Oral Presentations

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219 ADALIMUMAB FAILURE IN PAEDIATRIC UVEITIS: WHO, WHY AND WHAT NEXT?

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Adalimumab (ADA) is a standard treatment in juvenile idiopathic arthritis associated uveitis (JIA-U) and non-infectious idiopathic uveitis (IU). The aim of this study was to describe the disease and treatment course in those whose disease was resistant to ADA.

Retrospective review of patients attending a tertiary paediatric uveitis service between 2022-2024 with JIA-U or IU and failed to achieve disease control on ADA.

Twenty-two patients (13 female, 9 male) were identified. JIA-U was more common (n=19) compared to IU (n=3). ADA failure was due to ongoing uveitis in 19, with 3 being intolerant to the subcutaneous injection. All patients previously received methotrexate (MTX) with 16 patients concurrently receiving DMARD (MTX, mycophenolate mofetil or azathioprine) at the time of ADA failure. Seven patients tested positive to adalimumab antibodies (AA); in this group 2/7 received concurrent DMARDs. After ADA failure, 15 patients switched to infliximab, and 1 patient each to abatacept, tofacitinib, tocilizumab, certolizumab and golimumab. One patient received MMF monotherapy, and one patient was lost to follow up. 17 of the 21 patients achieved disease remission at last follow up.

The development of ADA antibodies is a common cause of treatment failure. AA was detected in 32% patients with ADA failure and concurrent use of DMARD in this group was lower than those without AA. Concurrent use of a DMARD may reduce the development AA.

There is no consensus regarding treatment following ADA failure, but our series suggests that infliximab or other biological treatments can be used to achieve disease remission.

226 SURGICAL OUTCOMES OF PAEDIATRIC UVEITIC CATARACT MANAGED IN A TERTIARY PAEDIATRIC MULTIDISCIPLINARY TEAM (MDT): IS IT ALL DOOM AND GLOOM?

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Historical literatures indicated cataracts developed in up to 70% of children and young people (CYP) with uveitis. This consecutive case series gives insight into the characteristics of visually significant uveitic cataracts requiring surgery managed at the MDT paediatric uveitis service by paediatric ophthalmologists and rheumatologists.

A preliminary retrospective observational review on all CYP presented between 2009-2024. Data was extracted from a uveitis database and patient electronic records.

13 CYP (16 eyes) were identified with cataract. 3 were excluded (1 visually-insignificant, 2 operated elsewhere previously). 10 CYP (13 eyes) