm was performed by neurosurgical team on day-five of symptoms. Post-operatively, his left VA improved to 6/7.5 with reversibility in left pupil size and improved LE ptosis. Although the limitation of LE extraocular movement remained unchanged, he experienced improvement in diplopia. High index of clinical suspicion is utmost important in managing pupil-involving oculomotor nerve palsy. CTA is a better radiological modality in detecting intracranial aneurysm and allows timely intervention which may reverse the initial visual-related complications.

A rare case of Listeria endogenous endophthalmitis – tips and pearls in treatment paradigm

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ABSTRACT

This report describes a rare case of right eye (RE) endogenous endophthalmitis secondary to Listeria monocytogenes. A 47-year-old Indonesian woman presented with RE sudden blurring of vision with redness and pain after 2 days post-partum. She has underlying gestational diabetes. Her RE visual acuity (VA) was counting fingers, while left eye VA was 6/9 (Snellen chart). There was no relative afferent pupillary defect. RE cornea was hazy with Descemet striae and fine keratic precipitates. A moving dense fibrin clot was noted in the anterior chamber, accompanied by dark brownish hypopyon level measuring 2.4 mm. Intraocular pressure (IOP) was elevated to 37 mmHg. Examinations of the left eye were unremarkable. B-scan ultrasonography of RE showed vitreous condensation with loculation. Vitreous tap was performed and sent for culture and microscopy examinations but no bacterial or fungal seen. Her blood culture revealed organism Listeria monocytogenes. She was given three doses of ceftazidime and vancomycin intravitreally and completed two weeks of intravenous ampicillin and oral ciprofloxacin. Topical gentamicin, ceftazidime, prednisolone and IOP-lowering agents were also initiated. Post-treatment, her RE VA improved to 6/9. RE cornea was clearer with small contracting fibrin clump and hypopyon has resolved. Fundus examination showed pink optic disc with no evidence of retinitis, choroiditis or vasculitis. Listeria monocytogenes is a rare pathogen of endophthalmitis. A high suspicious index should be raised in cases with dense fibrinous anterior chamber reaction, dark hypopyon and raised IOP. This can aid in early treatment and improve visual outcomes.

Association between age, retinal nerve fibre layer thickness and Hounsfield units value in a cohort of patients

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ABSTRACT

Introduction: Optical Coherence Tomography (OCT) is a non-invasive imaging technique that is commonly used to diagnose and monitor various retinal diseases, including glaucoma, age-related macular degeneration, and diabetic retinopathy. On the other hand, Hounsfield Units (HU) are a measure of the radio density of a particular tissue or material, and they are used in computed tomography (CT) scans. The objective of the study is to investigate a relationship between age, HU and OCT parameters in a patient group. **Materials and Methods:** The OCT parameters include the average RNFL thickness, rim area, disc area, average C/D ratio and cup volume of left and right eyes were obtained from the 39 heterogeneous patients visited the Ophthalmology Clinic, Hospital Pakar USM. The HU of left and right eye gloves and occipital brain areas as a control of those patients were measured from their CT brain images. A statistical analysis of the Bivariate Pearson correlation was performed between the age, HU and OCT parameters of the patients. **Results:** There were no significant correlations between age 42.2 (17.2) years) and HU with the average RNFL thickness, rim area, disc area, average C/D ratio, cup volume of right and left eyes. There were no significant correlations between age and HU of the right and left occipital brain areas with the OCT parameters. But there were significant negative correlations of age with the HU ($r = -.429$, $p = .006$) and average RNFL thickness ($r = -.345$, $p = .031$) of left eye. **Conclusion:** This preliminary study showed that HU could be a radiological marker for age related vitreous liquefaction and vitreoretinal pathophysiology. Therefore, it is important to replicate these findings in the large patient groups and the HU values should be interpreted in the context of the specific CT scan and the patient's individual characteristics and clinical history.

A case of fungal corneal ulcer with favourable outcome

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ABSTRACT

Fungal keratitis is a very serious, potentially sight-threatening corneal infection which most commonly develops in patients after trauma or those with a compromised corneal surface. We report a case of a healthy 50-year-old gentleman, presented to emergency clinic for right eve pain and redness for 3 days. Prior to that there was history of iron dust particles went into bis eye while welding. Upon presentation the visual acuity (VA) was counting finger on right eye and 6/9 over the left eye. There was no relative afferent pupillary defect. In the right eye, conjunctiva injected. There was corneal epithelium defect with dense infiltration para-centrally at 6 o'clock about 2.2 mm x 2.4 mm with small corneal scar adjacent to it. There was also severe anterior segment inflammation with hypopyon level 1 mm. The lens was cataractous with normal posterior segment findings. He was treated clinically with intensive antibacterial eyedrops. As his eye condition not improved, antifungal added, topical and systemically. His vision improved from counting fingers at presentation to 6/24. The diagnosis and treatment of fungal keratitis are still a challenge. Early and accurate diagnosis, along with immediate and vigorous treatment, plays a crucial role in managing cases of fungal keratitis. Such an intervention in time can rapidly control fungal infection and largely shorten corneal ulcer healing time and will result favourable visual outcome.

Blindness by ECT-induced posterior reversible encephalopathy syndrome resulting in transient cortical blindness

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ABSTRACT

Electroconvulsive treatment (ECT) for mental disorders is considered to be safe and effective when administered according to standard protocols for appropriate indications. However, ECT has its complications, which include blindness. Blindness by ECT-induced posterior reversible encephalopathy syndrome (EIPRES) resulting in transient cortical blindness (TCB) is one of the possibilities. A 69-year-old woman with underlying schizophrenia and major depression mood not improved with medical therapy, presented with immediate bilateral eye loss of vision post ECT. Visual acuity (VA) of bilateral eye showed no perception of light with negative menace reflex. Relative afferent pupillary defect was negative. Ocular examination revealed mild cataract in anterior segment while fundus and optic disc appeared normal. Full blood count, renal profile, and serum electrolytes were within normal range. Other central nervous system examinations were unremarkable. Contrast-enhanced computed tomography of brain and orbit was normal with no intraparenchymal lesion or bleed seen especially in occipital cortex. Reassessment was done on the subsequent day, VA had improved to counting fingers OU. Patient was reviewed at 48-hours post ECT, VA subsequently improved to 6/10 OD, 6/12 OS spontaneously. Magnetic resonance imaging done 1 week post ECT revealed frontal lobe atrophy and small vessel disease, with no intracranial bleed (ICB). Post ECT-TCB is a rare complication that resolves spontaneously without intervention. The overall safety of ECT is supported by many studies. Nevertheless, patients with EIPRES must be thoroughly examined with imaging as ECT may cause a life-threatening ICB that may need further surgical intervention.

Herpes zoster optic neuritis: a catastrophe of a disease

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ABSTRACT

Herpes zoster optic neuritis (HZON) is a rare sequalae of herpes zoster ophthalmicus (HZO). Ocular complications occur in 78% of cases which mainly involve anterior segment structures, while neuro-ophthalmic complications are rare. We report a case of isolated optic neuritis secondary to HZO in a young patient with uncontrolled diabetes. A 45-years-old diabetic gentleman, presented with a five days history of left eye painless blurred vision. Four weeks prior, he had vesicular rashes over the left periorbital area extending to the left parietal scalp, without ocular complaint. The rash was resolved with a two-week course of oral acyclovir. On examination, left visual acuity was no light perception with presence of relative afferent pupillary defect. The left fundus showed a swollen optic disc with Paton's lines, while the right fundus was normal. The extraocular movement and other neurological examinations revealed insignificant findings. The patient had uncontrolled diabetes with elevated HbA1C. Other blood parameters were normal, including infective and connective tissue disease screening, anti-myelin oligodendrocyte glycoprotein and anti-aquaporin 4 antibody. MRI of the brain and orbit reported normal findings. Pulsed intravenous methylprednisolone was commenced with oral acyclovir followed by a tapering dose of oral prednisolone. On follow-up, vision remained poor with the development of optic atrophy. Isolated optic neuritis is a rare complication of HZO which may lead to profound vision loss. Treatment with antiviral therapy and systemic steroids may help improve vision. Varicella zoster virus vaccination should be considered for at-risk populations to prevent such devastating complications.

Foster Kennedy syndrome in a case of metastatic neuroblastoma

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ABSTRACT

Foster Kennedy syndrome is an ophthalmological condition characterised by unilateral optic atrophy and contralateral optic disc oedema, usually caused by intracranial mass at the anterior cranial fossa. We report a case of metastatic neuroblastoma with Foster Kennedy syndrome. A one-year-nine-month-old boy, presented with a firm, non-mobile swelling measuring 1 x 1cm over his right temple for a month, associated with right eye swelling. He also had intermittent fever throughout, associated with lethargy and poor oral intake. Otherwise, there were no prior head trauma. His right eye was insensitive to light, with slight proptosis and there was relative apparent pupillary defect. Extraocular muscle movements of both eyes were intact. Fundus examination showed slight disc pallor in his right eye with mild disc swelling in his left eye. Brain imaging revealed an extra-axial soft tissue mass at the anterior cranial fossa, thickest at the right frontoparietal region, causing mass effect to the brain, with intracranial and intra-orbital extension, causing compressive optic neuropathy. A tissue diagnosis of neuroblastoma was obtained from multiple biopsies from the mass and bone marrow, with subsequent imaging demonstrating the primary tumour to be adrenal in origin, with bone and marrow metastases, in which he underwent primary tumour resection and chemotherapy. This case highlights the importance of high clinical index of suspicion and proper ocular examination, especially in paediatric population, in which failure to detect more sinister aetiologies may result in life and sight-threatening outcomes.

A case report of Acanthamoeba keratitis: diagnostic dilemma

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ABSTRACT

Acanthamoeba keratitis (AK) poses a significant diagnostic challenge due to its tendency to mimic other keratitis. This case report highlights the importance of maintaining a high index of suspicion for AK in cases of infective keratitis which responds poorly to treatment. We report a case of AK which initially presented with signs suggestive of viral keratitis. It responded poorly to anti-viral and steroid therapy. Subsequent clinical features mimicked fungal infection with presence of stromal ring infiltrate with feathery edges. Anti-viral treatment was stopped, and anti-fungal treatment was initiated. The clinical suspicion of AK was made based on the presence of disproportional pain, anterior stromal infiltrates, shifting hypopyon and failure to respond to anti-viral and anti-fungal therapy. Anti-acanthamoeba therapy was commenced despite absence of laboratory evidence. Patient responded well to intensive guttae chlorhexidine in combination with anti-viral and anti-fungal therapy. The diagnosis of acanthamoeba keratitis can be easily missed. A high index of suspicion is mandatory to prevent significant visual morbidity.

Evaluation of the effect of hypochlorous acid hygiene solution on ocular surface disease index and Schirmer tear test in patients with blepharitis

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ABSTRACT

Introduction: The purpose of this study was to determine whether a commercial formulation of hypochlorous acid (HOCI) hygiene solution (0.01%), Ocucyn™, can treat blepharitis and improve dry eye disease symptoms by evaluating Schirmer tear test (STT) and ocular surface disease index (OSDI) questionnaire results. **Materials and Methods:** Patients and caregivers were taught to use a spray form of HOCl (OcucynTM) on a dry cotton bud and it was then used to perform lid scrub, twice a day. Patients were reviewed at 0 week and 4 weeks from treatment initiation. Outcomes were assessed by reviewing symptoms, anterior segment photograph comparisons, STT and OSDI questionnaires. At the end of the 4 weeks, the medication was discontinued. **Results:** This study comprised of 5 patients (10 eyes) treated with blepharitis. Subjects were 4 males and 1 female in this study. Prior to treatment, 2 patients (40%) presented with both mild and moderate while 1 patient with severe dry eye grading. Post treatment, 3 patients (60%) recovered normal grading while 2 patients (40%) mild grading. STT showed 4 eyes (40%) with severe and 5 eyes (50%) with moderate dry eye pre-treatment. Post-treatment STT showed 6 eyes (60%) recovered normal grading. Anterior segment photography revealed improvement of blepharitis post-treatment. **Conclusion:** HOCl is an effective, safe stand-alone treatment option for blepharitis and improving dry eye disease symptoms.

Takayasu arteritis: the culprit to my sudden loss of vision

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ABSTRACT

Takayasu arteritis is a rare illness that causes inflammation and narrowing of blood vessels. Ocular manifestation in Takayasu arteritis is uncommon as it usually involves the aorta and its main branch. We report a case of branch retinal artery occlusion (BRAO) associated with Takayasu arteritis. A 32-year-old Indian male with underlying Hodgkin's lymphoma presented with right eye (RE) sudden onset inferior visual field loss for one day. Ocular examination revealed RE visual acuity of 3/60 and positive relative afferent pupillary defect. RE optic disc was hyperaemic with blurred margin superiorly and retina was pale at the superior half of the macula with a visible Hollenhorst plaque over the superior arterial branch. Systemic examination revealed the left brachial and radial pulse was not palpable. RE Bjerrum showed inferior half visual field defect with central scotoma. RE OCT macula showed thickened retina with intraretinal fluid. His total cholesterol and LDL were raised. Echocardiogram was normal. Ultrasound Carotid doppler showed thrombus within right CCA causing near 100% occlusion with absent doppler flow of right ICA and ECA. Computed Tomography Angiography showed aorta of normal calibre and configuration, complete occlusion of right intra- and extracranial ICA and collateral perfusion to right ACA and MCA. He was diagnosed with right superior BRAO secondary to Takayasu arteritis and was treated conservatively with double antiplatelets and statin. Despite it being a rare ocular involvement, Takayasu arteritis can cause BRAO especially in patients with multiple risk factors, hence thorough assessment is vital to make a diagnosis.

Seeing double after a coronary angiogram

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ABSTRACT

Neurologic complications post coronary angiography (COROS) are rare but significant, requiring prompt diagnosis and management for optimal care. A 50-year-old man with underlying diabetes mellitus, hypertension, dyslipidaemia, and a history of cerebral infarction presented with acute left eye (LE) diplopia at right gaze and ptosis following COROS for non-ST elevation myocardial infarction. Examination revealed a mild LE ptosis with the eye positioned downward and outward at primary gaze. Dextroversion, dextroelevation, and dextrodepression were absent over the LE but pupillary reflexes were preserved with no other abnormal neurological signs present. Echocardiography post-COROS showed no thrombus, and plain computed tomography (CT) brain revealed multifocal old infarcts, no acute intracranial haemorrhages. He was diagnosed with LE isolated pupillary sparing partial oculomotor nerve palsy and was managed conservatively. Subsequent follow-ups showed his symptoms improved. Examination showed recovery of LE muscle function evidenced by normal corneal reflex, absence of ptosis, and presence of dextroversion, dextroelevation, and dextrodepression. CT angiography of the brain and carotid showed old infarcts at the left corona radiata extending to the left lentiform nucleus and at the left thalamus, with short segment narrowing at the proximal basilar artery with no obvious plaque. Neurologic complications post-COROS are rare, most likely linked to microembolisms or transient vasospasms in this case as per CT angiography findings. A thorough assessment is vital for prompt diagnosis and effective treatment, enhancing patient outcomes and preventing long-term sequelae.

A twist of Parinaud oculoglandular syndrome

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ABSTRACT

Bartonella is a common organism associated with Parinaud oculoglandular syndrome; however, atypical presentations may necessitate a biopsy. A 58-year-old woman presented with right eye redness associated with lid swelling and right preauricular swelling for three weeks. The best-corrected visual acuity was 6/9 OU with no relative afferent pupillary defect. The right upper and lower eyelids were swollen and erythematous. Two firm masses were palpable in the right lower lid. The right eye was proptosed, and the extraocular muscle movement was slightly restricted in all gazes. Her conjunctival was injected with 360-degree chemosis. The posterior segment was unremarkable. Her total white cell count was 11.8, and C-reactive protein was 39. She was started on intravenous Ceftriaxone for right orbital cellulitis. Her clinical condition was status quo. Hence, we proceed with computed tomography brain and orbit, which revealed an enhanced thickening soft tissue mass with ill-defined margins at the right lower lid. An incisional biopsy was performed. Intraoperatively noted diffuse, non-mobile, multilobulated, firm mass measuring 10 mm x 10 mm. Histopathological analysis of the biopsied mass revealed features of Bartonella infection. The diagnosis was revised to Parinaud oculoglandular syndrome, and the patient was discharged with oral Cefuroxime to complete for a total of 6 weeks. During clinic follow-up, the ocular chemosis, lower lid swelling, and preauricular node resolved with vision of 6/9 in bilateral eyes. Unusual manifestations of Parinaud oculoglandular syndrome may involve the occurrence of an orbital mass, sometimes resembling orbital cellulitis. Nonetheless, utilisation of histopathological analysis for tissue identification of Bartonella presents an intriguing diagnostic alternative.

Double trouble

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ABSTRACT

To report a rare case of unilateral abducens nerve palsy in a patient with treated breast carcinoma. A 36-year-old Malay woman with underlying spondylosis and a right invasive breast carcinoma survivor presented with sudden-onset binocular diplopia for one week. She underwent right skin-sparing mastectomy and breast implant 7 years ago and completed chemotherapy and radiotherapy. Her latest magnetic resonance imaging (MRI) of the breast, 2 years ago, showed no recurrence of malignancy, so she is currently on 6-monthly surveillance. During the presentation, her visual acuity was 6/24 over the right eye and 6/18 over the left eye. Extraocular movement examination showed restriction of right eye abduction. Hess chart, which showed right lateral rectus underaction and left medial rectus overaction. Otherwise, other ophthalmic and neurological examinations were unremarkable. An urgent contrasted-enhanced computed tomography of the orbit and brain was performed in view of high suspicion of tumour recurrence. However, there were no space-occupying lesions noted. She was also investigated for other causes of abducens nerve palsy, including multiple sclerosis, diabetes mellitus, hypertension, and infective causes such as Syphilis but all investigations were negative. A few weeks later, this patient presented again with frequent falls, back pain, and difficulty in walking, which required a walking stick. MRI brain orbit and spine was carried out and revealed extensive spine metastases with irregular lesions arising from the pituitary gland, sella tursica, and clivus with local extension. She was co-managed with the neurosurgical and oncology team and was started on radiotherapy treatment. Unfortunately, her right abducens nerve palsy did not recover. In managing patients with cancer, especially in cases where there is a high suspicion of tumour recurrence, MRI is a highly sensitive imaging modality that should be considered, even if the CT scan results are normal, to ensure thorough evaluation and timely management of cancer patients. The multidisciplinary approach in managing cancer patients involves integrating various specialties for comprehensive assessment and timely intervention.

Breathlessness and blind

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ABSTRACT

To report a rare case of vaping induced acute vascular ischemic event presenting as left cilioretinal retinal artery occlusion. A 36-year-old woman with underlying childhood bronchial asthma presented with left eye acute loss of vision which was preceded by temporary loss of vision lasting for 10 minutes. She presented to our clinic 24 hours after onset of vision loss. She is a heavy smoker since she was 16 years old (20 pack years). She started heavy vaping every 4 hourly since 5 years ago. On the presentation, her left eye's visual acuity was light perception in all quadrants with positive relative afferent pupillary defect and reduced left optic nerve function over the left eye. Both eye anterior segment examinations were unremarkable. Left fundus examination revealed a cherry red spot, pale retina, and boxcarring of the retina vessels at all quadrants which corresponded to retina artery occlusion. Right eye fundus was unremarkable. Immediate left ocular massage, carbogen therapy and intraocular pressure- lowering agent was administered. Her vision improved to hand movement after intervention. Fundus fluorescein angiography revealed delayed arterio-venous filling with an enlarged fovea avascular zone and cilioretinal artery occlusion. Echocardiography and computed tomography angiography and vein (CTA and CTV) were normal. She was also investigated for infective, haematological, hyperviscosity and autoimmune causes but all were unremarkable. Patient was co-managed with medical team and was started on anticoagulant. Unfortunately, her left eye vision only recovered to hand movement. Vaping-related clotting phenomena may lead to sight threatening conditions such as central retinal artery occlusion. Prompt investigation and treatment should be carried out to avoid systemic complications such as cardiovascular and cerebrovascular events.

A post infectious scare: optic neuritis secondary to enteroviral meningoencephalitis

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ABSTRACT

Optic neuritis, characterised by inflammation of the optic nerve, is often idiopathic or associated with conditions such as multiple sclerosis (MS) or neuromyelitis optica spectrum disorder (NMOSD). Post-infectious optic neuritis, though rare, predominantly affects children. A 5-year-old boy presented with sudden reduced vision for 1 day associated with headache and fever. Upon presentation, the patient was not responding to light and showed absent blink reflex. Bilateral pupils were sluggish and there was bilateral optic disc swelling. Otherwise, anterior and posterior segment examinations were unremarkable in both eyes. Other neurological examinations were normal. Lumbar puncture showed cerebrospinal fluid (CSF) positive for enterovirus. CSF aquaporin-4 and oligoclonal band were negative. Serum myelin oligodendrocyte glycoprotein (MOG) antibody testing was not performed due to financial constraints. MRI of the brain and orbit indicated features consistent with central nervous system infection or meningoencephalitis, along with signs of raised intracranial pressure. Thus, this patient was treated as optic neuritis secondary to enteroviral meningoencephalitis. Intravenous methylprednisolone was initiated and bilateral eye visual acuity improved to 6/24 after 5 days. Currently, there is no specific antiviral medication that is available for enterovirus, therefore the patient was treated conservatively. Enterovirus infection can cause acute disseminating encephalomyelitis. Early steroid treatment and specific antiviral may be beneficial. It is usually monophasic but relapses can occur within 6 months with or without functional deficits. Therefore, it is crucial to monitor for potential development of multiple sclerosis and recurrent optic neuritis in the future.

Clinical manifestation of ocular bartonellosis: a case report

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ABSTRACT

Cat scratch disease (CSD) is a systemic illness which is caused by a gram-negative bacillus, Bartonella henselae and can have ocular involvement. We present 2 cases with variable, bilateral posterior manifestations of ocular bartonellosis. From March – April 2024, two healthy male patients were diagnosed of bilateral ocular bartonellosis with history of contact with cats, fever and headache before developing ocular symptoms. Diagnosis was supported by evidence of Bartonella henselae IgM and/or IgG. The first patient, a 25-year-old presented with right eye (RE) central scotoma, reduced visual acuity (VA) and optic nerve function test (ONFT) over the RE. Ocular examination revealed bilateral neuroretinitis. He was treated with oral Doxycycline for 6 weeks. The second patient, a 42-year-old also presented with RE central scotoma, reduced VA and ONFT over the RE. Upon examination, patient had bilateral optic disc swelling with multiple choroiditis spots and right eye cilioretinal artery occlusion with macula star. He was treated with intravenous ceftazidime for 1 week and oral Cefuroxime for 6 weeks while awaiting serology results. Both patient's VA and ONFT improved dramatically with treatment. Bartonella infection may present with an array of ophthalmic manifestation including bilateral neuroretinitis, choroiditis and vascular occlusion. Therefore, Bartonella henselae should be considered as a differential diagnosis in those patients with history of cat exposure and empirical antibiotics should be commenced before final serology confirmation of infection for good visual outcomes.

Herpes simplex geographical ulcer: discovering India's map in eye

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ABSTRACT

To report a case of geographical corneal ulcer. A 51-year-old male with no known co-morbid presented with left eye (LE) redness, blurring of vision, photophobia and tearing for 1 month. He has history of foreign body entered into LE 1 week prior to symptoms onset. His best-corrected visual acuity was 3/60 over LE and 6/9 over right eye with no relative afferent pupillary defect. Slit lamp examination over LE revealed swollen lids with mechanical ptosis and diffuse conjunctival injection. The cornea sensation was slightly reduced. There was huge central corneal ulcer measuring 6.5 mm x 6.2 mm with infiltrate measuring 5.7 mm x 4.0 mm. Fluorescein staining under cobalt blue light showed an epithelial defect which roughly resembles the shape of India map. Right eye was unremarkable. Patient was started on topical antibiotic and cycloplegic. However, during follow-up, patient showed very slow progress and cornea sensation was markedly reduced. A revised diagnosis of Herpes simplex keratitis was made. He was started on oral acyclovir and ointment acyclovir. His condition improved gradually at follow-up appointment with residual scarring remaining and his LE visual acuity improved to 6/18. In severe cases of Herpes simplex keratitis, ulcers can merge to form a distinctive "map-like" shape. Prompt diagnosis and treatment are crucial to prevent complications such as scarring, chronic pain, and increased transmission risk.

Sebaceous gland carcinoma: a great masquerader

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ABSTRACT

Sebaceous gland carcinoma (SGC) is a rare eyelid malignancy. Eyelid swelling mimicking chalazion is the most common presentation which can be misdiagnosed leading to delay in diagnosis and treatment. Patient is 62-year-old woman with underlying hypertension and goitre presented to with right eye (RE) upper eyelid swelling past 1 year became harder in consistency was increasing in size. On examination, her visual acuity was 6/6 both eyes and normal intraocular pressure. Slit lamp examination of the RE upper eyelid revealed a 1 × 1 cm hard, solitary centrally located lesion with few pouting punctums on the surface. The lesion had pearly telangiectatic vessels. The lesion extended through lid margin into palpebral conjunctiva. Otherwise, no ulceration and no loss of eyelashes. Left eye anterior segment and both eyes fundus was unremarkable. RE eyelid incision biopsy was done and histopathology report revealed features of SGC whereby tumour tissues arranged in nest and solid sheets with marked pleomorphism, vesicular nuclei with prominent nucleoli. Focal tumour clusters with central necrosis seen. No lymphovascular invasion seen. Patient was then subjected for RE excisional biopsy under frozen section followed by lid reconstruction. SGC is a great masquerader; therefore, higher clinical suspicion is needed for prompt diagnosis and management to prevent metastasis or recurrence related to advanced tumours.

A case of traumatic submacular haemorrhage treated with pneumatic displacement

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ABSTRACT

Submacular haemorrhage (SMH) can lead to significant vision loss due to conditions such as trauma, age-related macular degeneration, and surgery. Traumatic SMH presents a unique challenge as it can cause rapid and severe visual impairment. Pneumatic displacement is a proven treatment for certain cases of SMH, providing a minimally invasive way to reattach the neurosensory retina and enhance visual outcomes. A 33-year-old gentleman presented to casualty with central vision loss over his right eye following an assault. His presenting visual acuity was hand movements. Dilated fundus examination revealed a right large subretinal haemorrhage involving the fovea and commotio retina. Optical coherent tomography demonstrates a tall subretinal hyperreflective material with neurosensory retinal detachment. Pneumatic displacement was performed with intravitreal injection of 0.3 mL of perfluoropropane (C3F8) gas with facedown position. Post operation the haemorrhage was successful displacement with improvement of vision to 6/36. SMH can result in photoreceptor damage due to iron toxicity, fibrin meshwork contraction, and reduced nutrient flux, ultimately leading to macular scarring. Pneumatic displacement stands as one of the treatment options for addressing SMH. This case highlights the significance of early intervention in instances of SMH to prevent permanent vision impairment.

Brown tumour of right orbital roof expansile lesion – diagnostic and multidisciplinary therapeutic strategies: a case report

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ABSTRACT

Brown tumour is a known manifestation of hyperparathyroidism. Orbit is a rare site of involvement, which can be vision threatening apart and compromising facial aesthetics. We report a case of right orbital roof expansile lesion biopsy-proven Brown tumour during debulking surgery and strategies for multidisciplinary management. An 18-year-old male with multiple comorbidities was presented with painless facial asymmetry, progressive right proptosis and dystopia for past 6 months. Diplopia was present at primary gaze a few months at onset. Visual acuity was 6/12 on right eye, and 6/9 on left eye with absence of right relative afferent pupillary defect. The right eye was mildly proptosed with inferior globe dystopia. Ocular motility was markedly limited on upgaze. Fundus was normal in both eyes. Computed tomography scan revealed benign expansile lytic bone lesion containing multiple small calcifications at right orbital roof. It extended into the orbit and caused compressive effect to the globe. Surgical resection was combined with oral and maxillofacial surgeons, which biopsy confirmed brown tumour. The diagnosis was consistent with pre-existing secondary hyperparathyroidism that was presumed due to chronic kidney disease. However, with manifestation of Brown tumour, the parathyroid gland should be further evaluated with aim for parathyroidectomy, in order to minimize tumour recurrence. Ophthalmologist, specifically oculoplastic surgeon plays critical role in diagnosing orbital brown tumour. Combined surgical biopsy and resection with oral and maxillofacial surgeons ensure optimal outcome. Multidisciplinary therapeutic strategies are essential to address the long term local and systemic issues.

Case series of corneal perforation secondary to post-radiotherapy treatment in patients with sinonasal malignancies

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ABSTRACT

Corneal perforation is a known ocular complication following radiotherapy treatment. Radiation exposure may cause severe dry eyes that typically progresses towards erosion, persistent corneal epithelial defect and neurotrophic complications. We presented three case series of corneal perforation post radiotherapy in patients with sinonasal malignancies Three patients were diagnosed with sinonasal malignancy. All of them presented with cornea perforated secondary to severe dry eyes. They had received radiation exposure prior to the presentation. Two cases had undergone lamellar keratoplasty while one case had undergone tectonic penetrating keratoplasty due to chronic perforation and flat anterior chamber. Final visual acuities achieved were ranging from 6/12 till hand movement. Corneal perforation is the most serious complication that can occur after high-dose radiation exposure in Sino-nasal tumour patient. To prevent adverse outcomes and maintain eye health in radiotherapy patients, it is critical to take preventive measures and closely monitor radiation exposure among susceptible patients.

Effect of monocular degraded vision on manual dexterity performance using the grooved pegboard test

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ABSTRACT

Introduction: Manual dexterity plays a role in how individuals interact with and learn about their surroundings. Challenges in manual dexterity may interfere with the precise movements for everyday tasks. This study investigates the effect of monocular-induced degraded vision on manual dexterity performance using the Grooved Pegboard Test (GPT) in young adults. **Materials and Method:** Normally sighted individuals with best corrected visual acuity, and no binocular vision anomalies, diagnosed neurological disorders, or physical impairment were recruited in this study. The frosted lens is used to simulate the visual effect of monocular visual degradation. The procedure involves the execution of the GPT with degraded dominant eye, the execution of the GPT with degraded non-dominant eye and the execution of the GPT with no visual degradation. **Results:** 31 normally sighted young adults with mean age 22.70 (1.33) participated in this study. The mean score for GPT with degraded dominant eye was 97.96 (7.50), degraded non-dominant eye was 91.42 (5.54), and no visual degradation was 86.05 (5.56). There was significantly reduced manual dexterity performance with the degraded dominant eye compared to the degraded non-dominant eye ($t(30) = -6.82$, $p = 0.000$), degraded dominant eye compared to no visual degradation ($t(30) = -11.29$, $p = 0.000$), and degraded non-dominant eye compared to no visual degradation ($t(30) = -9.20$, $p = 0.000$) with paired-t test. **Conclusion:** There was a significant reduction in performance under conditions of visual degradation, with a more pronounced decline when the dominant eye was impaired. These findings provide insight for future research developing visual rehabilitation strategies to support individuals with compromised vision.

White dots syndrome with no white dots in the fundus

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ABSTRACT

Multiple evanescent white dots syndrome (MEWDS) is a subtypes of white dots syndrome. It is a rare inflammatory condition, characterised by multiple subretinal white dots extending from posterior pole to retina mid-periphery. Diagnosis can be challenging when white dots are not visible in fundus. Therefore, multimodal imaging is important for diagnosis. A 40-year-old Chinese woman, with underlying myopia, otherwise healthy, presented with acute onset, painless left blurring of vision for 2 days. It was associated with floaters. Upon examination, visual acuity was 6/60 (unaided); 6/30 (pinhole) OD and counting fingers OS. Anterior segments were normal. Left fundus examination revealed a tilted optic disc with peripapillary atrophy and flat retina. Bjerrum test demonstrated an enlarged left blind spot. Fundus autofluorescence showed hyperautofluorescent spots at the macula. Optical coherence tomography showed retinal pigment epithelial irregularities with discontinuities in inner segment/outer segment junction. Fundus fluorescein angiography (FFA) revealed early hyperfluorescence and area of staining with no hot disc, vasculitis or capillary non-perfusion. Diagnosis of MEWDS should be considered in young healthy women presenting with acute onset, unilateral, painless blurring of vision. Multimodal imaging is useful especially in cases with normal fundus findings. Even in the absence of white dots on clinical examination, FFA can show up the characteristic hyperautofluorescent lesions.

Retrobulbar haemorrhage: can we prevent blindness?

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ABSTRACT

Retrobulbar haemorrhage is a rare ocular emergency that complicates blunt trauma, eyelid or orbital surgery and requires urgent identification and management. Orbital decompression done in time can successfully reverse vision loss even in the setting of prolonged blindness. A 46-year-old male with no known medical illness, presented with severe right eye pain, proptosis and reduced vision following motor vehicle accident that occurred six hours prior. On examination of the right eye, the globe was tense with ophthalmoplegia in all gazes. The right pupil was mid-dilated 5mm and unreactive with visual acuity no perception of light. The lens was normal and fundus examination showed normal optic disc with multiple retinal bleeds surrounding the disc area, other posterior segment findings were unremarkable. Intraocular pressure was not able to be obtained as the patient was in severe pain. However, it was assumed to be very high as the globe was tense and hard. A diagnosis of acute retrobulbar haemorrhage was made and emergency lateral canthotomy and cantholysis was performed in the emergency department. The patient's condition continued to improve and on day 26 post trauma his vision improved to 6/24 with resolved ophthalmoplegia. Early recognition and immediate orbital decompression can help to preserve vision loss in retrobulbar haemorrhage, regardless of the time since injury.

Seeing through optic disc tuberculoma

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ABSTRACT

Optic disc tuberculoma is rare but significant manifestation of tuberculosis (TB), especially in immunocompromised patients. Hereby we would like to report a case of optic disc tuberculoma. A 34-year-old female with underlying HIV and tuberculous lymphadenitis presented with right eye (RE) blurring vision for 2 weeks. Examination revealed RE vision 6/18, left eye (LE) 6/9. Relative afferent pupillary defect positive (RAPD) in RE with reduced light and red saturation. RE fundus showed optic disc (OD) swelling with no splinter haemorrhage or choroidal lesion. LE fundus normal. CECT brain and orbit revealed enlarged right optic nerve. She was diagnosed with RE optic neuritis secondary to TB and treated with antituberculosis medication (AKurit-4). Steroid was not given due to ongoing infection. She was non-compliant with medication, leading to deterioration of RE vision to 6/24 after 2 weeks with reduced light, red saturation and positive RAPD. RE fundus showed OD swelling with splinter haemorrhage and a granuloma lesion measuring 3-disc diameter (DD) inferonasal to the OD. She was diagnosed RE optic neuropathy secondary to optic nerve tuberculoma, and treatment was supplement with intramuscular streptomycin. On follow up RE vision improved to 6/9, with improving light and red saturation. Fundus examination showed RE OD swelling and splinter haemorrhage resolved, and granuloma size reduced to 1.5DD. Optic disc tuberculomas are rarely reported, and required treatment duration remains unclear. In this case, our required additional streptomycin on top of first line AKurit-4, which condition later shows improvement.

Postoperative challenges in oculomotor nerve schwannoma: a case report

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ABSTRACT

Oculomotor nerve schwannomas are extremely rare, benign tumours arising from the Schwann cells. Schwannomas of the oculomotor nerve are seldom reported in the literature, making their diagnosis and management particularly challenging for clinicians. The rarity of these tumours and the nonspecific nature of the symptoms often lead to a delay in diagnosis, underscoring the need for heightened clinical suspicion and advanced imaging techniques. We present a case of a 60-year-old gentleman who exhibited symptoms of unilateral non-axial proptosis and optic disc swelling. Orbital magnetic resonance imaging revealed a heterogenous, well-defined margin intraconal lesion. Patient underwent a complete excision of the mass consistent with schwannoma without any intraoperative complications. In the early postoperative period, patient developed binocular double vision with left exotropia and significant loss of adduction. To correct this, we performed a surgical transposition, repositioning half of the left superior rectus and half of the left inferior rectus to the medial rectus muscle. This procedure was aimed at restoring the balance of extraocular muscle forces. Postoperatively, patient showed a significant improvement, regaining an orthophoria position at primary gaze and experiencing a marked reduction in diplopia. This case highlights the importance of prompt and accurate diagnosis, followed by immediate and appropriate surgical intervention and effective postoperative rehabilitation in achieving optimal functional and cosmetic outcomes. The case underscores the necessity for a multidisciplinary approach, involving neurosurgery, ophthalmology, and radiology, to ensure comprehensive and optimal recovery for patients with such rare orbital tumours.

Posterior ischaemic optic neuropathy post successful coiling of direct spontaneous carotid cavernous fistula in a young healthy male

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ABSTRACT

Trans-arterial coil embolization is a common interventional procedure for symptomatic carotid cavernous fistula (CCF). However, it rarely causes sight-related adverse events. We report a rare case of unilateral posterior ischemic optic neuropathy (PION) following a successful trans-arterial coil embolization of direct spontaneous CCF in a young, healthy male. A 22-year-old gentleman with no known medical illness and no history of trauma, developed binocular diplopia and intermittent headache for five months with worsening right eye (RE) redness, swelling and proptosis for two days. On examination revealed RE vision 6/6, intraocular pressure (IOP) of 23 mmHg, lagophthalmos, pulsatile exophthalmos, orbital bruit, chemosis with corkscrew vessels and abduction deficit. Cerebral digital subtraction angiography (DSA) confirmed right cavernous portion of internal cerebral artery (ICA) aneurysm with direct right CCF. Trans-arterial coil embolisation was successfully performed. Immediately after coiling procedure, he complained of RE blurred vision, with vision reduced to 6/36. A positive grade 2 relative afferent pupillary defect and a pink optic disc were observed. He was promptly diagnosed with RE PION and started on intravenous Methylprednisolone 1 g OD for 3 days. His vision subsequently returned to baseline, accompanied by the resolution of initial signs and symptoms. This case underscores the risk of developing PION following endovascular intervention for direct CCF and emphasizes the necessity of maintaining a high index of suspicion for diagnosis. Intravenous Methylprednisolone may help to reduce inflammation caused by the ischaemic event during the coiling procedure.

Conjunctival lymphoma masquerading as chronic conjunctivitis

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ABSTRACT

Malignant lesions of the conjunctiva may present with slowly evolving signs resembling inflammation. Rarely, a diffuse clinical presentation is encountered, and this may mimic chronic conjunctivitis. An 80-year-old Chinese man, known case of hypertension and hyperlipidaemia, first presented with complain of right eye (RE) blurring of vision for the past one year. However, he is unsure of onset of duration of RE redness which was noted during eye examination. A diagnosis of conjunctivitis was made and treated with topical antibiotic. He was also diagnosed with RE white cataract. His condition did not improve and developed RE conjunctival swelling. He denied any constitutional symptoms and family history of malignancies. His visual acuity was hand movement in the RE and 20/120 in the left eye. Examination of the RE revealed a diffuse subconjunctival fleshy mass extending from 8 to 4 o'clock over the epibulbar surface. Conjunctival biopsy was performed and histopathology examination showed features of low-grade non-Hodgkin B-cell lymphoma. Immunohistochemistry report was suggestive of marginal zone lymphoma. No systemic organ involvement was detected. The patient was subsequently referred to the haematology team, where he was managed conservatively in view patient was asymptomatic and the lesion was localised. Subsequently, the lesion regressed spontaneously and he is under long term follow-up. Conjunctival lymphoma may rarely present as a diffuse lesion and can be misdiagnosed as chronic conjunctivitis. Therefore, a high index of possibility of malignancy should be kept in mind to avoid oversight and misdiagnosis.

Rare ocular manifestation of Mycoplasma pneumoniae infection

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ABSTRACT

Mycoplasma retinopathy refers to retinal changes associated with infections caused by Mycoplasma species, particularly Mycoplasma pneumoniae. This condition is rare but can occur, especially in the context of systemic Mycoplasma infection. We report a rare ocular presentation of Mycoplasma pneumoniae infection. A 26-year-old woman presented with a 1-week history of generalised, progressive worsening bilateral eye blurring of vision preceded by fever and cough. Her visual acuity was 3/60 and 6/36 for right and left eyes respectively. Anterior segment examination was unremarkable. Dilated fundus examination bilaterally revealed multiple intra-retinal haemorrhages, some of which were white-centred, and cotton wool spots in the posterior pole and peripheral fundus. Optic disc and macula were normal. Autoimmune and infective workups were negative. Serology testing for Mycoplasma pneumoniae was positive and she was diagnosed with atypical pneumonia with ocular manifestations. The patient was treated with oral azithromycin. Reviews in 6 weeks post treatment show improved visual acuity of 6/24 in the right eye and 6/12 in the left eye with resolving both eye intraretinal haemorrhage and cotton wool spots. Patients with mycoplasma retinopathy may present with blurred vision and retinopathy changes. The diagnosis typically involves laboratory tests for mycoplasma infection. Antibiotics treatment to address the infection is important and in certain cases, corticosteroids may be indicated to reduce inflammation.

Third nerve palsy due to compression by interpeduncular cistern tuberculoma

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ABSTRACT

Central nervous system (CNS) disease resulting from Mycobacterium tuberculosis is a rare but profoundly destructive manifestation of tuberculosis. CNS tuberculosis constitutes 5-10% of all tuberculosis cases and is associated with high mortality and significant neurological morbidity. In children, CNS tuberculosis commonly presents as tubercular meningitis, post-tubercular meningitis hydrocephalus, and, more rarely, as space-occupying lesions called tuberculomas. A 10-year-old boy with underlying tuberculosis meningitis on day 54 intensive phase of anti-tuberculosis treatment with adjunctive dexamethasone. He presented with a left side headache for 2 days associated with left eyelid drooping and mild blurring of vision. Otherwise, no dizziness, nausea and vomiting. Visual acuity of the right eye (RE) was 6/9 and the left eye (LE) was 6/12 with reverse relative afferent pupillary defect negative. LE ptosis with aperture opening of 2mm covering pupillary axis and frontalis overaction was observed. The patient had all gaze diplopia and left eye limited extraocular movement in all gazes except left lateral movement. Normal optic nerve function with anisocoria of RE 3mm and LE 5mm were noted. Anterior and posterior segment findings were unremarkable. Otherwise, there was no nystagmus and the patient had normal gait. Magnetic resonance imaging revealed interpeduncular cistern tuberculoma (0.9 x 1.2 x 1.2 cm) with mass effect and compression on the left oculomotor nerve. Intracranial paediatric tuberculoma is a rare presentation of CNS tuberculosis. Thorough systemic and ocular examination is needed to evaluate the patient's condition and immediate imaging to look for life threatening space occupying lesion.

Ocular ischaemic syndrome secondary to direct carotid-cavernous fistula: a case report

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ABSTRACT

Ocular ischaemic syndrome (OIS) is a rare but serious condition cause by blockage or severe narrowing of carotid arteries. We report a case report of OIS secondary to indirect carotid-cavernous fistula (CCF). A 54-year-old woman with underlying type-2 diabetes mellitus, complained of persistent painless left eye redness for two years. She denied history of ocular trauma prior to the redness. On examination, her both eyes vision was 6/9. The left eye exhibited mild non-axial proptosis, with Hertel exophthalmometer measuring 12mm OD and 14mm OS at a base of 98mm. Both eyes' optic nerve function tests were normal and extraocular muscle movements were full. The anterior segment of left eye revealed corkscrew vessels with intraocular pressure of 17mmHg. There was no neovascularization in iris and gonioscopy examination showed open angle. Fundus examination of left eye showed multiple coin shaped blot haemorrhages at mid peripheral region and tortuous vessels, with no new vessels. Right eye anterior segment unremarkable and fundus showed moderate non-proliferate diabetic retinopathy. Her fasting lipid profile and fasting blood sugar were normal. Contrasted computed tomography of the orbit and brain revealed left CCF with a dilated left superior ophthalmic vein. She was co-managed with neurosurgical team and digital subtraction angiography brain confirmed left indirect CCF (barrow type D). She was scheduled for embolization surgery. This case underscores the importance of early diagnosis and intervention in patients with indirect CCF complicated by OIS. Timely treatment can improve patient outcomes and preserve visual function.

Successful regression of orbital lymphatic-venous malformation with sclerotherapy

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ABSTRACT

Orbital lymphatic-venous malformation is a rare multicystic malformation of the lymphatic and vascular system commonly affecting the paediatric population. A 16-year-old female with no known medical illness and no known drug allergy presented to us with gradual onset of left eye painless proptosis for 3 months, associated with blurring of vision for 2 weeks. There was no prior history of fever or trauma. Visual acuity was 3/60 (pinhole 6/36) in left eye and 6/9 in the right eye. She had grade 1 relative afferent pupillary defect. She was found to have restricted left extra-ocular muscle movements in all directions, associated with a 7 mm non-axial proptosis. There was also evidence of optic disc swelling and macula striation in the fundus examination. Magnetic resonance imaging of brain and orbit showed heterogenous enhancing mass at medial left orbit and presence of multiple phleboliths and cystic components with fluid filled level occupying the medial extraocular and retroorbital space involving the orbital apex suggestive of left orbital veno-lymphatic malformation with venous component predominance. There was no intracranial involvement. Due to the close proximity of the tumour to the optic nerve and high risk of bleeding intraoperatively as it was a highly vascularized tumour, interventional radiologist was consulted for sclerotherapy instead of debulking surgery. The patient underwent bleomycin sclerotherapy and showed an excellent response with the resolution of proptosis and improvement in extraocular muscle movement. Sclerotherapy is a promising and less invasive alternative treatment for orbital-venous malformation.

A case of uveitic glaucoma and Hansen's disease

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ABSTRACT

Leprosis, also known as Hansen´s disease, is a chronic infective granulomatous disease caused by Mycobacteriam leprae. We report a case of atypical uveitic glaucoma that is due to Hansen's disease. A 28-year-old lady with a history of lepromatous leprosy since 2020, had bilateral eyes chronic anterior uveitis with multiple flare-ups, worsening in July 2023 during steroid tapering. Vision was 1/60 OD and hand movement (HM) OS. Examination revealed both eyes 360-degree occlusio pupillae with iris bombe, mutton fat keratic precipitate, anterior chamber activity 2+ and rubeosis iridis. Her intraocular pressure (IOP) was 30 mmHg OD, 42 mmHg OS with no fundus view. B-scan showed posterior vitreous detachment and flat retina. Thorough investigations performed and yielded negative results. Despite maximum medical therapy and laser peripheral iridotomy, IOP remained uncontrolled. She underwent bilateral combined phacoemulsification and glaucoma drainage device implantation. Aqueous tapping for polymerase chain reaction for Mycobacterium leprae and Mycobacterium tuberculosis were negative. Post-surgery, her vision improved to 6/9 OD and HM OS. Both eyes' IOP were controlled without medication. Right fundus revealed hyperemic swollen optic disc and cystoid macula edema (CMO) OD, while left eye showed pale optic disc. She was on slow steroid tapering, with no subsequent flare-ups and resolved CMO. This case highlights the complexity on the management of uveitic glaucoma in Hansen's disease. Close monitoring with multidisciplinary approach is essential for managing such multifaceted conditions.

Slowly but surely, ipsilateral painless vision loss due to Meningothelial meningioma: a case report

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ABSTRACT

We report and discuss a case of painless gradual ipsilateral vision loss secondary to optic nerve sheath meningioma (ONSM), an uncommon benign tumour arising from optic nerve and meningeal sheath. ONSM is the second-most common primary optic nerve tumour. It can grow along the entire length of the nerve and penetrate into cerebral space, affecting the contralateral visual pathway. Method: A single case report. A 56-year-old woman presented with painless right eye swelling for 6 months with preceding progressive reduction of right vision for a year. Examination revealed right proptosis with mild swelling surrounding the right eye. There was right relative afferent pupillary defect with no light perception. The right optic disc was pale. Computed Tomography scan showed an intraconal mass and surgery revealed yellowish-white mass engulfing the optic nerve. Histopathological examination revealed meningothelial meningioma. Due to the size of the tumour and poor visual prognosis, exenteration with lid sparing and orbital prosthesis was offered. ONSMs commonly affect the visual pathway due to their location and may lead to vision loss. Treatments of ONSMs include observation, surgical resection, and radiotherapy. Asymptomatic patients can be treated conservatively. Recent advancement such as trans-nasal endoscopic optic nerve decompression or stereotactic radiotherapy give promising results in ONSMs patients, including a complete resolution of visual symptoms following total tumour resection.

Case report of unilateral uveitis following streptokinase treatment for myocardial infarction

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ABSTRACT

To report a case of unilateral uveitis following streptokinase treatment for myocardial infarction. 59-year-old male with underlying diabetes mellitus, hypertension, dyslipidaemia and ischemic heart disease presented to the emergency department with sudden onset left sided chest pain, shortness of breath and sweating. He was diagnosed with a myocardial infarction (MI) and was thrombolysed with streptokinase (1.5 million units). After 6 hours, he complained of sudden onset left eye (LE) pain, redness and reduced vision. On examination of LE, vision was 6/12. Intraocular pressure (IOP) was normal. He had conjunctival circumcilliary injection, cornea clear, anterior chamber (AC) was deep, with marked uveitic reaction (cells 4+) and a strand of fibrin at pupillary margin. No hypopyon or hyphaema noted. Fundus was unable to visualize due to AC flare, B-scan of LE shows vitreous clear and retina is flat. The right eye (RE) was unremarkable. He was treated with guttae predforte 2 hourly and gradually tapered down. Subsequently his signs and symptoms improved with a visual acuity of 6/9. AC reaction reduced (cells1+) with resolution of fibrin. Although rare, unilateral and bilateral uveitis has been reported as a side effect of streptokinase infusion following treatment for MI. Due to potential side threatening complications, it is important to recognize these side effects. Treatment with topical steroids results in rapid resolution of uveitis.

Anterior vitreous cell: a missed clue in a case of neuroretinitis masked by central retinal vein occlusion

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ABSTRACT

To report a case of non-ischaemic central retinal vein occlusion (CRVO) masking neuroretinitis diagnosis in a young healthy adult. A 37-year-old healthy female first presented with 1-week history of left eye (LE) painless blurring of vision, which was preceded by acute floaters for few days. She had no systemic complaints, denies high risk behaviour or significant travelling history. Her vision was 6/9 bilaterally, optic nerve function was intact and anterior segment findings were unremarkable. LE fundus showed swollen optic disc (OD), extensive retinal haemorrhages with dilated vessels in all quadrants and absence of cotton wool spot. She was diagnosed with non-ischemic CRVO. Her investigation results including infective screening, cardiovascular risks and connective tissue screening turned up to be negative. In the third months' visit, there was worsening of OD swelling with macula involvement evidence by Optical coherence tomography (OCT), coinciding with worsening of vision to 6/36. Her diagnosis puzzled us. Medical retina team was referred. She was noted to have LE anterior vitreous cell and history of pet cat at home was elicited. The diagnosis was then revised to neuroretinitis and trial of oral ciprofloxacin 500 mg BD and oral Prednisolone 40 mg OD was started. She completed 5-weeks course of oral ciprofloxacin, oral prednisolone and topical dexamethasone QID. She regained her baseline vision (6/9) with concurrent resolution of OD and macula swelling. The presentation of CRVO may be misleading, especially in a young healthy adult. Thorough history taking and eye examination is crucial in establishing accurate diagnosis. Neuroretinitis masked by the clinically CRVO-like presentation is the highlight of this case report.

Right abducens nerve palsy as the only manifestation of nasopharyngeal carcinoma: a case report

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ABSTRACT

Nasopharyngeal carcinoma (NPC) can present with atypical symptoms including cranial nerve palsies as an early manifestation. We would like to report a case of NPC manifested as an isolated cranial nerve VI palsy. We report a case of a 32-year-old gentleman with no known illnesses presenting with a four-days-onset of binocular diplopia. He is a chronic smoker of 20 pack years and has a brother who passed away from advanced NPC. Examination revealed visual acuity of 6/6 in both eyes. Anterior segment and fundus examination were normal. Right eye extraocular muscle movement was limited on right dextroversion, full on all other gazes. There was binocular diplopia on primary and right gaze. Systemic examinations were unremarkable. Computed tomography (CT) showed a 2.7 x 3.1 x 2.4 cm right nasopharyngeal mass with left submandibular lymphadenopathy. He was co-managed with the Otorhinolaryngology team and the biopsy was conclusive of NPC. He was referred to Oncology and commenced on combined chemoradiotherapy (CCRT) and weekly Cisplatin. Further CT and Magnetic resonance imaging revealed enhancing soft tissue extending from right carotid canal into right cavernous sinus towards medial cranial fossa and at right retroclival region and sphenoid sinus. After multiple cycles of CCRT, his latest CT shows resolution of right fossa of Rosenmuller mass with mild residual fullness, resolved intracranial extension through right Meckel's cave and reduction in size of cervical lymphadenopathy. Isolated sixth nerve palsy is an uncommon but possible presentation in NPC. Timely recognition of this disease can help orient patients to appropriate otorhinology and oncology attention required.

Paracentral acute middle maculopathy in a healthy pregnant woman

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ABSTRACT

Paracentral acute middle maculopathy (PAMM) is a rare retinal disorder characterised by diffuse lesions at the inner nuclear layer (INL) on spectral-domain ocular coherence tomography (SD-OCT). Extensive investigations are often required to rule out all the systemic risk factors as PAMM is associated with various retinal vascular diseases. A 32-year-old primigravida in her first trimester with no known medical illness, presented with right temporal paracentral scotoma for one week. Visual acuity was 6/6 bilaterally, with no relative afferent pupillary defect. Anterior segment examination was unremarkable with normal intraocular pressure of 14mmHg. Fundus examination revealed a slight elevation over the right nasal fovea. Left eye fundus was unremarkable. She was noted to have an enlarged blind spot on the visual field test of her right eye. OCT of the macula revealed a hyper-reflective band nasal to the fovea which involving the INL, consistent with PAMM. OCT angiography (OCT-A) showed flow attenuation corresponding to the site of lesion. However, systemic workups for hypertension, diabetes mellitus and dyslipidaemia were unremarkable. A final diagnosis of PAMM was made based on the findings on OCT and OCT-A macula. The symptoms persisted throughout her pregnancy and postpartum, however, the severity gradually decreased. Meanwhile, there was complete resolution of the hyperreflective band which was previously seen on OCT and OCT-A macula. PAMM is an uncommon cause of scotoma but is possible in a healthy pregnant lady with no ocular and vascular systemic risk factors. OCT and OCT-A should be performed to look for the characteristic changes at the INL while the systemic work-up may help to exclude systemic and cardiovascular risk factors.

Paediatric cataract surgery outcome in Hospital Raja Perempuan Zainab II: A 10-Year Review

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ABSTRACT

Introduction: Cataract is the main cause of visual loss in paediatric population (22.3%) followed by retina disorders (20.8%). A recent study involving 12 Asean countries showed that Malaysia has one of the highest prevalence of paediatric cataract in Asia at 5.33 per 10,000 people, whereas its neighbour Indonesia and Thailand has a prevalence of 0.60 and 4.27 per 10,000 people, respectively. Treating cataract in paediatric population is challenging. Particular challenges include a more elastic lens capsule, a smaller eye that can preclude intraocular lens (IOL) implantation, and quickly changing axial length, which makes determining IOL power more challenging. **Materials and Methods:** A retrospective study involving 48 patients (65 eyes) aged 0-17 years old with cataract and underwent cataract surgery in Hospital Raja Perempuan Zainab II, Malaysia from January 2014 until December 2023. The demographics and clinical data were collected from medical records. Visual outcomes at one-year post-operation and the associated factors were analysed using logistic regression. This study is approved by Medical Research & Ethics Committee (MREC), NMRR ID-24-00814-OLC (IIR). **Results:** There were higher preponderance in male, 32 (66.67%) compared to female, 16 (33.33%) consistent with previous local study (4). In our study, 32.3 % (21) of patient aged less than 5 years old, and 67.7% (44) of patients aged more than 5 years old. Majority of our patients had unilateral cataract, 31 patients, compared to bilateral cataract, 17 patients. Our study showed most patients had primary cataract, 44 eyes compared to secondary cataract, 21 eyes, aligning with findings from previous studies (4, 5). The most common cause of secondary cataract is traumatic cataract (11 eyes) followed by post vitrectomy cataract (5 eyes) and uveitic cataract (5 eyes). The mean axial length is 22.5 (2.4) mm. The most common post operative complication is posterior capsule opacification in 8 patients (12.3%), consistent with previous studies (4,5,6). 13 patients have systemic comorbidities, the concomitant conditions included Down syndrome, congenital heart disease, global developmental delay and retroviral disease. 18 patients have ocular comorbidities, the most common condition is rhegmatogenous retinal detachment in 6 patients. Multiple logistic regression showed that ocular and systemic comorbidity were significantly associated with poor visual outcome, with p-value of 0.016 and 0.045 respectively. There are no significant association of age, axial length, cause of cataract and duration of surgery with the poor visual outcome. **Conclusion:** Posterior chamber IOL implantation is significantly associated with better visual outcomes. The presence of ocular and systemic co-morbidities significantly increases the risk of poor visual outcomes. In clinical practices, identifying and managing co-morbidities early may improve visual outcomes in paediatric cataract surgery.

Clinical insights into infectious neuroretinitis: case series

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ABSTRACT

Infectious neuroretinitis, commonly caused by Bartonella species, which is usually transmitted via cat scratch. We report 3 cases of infectious neuroretinitis in single centre. Case-1: A 19-year-old Malay gentleman with a one-week history of left eye (LE) central scotoma, headache and vomiting. Vision LE hand movement. Examination showed LE optic disc (OD) swelling and macular star formation. He received 6-weeks of oral azithromycin. Post treatment LE vision improved to 6/24 with resolving scotoma. Case-2: A 27-year-old Malay lady, presented with one-day history of LE blurring of vision with fever and right cervical lymphadenopathy. Vision was right eye (RE) 6/9 and LE 6/60. Examination revealed bilateral asymmetrical bilateral OD swelling with retinitis and LE macular star. Fluorescein angiography showed bilateral OD hyperfluorescence and LE cystoid macular oedema. She completed one-week-of intravenous ceftazidime and 10-weeks-of oral doxycycline, rifampicin, and prednisolone. Clinically, LE vision improved to 6/9 with reducing OD swelling, retinitis and macular star. Case-3: A fifty-years-old Malay lady presented with two-weeks history of RE scotoma and fever. Vision RE counting finger. Examination showed presence of OD swelling, choroiditis, vitritis, and macular star over RE. She received 6-weeks-of oral doxycycline. RE vision was improved to 6/18 with reducing scotoma, OD swelling, and vitritis. These three patients had a history of unvaccinated cat scratches and positive IgG for Bartonella Hensalae. Bartonella neuroretinitis is clinical diagnosis. Treatment remains controversial, either antibiotics alone or antibiotics with steroid. Most patients achieve good visual recovery post treatment.

Sight threatening thyroid eye disease

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ABSTRACT

Thyroid eye disease (TED) is a chronic immune-mediated inflammation of the orbit affecting nearly half of patients with Grave disease. Cigarette smoking is one of the strongest modifiable risk factors of TED. We report a case of rapidly progressive TED. A 51-year-old gentleman, a heavy smoker with underlying hyperthyroidism presented with bilateral eye (BE) pain for 3 days. BE visual acuity (VA) was 6/9 with no relative afferent pupillary defect (RAPD). Extraocular muscle (EOM) was restricted (-1) in all gazes with intact optic nerve function. BE were proptosed with lagophthalmos, injected conjunctiva, and punctate epithelial corneal erosions. Fundus examinations were unremarkable. Patient was treated for exposure keratopathy secondary to lagophthalmos associated with TED and was prescribed artificial tears. Condition worsened after 1 month associated with diplopia. EOM showed restriction (-3) in all directions with reduced vision. Clinical activity score was 6. Contrast enhanced computed tomography (CECT) of orbit showed EOM thickening and proptosis corresponding to TED. Revised impression was BE moderate-severe TED (EUGOGO classification). Patient was advised for medication compliance and smoking cessation. Despite on six cycles of IV Methylprednisolone, BE VA became counting fingers and RAPD turned positive. Repeated CECT orbit showed worsened TED. Oral immunosuppressive course of 6-months was commenced. BE medial wall orbital decompression was then performed. Post-operatively, his symptoms resolved, however, vision remained poor. Smoking has a detrimental effect in TED as it has been shown to worsen the disease. The response to treatment is delayed and considerably poorer in smokers. Smoking cessation and medication adherence are necessary for a successful TED treatment.

Right eye globe rupture: a case report

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ABSTRACT

Globe rupture is the common term to describe all types of open globe injuries. Open globe injuries are full-thickness wounds of the cornea or sclera that are due to laceration or blunt force trauma. A-65-year old woman presented with a fall while walking on an uneven ground and hit her right eye. She sustained swollen, bleeding, painful right eye (RE) with vision loss. RE showed periorbital hematoma and impaired visual acuity (VA) with only perception of light (PL). Extraocular movements were limited, chemosis was present but no corneal laceration. Anterior chamber was formed with hyphaema. Reverse relative afferent pupillary defect (RAPD) was positive. Left eye was normal. CT orbit showed right periorbital haematoma with globe distortion. Right optic nerve was intact. Intraoperatively showed a clean laceration wound with sharp edge near superior limbus, measuring 18 mm, with iris prolapse. Upon discharge, VA of RE remains poor. In globe rupture, initial VA of only PL or worse is closely associated with poor visual outcome. Wounds involving zone III (>5 mm posterior to limbus) has significantly poorer visual outcomes versus those involving zones I (cornea and limbus) or II (anterior 5 mm of sclera). Primary repair within 24 hours is warranted to prevent poor visual prognosis. The extent of visual loss after a ruptured globe is unpredictable. Early surgical repair improves visual prognosis, however severe injury will often result in vision loss.

A paediatric case report: misinterpretation of a prolapsed iris as a leech

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ABSTRACT

Eliciting history in paediatric patients can be challenging, however essential in determining the course of management. We share an experience in gathering history from a patient presented with an ocular foreign body. A 7-year-old girl was brought to the emergency department complaining of painless right eye (RE) foreign body, a leech that gets into her eye while taking a shower, associated with redness, and itchiness. RE visual acuity (VA) was light perception and left eye (LE) was 6/12 with no relative afferent pupillary defect. RE showed a teardrop pupil with a prolapsed iris at 5 o'clock. Seidel's test was negative with deep anterior chamber. Skull x-ray and contrast-enhanced computed tomography of brain and orbit showed no intraocular foreign body. Intraoperative findings revealed a slanted clean-cut corneal laceration with prolapsed iris at 5 o'clock extended until sclera measuring about 4 mm. No foreign body was found. Cornea and sclera toilet and suturing were performed. Postoperatively, RE VA improved to 6/12. During follow-up, her best corrected visual acuity was 6/7.5. Patient disclosed that she had accidentally poked her eye with a cutter. Paediatric ocular trauma is the leading cause of significant morbidity worldwide. Obtaining a complete history is crucial to ensure a successful healthcare delivery for young patients without delay. A thorough assessment helps to identify the injury and timely intervention reduces the morbidity and improves long-term visual outcomes.

Favourable outcome in subliminal micropulse yellow laser treated centrally-involved diabetic macula oedema in low socioeconomic patient

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ABSTRACT

Subliminal micropulse yellow laser technology is an advanced laser technique that utilizes cell photostimulation to decrease total laser energy delivered to tissues. This method involves the delivery of short, repetitive laser pulses, with each pulse separated by enough time to allow for heat dissipation, enabling tissue cool down and preventing thermal burns. A 74-year-old diabetic woman presented with progressively worsening blurry of vision. Optical coherence tomography (OCT) of both eyes demonstrated centrally-involved diabetic macula oedema (Ci-DME) with right eye (RE) central subfield thickness (CST) of 675 µm and left eye (LE) CST of 312 µm. She underwent subliminal laser treatment for both eyes using Subliminal Multispot 577 nm-Yellow Laser as she cannot afford intravitreal anti-vascular endothelial growth factor (anti-VEGF) treatment. Six months follow-up revealed improvement, with the RE CST reduced to 337 µm and the LE CST to 252 µm, visual acuity improved from 6/60 to 6/12 in the RE and from 6/24 to 6/12 in the LE with only a single laser treatment. Micropulse laser treatment is a safe and non-damaging therapeutic option that selectively targets the retinal pigment epithelium. Theoretically, the 577 nm yellow laser light offers peak absorption by oxyhaemoglobin, minimal intraocular light scattering and pain, and negligible absorption by xanthophyll. Experts have also indicated that transfoveal treatment is safe. In this case report, we demonstrated a favourable outcome with subliminal laser treatment in a patient of low socioeconomic status and highlighted the benefit of a single-visit treatment yielding positive results.

Management challenges in bilateral chronic rhegmatogenous retinal detachment in a young lady with bilateral steroid-induced cataract

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ABSTRACT

Bilateral retinal detachment presents significant challenges, especially when compounded by steroid-induced cataracts that obscure the retina. We discuss the complexities of managing a case of bilateral chronic rhegmatogenous retinal detachment (RRD) in a student with steroid-induced cataracts. A 22-year-old student presented with right eye (RE) blurry of vision for one year. Upon examination, best corrected visual acuity was HM for RE, 6/7.5 for left eye (LE). RE Anterior segment (AC) examination revealed iris pigment cells 4+, posterior synechiae (PS) from 3-4 and 9-10 o'clock. The LE only demonstrated cells 1+ in the AC. Bilateral lens were cataractous with iris pigment deposits on the anterior capsule. Dilated fundus examination revealed RE poor view. LE demonstrated vitreous haze, tobacco dust, and a macula-on RRD from 12-4 o'clock with a giant horseshoe tear at 2 o'clock extending anteriorly. A phacoemulsification, plana vitrectomy, silicone oil and endolaser was performed. Among the challenges being addressed were preoperatively, patient had neglected the symptoms, due to poor vision secondary to preexisting cataract, resulted in delay treatment. Intraoperatively, phaco-vitrectomy in which cataract is removed first is required due to poor view. This had significantly lengthened the operative time. Postoperatively, it is challenging to establish patient compliancy to medications due to poor insight.

Spontaneous closure of traumatic macular hole in a paediatric patient

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ABSTRACT

A macular hole is a full-thickness defect of the neurosensory retina at the fovea which can cause significant central vision loss. Macular holes in paediatric age group are often associated with blunt trauma. Traumatic macular hole (TMH) occurs when an acute blunt force on the globe results in a contrecoup injury on the macula. We report a case of a spontaneous closure of a TMH with good visual recovery in a paediatric patient. An 11-year-old boy who alleged hit by soft drink can over right eye. He sustained right periorbital haematoma and conjunctival haemorrhages. His visual acuity was 6/12 in the right eye and 6/6 in the left eye. Right eye fundus examination showed macula hole, commotio retina and vitreous haemorrhage. Optical coherence tomography (OCT) revealed full thickness macular hole with cystoid changes. The boy had been followed up regularly for macular hole. The macular hole was found to have closed completely after 18 months with right eye visual acuity improved to 6/9. TMHs are uncommon, with an incidence of 1-9% of ocular trauma cases. A TMH is thought to occur probably due to primary dehiscence of the fovea or secondary breakdown of traumatically induced cystoid changes. OCT plays an essential role in visualizing anatomical TMH closure. Small macular defect may allow easy migration of glial cells.

A rare manifestation of optic neuritis secondary to Tolosa Hunt syndrome with pachymeningitis

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ABSTRACT

Tolosa-Hunt syndrome (THS) usually presents with severe unilateral periorbital headache and ophthalmoplegia. This case demonstrates an atypical presentation of THS that is characterised by painless blurring of vision and optic neuropathy. A 48-year-old Malay female with underlying diabetes mellitus, hypertension, and dyslipidaemia presented with painless blurring of vision in her right eye (RE) over several months. Visual acuity in the right eye was reduced, with a positive relative afferent pupillary defect (RAPD). Optic nerve function tests were impaired: red desaturation and diminished light brightness. Extraocular movements (EOM) were intact, with no involvement of other cranial nerves observed. Fundus examination of the right eye revealed normal findings. Humphrey visual field testing showed a central scotoma. Blood parameters for infections and connective tissue diseases were normal. Urgent contrast-enhance computed tomography brain and magnetic resonance imaging brain revealed an enhancing lesion at the left MCA-ICA junction and enlargement of the right cavernous sinus, indicative of THS with pachymeningitis. Treatment given was intravenous methylprednisolone 250 mg QID for 5 days, followed by a tapering course of oral prednisolone which resulted in improved visual acuity and resolution of the central scotoma. After a few weeks, symptoms relapsed and azathioprine was added which further improved the central scotoma. THS may not always present with painful ophthalmoplegia during early presentations. Concurrent pachymeningitis can occur, so a high suspicion for THS is important. Prompt diagnosis and initiation of treatment for THS are crucial to prevent complications like recurrent optic neuritis, even in the absence of classic symptoms.

Management challenges of recurrent cytomegalovirus endotheliitis: a case study

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ABSTRACT

Recurrent cytomegalovirus (CMV) endotheliitis may lead to irreversible corneal damage, therefore early recognition and vigilant management is necessary. A 75-year-old gentleman had bilateral advanced primary open-angle glaucoma done trabeculectomy, on long term topical steroid and bilateral pseudophakia. In June 2017, he had right eye blurred vision associated with red eye, cornea oedema and anterior uveitis. CMV endotheliitis was diagnosed after a positive CMV polymerase chain reaction (PCR) in aqueous tap, taken at 8 months after recurrent exacerbations of keratouveitis despite treatment. Treatment with topical ganciclovir gel 0.15% and intensive dexamethasone successfully alleviated the symptoms. Medications were stopped at fourth month, but topical dexamethasone was kept at twice daily to minimize bleb failure. 16 months later, second episode of CMV endotheliitis occurred. Topical ointment ganciclovir 0.15% was initiated, aqueous tap at fourth month confirmed negative CMV PCR, yet treatment was maintained for 18 months. A third episode occurred nineteen months after treatment cessation. Due to financial constraints, treatment shifted to 2% ganciclovir drops, initially effective but subsequently vision deteriorated after 5 months. Ointment ganciclovir 0.15% was restarted however vision remained static. The latest CMV PCR test remained positive with lower viral load (158 IU/ml) despite treated for eleven months. CMV endotheliitis should be suspected early with non-resolving keratouveitis especially in patients on long term topical steroids. This case highlights the complexities in managing recurrent CMV endotheliitis, particularly on the duration of antiviral therapy. Ointment ganciclovir 0.15% showed more effective than ganciclovir 2% drops in this case.

PRES-induced blindness: a reversible vision crisis

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ABSTRACT

Posterior reversible encephalopathy syndrome (PRES) is a rare neurological disorder characterized by headache, altered mental status, seizures, and visual disturbances. We report a case of PRES with transient cortical blindness in a primigravida patient. A 33-year-old primigravida, unaware of her pregnancy, presented with sudden onset of vision loss, severe headache, seizures, and altered mental status over 2 days. On arrival, she was unresponsive with a blood pressure of 234/150 mmHg. Physical examination revealed a palpable uterus at 34 weeks, later confirmed by ultrasound to be 35 weeks with a viable foetus. The patient was intubated for airway protection. Cerebral computed tomography showed bilateral occipital white matter hypodensities consistent with PRES. She was treated for eclampsia and underwent emergency caesarean section, delivering a healthy infant. On post-extubation day one post-delivery, she reported bilateral blurry vision with visual acuity limited to counting fingers. No relative afferent pupillary defect was noted. Fundoscopy revealed flame-shaped haemorrhages, multiple cotton wool spots, and a dull foveal reflex. One week later, her vision improved to 6/9 bilaterally with normal ocular findings. Humphrey visual field testing showed residual left homonymous quadrantanopia after two weeks. This case underscores the critical importance of early recognition and treatment of PRES in pregnant patients. Timely intervention can lead to significant recovery of visual function and overall prognosis.

More than meets the eye: nasal extranodal T-cell lymphoma mimicking preseptal cellulitis

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ABSTRACT

Extranodal T-cell lymphoma, nasal type, is a rare form of non-Hodgkin lymphoma, particularly uncommon when it involves the orbit. This study describes a case of previously treated nasal extranodal T-cell lymphoma presenting with unilateral painless eyelid swelling resembling preseptal cellulitis. A 53-year-old female with a history of nasal extranodal T-cell lymphoma presented with painless right eyelid swelling for two weeks. Initially managed as preseptal cellulitis with antibiotics, her condition did not improve despite treatment. Imaging revealed an enlarging lesion in the right nasal cavity extending into the orbit and sinuses. Nasal endoscopy confirmed a polypoidal mass, and biopsy results indicated recurrent extranodal T-cell lymphoma. The patient was promptly referred for chemotherapy, resulting in a significant reduction of the nasal mass on follow-up imaging. This case underscores the diagnostic challenge posed by nasal extranodal T-cell lymphoma, which can mimic more benign conditions like cellulitis. The clinical presentation, initially suggestive of cellulitis with eyelid swelling and erythema, did not respond to standard antibiotic therapy, prompting further investigation. Imaging played a crucial role in identifying the extent of orbital involvement and guiding subsequent management. This case highlights the importance of considering unusual presentations of lymphomas, especially in patients with a prior history, when symptoms do not align with expected outcomes of common conditions like cellulitis. Timely recognition and appropriate referral for specialised treatment are essential in managing such atypical manifestations of lymphoma.

Insights into optic disc swelling: diverse etiologies and management strategies

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ABSTRACT

Bilateral optic disc swelling can result from various underlying conditions, such as papilloedema, autoimmune diseases, infections and less commonly, superior sagittal sinus thrombosis. This case series aims to illustrate the diverse aetiologies and management approaches for optic disc swelling. Case 1: A 30-year-old male presented with fever, headache, nausea, and blurred vision. Fundoscopy revealed bilateral optic disc swelling. A lumbar puncture confirmed elevated intracranial pressure and a positive cryptococcal antigen. The patient was treated with systemic amphotericin B and flucytosine, resulting in clinical improvement. Case 2: A 28-year-old woman presented with blurring of vision and diplopia for two weeks associated with headache and vomiting. Examination revealed bilateral abducens nerve paresis with optic disc swelling. Computed tomography venography revealed empty delta sign, suggestive of superior sagittal sinus thrombosis. Anticoagulation therapy was initiated, leading to significant improvement in visual function and resolution of optic disc swelling. Case 3: A 37-year-old woman with a history of exposure to cats presented with right eye reduced vision for two days. Fundoscopy showed bilateral optic disc swelling with a right macular star. Treatment with oral azithromycin resulted in complete symptom resolution. This case series demonstrates the importance of a comprehensive diagnostic evaluation for optic disc swelling. Tailored treatment based on the underlying cause can lead to favourable outcomes, emphasising the importance of a holistic and multidisciplinary approach.

Mystery of the blinding tunnel: compressive optic neuropathy with atypical retinitis pigmentosa in a paediatric patient

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ABSTRACT

Cases of atypical retinitis pigmentosa (RP) in paediatrics were not well documented in literature. We report an unusual case of atypical RP with concurrent compressive optic neuropathy. A 7-year-old healthy boy presented with right eye sudden unprovoked vision loss and night blindness. Right relative afferent pupillary defect was positive, with visual acuity (VA) of hand movement in the right eye (RE) and 6/30 in the left eye (LE). Anterior and posterior segment was normal, neurological assessment was unremarkable. Visual field (VF) assessment was unable to be performed for RE, while LE showed a constricted VF. Visual evoked potential is suggestive of chiasmal and right optic tract lesions. Magnetic resonance imaging (MRI) brain and orbit noted compression of the optic chiasm and intracranial right optic nerve by internal carotid artery. Surgical decompression noted intraoperatively very minimal compression. Post-operatively, the VA was 6/7.5 in both eyes, VF improved with residual tunnel vision. After a year, his bilateral VF worsened, but VA remained 6/7.5. Repeated MRI was unremarkable. From a multi-disciplinary discussion, he was treated as optic neuritis with systemic corticosteroids. Serum vitamin B, folate, autoimmune workup, anti-aquaporin-4, and Leber hereditary optic neuropathy gene analysis were normal. After 2 years of follow-up, multiple hypopigmented spots appeared over bilateral peripheral retina with attenuated retinal vessels. Fundus florescence angiogram revealed multiple hyperfluorescent spots. Diagnosis of atypical RP was made. The unusual presentation in this patient poses a diagnostic challenge as the symptoms of atypical RP were shadowed by the compressive optic neuropathy and initial normal fundus appearance.

A retrospective 4-year review of paediatric corneal ulcer cases in Hospital Tunku Azizah

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ABSTRACT

Introduction: Corneal ulcer causes global blindness and leads to amblyopia in children if left untreated. **Materials and Methods:** A retrospective cross-sectional study was conducted at Hospital Tunku Azizah, consisting of paediatric corneal ulcers under 12 years old between January 2020 to May 2024. Data were extracted from medical records using the ICD-10 (International Classification of Diseases, 10th Revision) coding system. A total of 35 paediatric corneal ulcers were reviewed. **Results:** The mean age was 4.6 years, with 24 males (68.5%) and 11 females (31.4%). The mean duration between symptom onset and first presentation was 9.3 days. Risk factors were divided into infective (31.4%) and non-infective causes (68.6%). Non-infective causes included exposure keratitis and neurotrophic (41.7%), followed by immune-mediated (vernal keratoconjunctivitis, allergic conjunctivitis) (29.2%), post-trauma (25%), and ocular surface disease (4.1%). The mean visual acuity on presentation was 6/30. The mean visual acuity post treatment was 6/18. Four (11.4%) cases yielded positive culture. All patients were started empirically with a loading dose of topical antibiotic still cultures were reviewed. Unfortunately, one worsened requiring allogeneic plasma eye drops, multiple amniotic membrane transplantation and tarsorrhaphy for non-healing corneal defect and another one patient had recurrent ulcer due to non-compliance to medication. **Conclusion:** Corneal ulcer is preventable and treatable, resulting in good visual outcome. Hence, early detection is essential for timely treatment to reduce complications.

Unveiling the lens: delving subluxations in ROP babies - a case series

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ABSTRACT

Infants born prematurely face multiple ocular challenges, including retinopathy of prematurity (ROP). Subluxated lens in a newborn is rare, and its management is challenging. We report four cases of premature babies presenting with combined ROP and subluxated lens. All four infants were born prematurely at 26 weeks with a birth weight of less than 1000 g. All had complex medical issues but no birth trauma. The first and second infants had underlying bronchopulmonary dysplasia, intraventricular haemorrhage and anaemia of prematurity. The third and fourth infants had underlying respiratory distress syndrome. All infants developed stage 2 zone 2 ROP between 32 to 40 weeks. Incidentally, during ROP screening, noted presence of mild nasally subluxated lens with secondary glaucoma that was amenable to medical treatment. Unfortunately, the first and fourth infant's condition worsened, progressing to stage 4A and 4B ROP, respectively. In addition, the fourth infant had an anteriorly subluxated lens. Both infants underwent trans-pars plana vitrectomy and lensectomy. Infants with ROP and subluxated lenses need careful management to preserve vision, control glaucoma, and monitor long-term ophthalmologic complications for optimal visual development.

Leukaemic retinopathy: a case series

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ABSTRACT

Leukaemic retinopathy is a significant ocular complication observed in leukaemia. Up to 69% of all patients with leukaemia showed fundus changes during the course of their disease. To describe three cases of leukemic retinopathy and compare their visual outcome with and without treatment. Case 1: A 26-year-old Malay male with a known case of acute myeloid leukaemia and still undergoing chemotherapy presented with painless, sudden blurring of vision in both eyes for four days. His visual acuity was CF (OD) and 6/18 (OS). Fundus examination revealed multilayered retinal haemorrhages and Roth spots in both eyes. Two months later, his visual acuity improved to 6/18 (OD) and 6/9 (OS), with reduced haemorrhages and fading of Roth spots. Case 2: A 53-year-old Malay male presented with painless, sudden blurring of vision in both eyes for one day. His visual acuity was 6/12 (OD) and 6/36 (OS). Fundus examination showed multilayered retinal haemorrhages and Roth spots. He was then investigated and diagnosed to have chronic myeloid leukaemia. He was started on chemotherapy. One month later, his visual acuity improved to 6/9 in both eyes with corresponding improvement in fundus findings. Case 3: A 32-year-old Malay male presented with sudden, painless scotoma in the right eye for two days, associated with weight loss. Fundus examination showed bilateral swollen optic discs with multiple layer of retinal haemorrhages and Roth spots. His white cell count was 244 × 10^3/μL. He was referred for leukaemia management but did not pursue treatment. His vision remained unchanged upon phone follow-up. Ocular manifestation can be one of the signs in diagnosing and monitoring haematological malignancy. Chemotherapy is the primary treatment modality and may improve the visual outcome if treated accordingly.

From one eye to another: metachronous retinoblastoma unravelled

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ABSTRACT

Metachronous retinoblastoma is a rare occurrence. It refers to an asynchronous tumour development in the eyes of individuals with a history of retinoblastoma. A 1-month-old boy presented with leukocoria in the left eye (LE) at 6 weeks of age. There was presence of LE relative afferent pupillary defect (RAPD) and no response to light. Anterior segment examination of the left eye revealed leukocoria and 360-degrees of rubeosis iridis. Fundus examination showed a vascularised retinal mass occupying the entire vitreous cavity and obscuring the optic disc. Ultrasound biomicroscopy showed mass touching ciliary body. The right eye (RE) was normal. Magnetic resonance imaging orbit revealed no enhancement along the retrobulbar or optic nerve regions. He was diagnosed with Group E retinoblastoma in the LE and enucleation was promptly performed. Histopathological examination confirmed no evidence of high-risk histopathological risk factors. Five weeks post-enucleation of LE, a retinal mass measuring one-eighth of the optic disc size was noted superior-nasally in the RE. The mass was treated with local laser therapy. Patient was given four` cycles of systemic chemotherapy. Subsequent monitoring showed no progression of the disease in the child. Timely recognition and management of metachronous retinoblastoma in young children are critical for vision preservation and optimal outcomes.

Orbital cellulitis complicating extensive sinusitis: a case report

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ABSTRACT

Orbital cellulitis is the infection of soft tissues extending beyond the orbital septum. It exhibits preponderance toward children and demonstrates varying severity, including sight and life-threatening complications. We report a case of a teenager with orbital cellulitis complicating extensive sinusitis. A 14-year-old boy with allergic rhinitis presented with rapidly increasing left eyelid swelling, redness and pain of one day duration. This was preceded with fever, cough and runny nose of 3 days. No drop in vision. No toothache, eye trauma or insect bite. Left eye was proptosed, mildly chemosed with restricted and painful extraocular movement. Optic nerve function test was normal bilaterally. Left eye intraocular pressure was 22 mmHg. Right eye anterior segment was unremarkable. Fundi examination were unremarkable. A provisional diagnosis of left orbital cellulitis was made. Urgent contrast-enhanced computed tomography showed features of orbital cellulitis with subperiosteal abscess and opacification of left paranasal sinuses. Intravenous empirical broad-spectrum antibiotic was immediately initiated and the Otorhinolaryngology team roped in for co-management. Due to clinical deterioration, endoscopic endonasal sinus surgery and pus drainage was performed by the otorhinolaryngologist. Pus culture revealed Staphylococcus aureus and Staphylococcus lugdunensis. Upon completion of treatment, there was resolution of pain, proptosis and chemosis. Extraocular movements were full and free. Intraocular pressure returned to normal. High index of suspicion and initiation of empirical broad-spectrum antibiotics, with or without surgical intervention and management of underlying cause is pertinent to ensure favourable outcome. Multi-disciplinary approach is also often required in the management of orbital cellulitis.

A rare case of spontaneous hyphaema secondary to disseminated intravascular coagulation

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ABSTRACT

Disseminated intravascular coagulation (DIVC) is characterised by systemic activation of blood coagulation, resulting in fibrin formation and microvascular thrombi in various organs, causing multiple organ dysfunction syndrome (MODS). Ocular manifestations commonly affect the posterior segment. We would like to report a rare case of anterior segment involvement secondary to DIVC. A 45-year-old woman with underlying diabetes mellitus, hypertension and end-stage renal failure underwent left below-knee amputation (BKA) for left foot wet gangrene. Premorbidly, she is legally blind in both eyes with a history of left eye (LE) central retinal artery occlusion (CRAO) and right eye (RE) lasered advanced diabetic eye disease (ADED). Three weeks post-surgery, she sustained left proximal femoral artery aneurysm. Blood workup indicated DIVC. The patient then developed a spontaneous hyphaema in her RE. Her anterior chamber was 80% filled with fresh hyphaema, with minimal iris details visible. Bilateral corneas were clear, with no periorbital haematoma. Intraocular pressure (IOP) was normal bilaterally. There was no fundus view of RE. LE fundus showed a pale optic disc. Hourly steroid and daily atropine 1% eyedrops were initiated. Three weeks after DIVC was resolved, hyphaema regressed to 20% of anterior chamber, with blood clot obstructing the pupil. DIVC usually presents ocularly with fundus signs like choroidal haemorrhages due to fibrin formation in the choroidal vasculature and exudative retinal detachments. Eyecare providers should be aware of possible anterior segment involvement, so that prompt diagnosis can be made and timely treatment given.

Orbital metastatic leiomyosarcoma - a great mimicry of Graves orbitopathy

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ABSTRACT

Orbital metastatic leiomyosarcoma, a malignant smooth muscle neoplasm, is infrequently observed within the orbit and may originate primarily, secondarily, or as metastasis. This report presents a case of unilateral proptosis in a middle-aged woman, initially suspected to be Graves orbitopathy, later identified as an extraconal mass secondary to metastatic leiomyosarcoma. A 50-year-old woman with newly diagnosed thyrotoxicosis experienced a one-month history of left eye proptosis and ptosis, accompanied by blurred vision and diplopia. Visual acuity was 6/6 in the right eye and 6/18 in the left eye. A positive relative afferent pupillary defect, marked proptosis and restricted extraocular muscle movement were noted in the left eye, mimicking Graves orbitopathy. A computed tomography (CT) scan of the orbit revealed a left orbital extraconal mass with intracranial extension causing proptosis. Tumour debulking surgery was performed, and biopsy indicated a high-grade round blue cell tumour, likely metastatic. Positron emission tomography (PET) identified a large uterine neoplasm with local invasion and systemic metastases to the left renal lower pole, peritoneum, and bone. She underwent palliative chemotherapy with Doxorubicin and Ifosfamide. In cases of proptosis, a prompt and comprehensive systemic evaluation is crucial to avoid missing potentially life-threatening conditions. This case underscores the importance of considering metastatic leiomyosarcoma in the differential diagnosis of orbital masses.

Central retinal artery occlusion: a race against time to save sight

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ABSTRACT

Central retinal artery occlusion (CRAO) with cilioretinal artery sparing offers a unique clinical scenario where the macula remains perfused and functional. We are presenting a case of CRAO with cilioretinal artery sparing, offering a unique perspective on the condition. A 47-year-old Malay male with underlying hypertension and dyslipidaemia presented with sudden onset painless blurring of vision in the right eye (RE) for a day. Otherwise, he denied any trauma and no other associated eye complaints. On examination, the patient has a positive relative afferent pupillary defect of RE with vision of hand movement (HM). The anterior segment was unremarkable. The fundus of the RE showed presence of cherry red spot at the macula and retinal ischemia at all quadrants of the retina except at the papillomacular bundle area with no Hollenhorst plaque seen. Acute management of CRAO was given to him and the patient was comanaged with the medical team to screen risk of developing stroke. Unfortunately, his vision remained at HM after 6 weeks of attack. CRAO with cilioretinal artery sparing offers a glimmer of hope in an otherwise dire ophthalmic emergency. However, in our case, the vision remained the same as the patient presented 24-hours of CRAO attack. CRAO with cilioretinal artery sparing present in approximately 15–30% of the population.

An atypical case of complex indirect carotid cavernous fistula with contralateral ophthalmic symptoms

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ABSTRACT

A carotid cavernous fistula (CCF) is an abnormal communication between the carotid artery and the cavernous sinus, usually on the ipsilateral side. We report a case of a right sided carotid artery fistula draining into the left ophthalmic vein, giving rise to a left sided ocular manifestation. A 79-year-old woman with underlying diabetes and hypertension presented with a one-month history of left eye redness associated with diplopia and blurred vision. She was already on topical antiglaucoma over the left eye. Visual acuity was 6/24 OD and 6/30 OS. The relative afferent pupillary defect was negative. Anterior and posterior segment examination was normal for the right eye. There was left eye proptosis with limited extraocular movement. Corkscrew vessels were present over the left conjunctiva. The rest of the anterior segment was unremarkable. The intraocular pressure was 22 mmHg over the left eye. Left fundus examination revealed a pink optic disc with a cup-to-disc ratio of 0.4. The veins were slightly tortuous but not dilated. A cerebral angiogram revealed a complex indirect CCF from the right internal and right external carotid artery, draining into the left ophthalmic vein. Embolisation was attempted; however, it was unsuccessful. The patient suffered from a stroke post-procedure. She refused any further interventions. A complex CCF may lead to a challenging embolisation treatment and may cause significant morbidity to the patient. A timely multidisciplinary approach is essential to ensure favourable outcomes.

Case report of simultaneous bilateral optic neuritis

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ABSTRACT

A 28-year-old woman with underlying Hb E beta-thalassemia, presented with sudden onset both eyes (BE) blurring of vision. She also had BE pain on movement for the past 3 days. She has no history of prior optic neuritis. Systemic review was negative. Upon examination, BE vision was counting finger at 1 foot, relative afferent pupillary defect (RAPD) negative, with reduced light and red saturation, and failed colour vision test for BE. The anterior segment was unremarkable. BE fundus shows hyperaemic optic disc with blurred disc margin, no macula star, no vitritis, retinitis or choroiditis. The neurological examination was unremarkable. Magnetic resonance imaging of brain and orbit shows retrobulbar intra-orbital segment of bilateral optic nerve thickened (right>left) and enlarged. There is also streakiness, thickening and irregularities of the optic sheath. The impression is bilateral optic neuritis and optic nerve perineuritis, no evidence of demyelinating brain lesion. She was treated with a course of intravenous methylprednisolone 250 mg QID for 3 days. Post treatment, right eye (RE) vision improved to 6/36 (PH 6/24) while left eye (LE) 6/24 (PH 6/12). There was no more eye pain. RAPD negative, with improvement in red and light saturation BE. BE fundus noted reduction in optic disc swelling. She was discharged with a course of oral prednisolone for 10 days. Her vision further improved the following week, RE vision 6/24 (PH 6/9), LE vision 6/12 PH 6/9, with reduction in optic disc swelling. Cerebrospinal fluid (CSF) electrophoresis showed oligoclonal band. CSF aquaporin-4 antibody was negative. Simultaneous bilateral optic neuritis is considered rare in adult and with a course of corticosteroid therapy, vision may improved. RAPD may be negative in bilateral optic neuritis, therefore a proper optic disc evaluation is important.

WEMINO syndrome- can we find a focal mid pons lesion or not?

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ABSTRACT

Wall-eyed monocular internuclear ophthalmoplegia (WEMINO) is a rare variant of internuclear ophthalmoplegia (INO) and consists of INO with ipsilateral exotropia. A medial longitudinal fasciculus (MLF) lesion at mid pons could cause WEMINO. A 55-year-old man with hypertension developed sudden double vision associated with dizziness, nausea, and vomiting for two days. Blood pressure was 168/97 mmHg. Capillary blood sugar was 16.8 mmol/L. The visual acuity for both eyes was 6/9. He saw double in his primary and left gazes. The right eye (RE) was exotropic in the primary gaze and could not move beyond the midline on the left gaze. There was a complete adduction deficit in the RE with abduction nystagmus observed on the LE. A skew deviation with the right hypertrophic eye was also observed. Other eye movements were full. Convergence and vestibular-ocular reflex were impaired on the right. Pupils were symmetrical and absent of ptosis. Other ocular and neurological examinations were unrevealing. A FLAIR sequence magnetic resonance imaging expressed a hyperintense signal in the right MLF at mid pons suggestive of an acute right paramedian pontine infarction. He was referred for stroke management. He was advised to occlude the RE temporarily. In a month, he did not see double in primary and reduced double on the left gaze. His RE adduction could pass beyond the midline (25%) without nystagmus on the LE. There was no skew deviation either. WEMINO could be the sole clinical manifestation of a focal pontine infarction and missed unless specifically localised to paramedian mid pons.

Exploring the role of monthly 5-FU intralesional injection as an option for recurrent pterygium - a case report

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ABSTRACT

Recurrence is the primary concern following pterygium excision. Managing recurrent pterygium poses significant challenges because it is often more aggressive and difficult to treat, accompanied by more conjunctival inflammation and scarring. We report a case of the use of monthly intralesional 5-fluorouracil (5-FU) in the treatment of recurrent pterygium. A 33-year-old gentleman who works as a field worker, was diagnosed with a right eye double pterygium. He underwent a pterygium excision surgery, but later developed recurrent nasal and temporal pterygium. Surgical intervention with pterygium excision and conjunctival graft, augmented with intraoperative mitomycin C, was performed. Despite the second surgery, impending recurrence was observed during follow-up. He was subsequently given a monthly intralesional 5-FU injections (5 mg/0.1 ml) for a total of four injections and visible improvement was seen at first. However, at 1 month review after last injection, there is no complete regression of blood vessel at the pterygium site. The efficacy of monthly intralesional 5-FU was not as promising as compared with the weekly 5FU as it may not be adequate to halt the progression of recurrent pterygium. However, a longer follow-up and further studies are needed to determine the efficacy of these injection intervals as a viable alternative option.

Evaluating user comfort and confidence in retinal examination instruments: direct ophthalmoscope and handheld fundus camera

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ABSTRACT

Introduction: Traditionally, the direct ophthalmoscope has been the standard tool for retinal examination. However, its limitations in ease of use, patient comfort, and image quality have driven the search for more advanced technologies. The handheld non-mydriatic fundus camera offers a modern alternative with enhanced usability and superior diagnostic capabilities. This study compares the user comfort and confidence between these two devices in clinical practice, responding to the increasing demand for tools that improve both the clinician's efficiency and the patient's experience. **Materials and Methods:** This quasi-experimental design study involves medical doctors and students from various fields, excluding ophthalmologists and ophthalmology residents. 70 participants were randomly assigned to either the direct ophthalmoscope (Welch Allyn) or the handheld non-mydriatic digital retinal fundus camera (New Eyes), followed by a 15-minute demonstration and practice session. Participants performed timed retinal examinations on non-dilated patients and completed questionnaires to evaluate their experiences. The procedure was repeated with the alternative device on different patients. The system usability scale (SUS) was used to objectively measure participant's experience, perceived usability and confidence between two devices. Additional data on demographic information and the ability to reliably recognise retinal structures was collected. **Results:** The handheld fundus camera had a higher mean SUS score (64.0) compared to the direct ophthalmoscope (58.6), with a significant mean difference ($p < 0.001$). Confidence in correct findings was significantly higher with the handheld fundus camera (92.9%) than with the direct ophthalmoscope (32.9%, $p < 0.001$). Confidence in image sharpness also favoured the handheld fundus camera (94.3%) over the direct ophthalmoscope (45.7%, $p < 0.001$). **Conclusion:** The handheld non-mydriatic digital retinal fundus camera demonstrated superior ease of use and effectiveness, indicating a preference for this technology in medical practice.

It was all yellow: a rare case of adult-onset Coats disease

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ABSTRACT

Coats disease, first described by Coats in 1908, is an idiopathic non-hereditary condition with retinal telangiectasia associated with retinal exudation that may progress to retinal detachment. Its median age of presentation was 6 years with male predominance (3:1). We report a rare case of a Coats disease in a non-juvenile patient. A 21-year-old lady with no known medical illness presented with left eye progressive blurring of vision and visual field loss for two months duration. Visual acuity of the left eye was hand movement with positive relative afferent pupillary defect. Anterior segment examination showed signs of granulomatous uveitis in the left eye evidenced by mutton-fat keratic precipitates, Busacca nodules and cells of 2+. Left eye fundus examination revealed extensive subretinal exudates involving the macula with inferior exudative retinal detachment and preretinal haemorrhages. Uveitic blood workups were unremarkable. Fundus fluorescein angiogram revealed multiple small vessels vasculitis at periphery and "light bulb" telangiectatic vessels at inferotemporal quadrant. Additionally, optical coherence tomography showed loss of foveal contour with massive subretinal fluid and exudates. Patient was given a trial on intravitreal Aflibercept and started on tapering dose of oral steroids. However, despite maximal medical treatment, patient vision was poor. Although Coats disease is primarily a disease of childhood and most commonly affecting males, we should consider its diagnosis in adult or female patients. Early presentation of adult-onset Coats disease usually offers good prognosis, but late presentation with complications may lead to irreversible damage and poor visual outcome.

Choroidal abnormalities in neurofibromatosis: unveil and reveal

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ABSTRACT

To report a case of choroidal abnormalities in a patient with underlying Neurofibromatosis Type 1 (NF1). A 19-year-old boy with underlying bronchial asthma was referred for bilateral eye floaters for 1 year duration. He is not myopic. Visual acuity for both eyes was 6/9. Bilateral eyes have no relative afferent pupillary defect and optic nerve function test was normal. Anterior segment revealed multiple scattered Lisch nodules. Bilateral eye cup disc ratio was 0.6, otherwise unremarkable fundus examination and with no specific retinochoroidal abnormalities. There was no abnormality detected from optical coherence tomography (OCT) of the macula. However near infrared images showed multiple patches of bright choroidal lesion in the posterior pole of both eyes. Subsequently, indocyanine green angiography (ICGA) was done and revealed patches of hypercyanescence at early phase consistent with whitish lesion seen in infrared. Fluorescein angiography revealed no dye leakage or capillary fall-out and no vasculitis. Systemic examination showed multiple small café au lait spots and neurofibromas at the back, neck and upper limb. On further investigation, child's mother had neurofibromas at her face and similar findings in infrared images. It is therefore important to detect choroidal abnormalities in patient with NF1 as it has been added as an ocular diagnostic criteria recently since 2021.

Godtfredsen syndrome: an unusual initial presentation of multiple myeloma with intracranial plasmacytoma

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ABSTRACT

Godtfredsen syndrome, is a syndrome of abducens nerve (cranial nerve CN VI) and hypoglossal nerve (cranial nerve CN XII) palsy that localise to a clival lesion. Multiple myeloma (MM) and plasmacytoma are rarely one of its causes. A 56-year-old man with no known comorbidities, presented with binocular diplopia, loss of weight and appetite for two weeks. Examination showed failure of left eye abduction and deviation of tongue towards left side upon protrusion, without Horner's syndrome, meningism, or other neurological deficits. This showed isolated left CN VI and XII palsy. Blood tests depicted cytopenia (anaemia and thrombocytopenia), acute kidney injury and hypercalcemia. Computed tomography (CT) brain contrast showed multiple lytic lesions with solid components of plasmacytoma at the clivus, left basisphenoid, basioccipital, and occipital bone. The plasmacytoma extended laterally to infiltrate the left cavernous sinus. Bone marrow biopsy and serum protein electrophoresis confirmed IgG kappa multiple myeloma. Clivus is a part of the occipital bone at the skull base, which is formed by sphenoid body and basiocciput, joined at the spheno-occipital synchondrosis. Abducens nerve and hypoglossal nerve are positioned medially on the clivus, which makes them susceptible to lesion at midline clivus while sparing other cranial nerves. The plasmacytoma extended into left cavernous sinus, potentially contributing to abducens palsy. Magnetic resonance imaging of brain is the preferred method to evaluate lesions and affected cranial nerves, but it was not performed due to resource constraints.

Blinking at the unseen: breast cancer metastasis to the eyelid

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ABSTRACT

Breast cancer is the most common primary tumours for eye or orbit metastatic carcinoma, with eye involvement in 30% of patients with metastatic disease. We report a 72-year-old woman with a mass over the margin of right upper eyelid. She denied of eye redness or blurring of vision. She was diagnosed with stage 4 right breast adenocarcinoma 4 years ago. She underwent right mastectomy 3 years ago and did not receive chemotherapy due to advanced age. On examination, the right upper eyelid was swollen and erythematous. There was a broad-based mass at the palpebral conjunctiva on the temporal side of right upper lid which involved the lid margin. It was measured 1 cm x 2 cm and feeder vessels were present. Corkscrew vessels were seen on bulbar conjunctiva. Computed topography reported avidly enhancing soft tissue at right upper eyelid anterior to the lacrimal gland which was bulky and mildly enhancing compared to the left. Histopathological examination of the lesion revealed diffused infiltration of eyelid tissue by malignant cells with overlying epidermis was atrophic. Immunohistochemical studies of the malignant cells are positive for CKAE1/AE3 and GATA3 in keeping with primary breast carcinoma. The patient was started on topical fluorouracil eye drops. No radiotherapy or chemotherapy was given. The patient deceased 4 months after the ocular symptoms occurred due to the deterioration of the general condition. The most common primary source of orbital metastases in women is breast cancer. Histological combine with immunohistochemical studies are required to confirm the diagnosis.

Fishing stone related trauma: an unusual mechanism of injury following fishing

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ABSTRACT

Fishing is a popular recreational activity worldwide, but it can pose risks of severe ocular trauma. While fishing-hook injuries are well-documented, this report describes an unusual case of ocular trauma caused by a fishing plummet. We present a case of a 32-year-old male who experienced significant left eye trauma from a fishing plummet. Initial examination revealed severe visual impairment and associated ocular findings. Imaging identified a metal-like object in the inferotemporal orbital space, which was successfully surgically removed. Postoperative recovery included steroid treatment for traumatic optic neuropathy, resulting in notable visual improvement. This case highlights the significance of timely surgical intervention in managing fishing-related ocular injuries, particularly those involving large foreign bodies. The successful use of lateral canthotomy and cantholysis, combined with appropriate postoperative steroid treatment, led to a notable improvement in the patient's vision. It emphasises the need for increased awareness among recreational fishermen about the potential hazards of their equipment, advocating for safety measures to prevent such injuries.

An unexpected turn: morning glory disc anomaly uncovered post motor vehicle accident

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ABSTRACT

Morning glory disc anomaly (MGDA) is a rare congenital optic disc malformation that can remain undetected in early childhood but may lead to significant visual impairment. A 30-year-old female with bronchial asthma presented with subconjunctival haemorrhage (SCH) in her right eye (RE) after a motor vehicle accident. She reported poor vision in her left eye (LE) since childhood, unresponsive to corrective lenses. Family history was unremarkable. Examination revealed best corrected visual acuity of 6/9 in the RE and 6/36 in the LE. The external and anterior segment examination showed mild temporal SCH in the RE and mild exotropia in the LE. Fundus examination of the LE demonstrated a large optic disc with radiating blood vessels and peripapillary atrophy, indicative of MGDA, while the RE appeared normal. Systemic examination and computed tomography scan revealed no significant findings, and optical coherence tomography was unremarkable. MGDA occurs in approximately 1 in 10,000 to 15,000 live births and is associated with various systemic conditions, including transsphenoidal basal encephalocele and neurofibromatosis Type 2. Comprehensive evaluation is essential for identifying associated conditions. Patients may present with reduced visual acuity, visual field defects, and amblyopia, with management focused on symptomatic relief and monitoring. Visual prognosis varies; some patients maintain stable vision while others may experience deterioration.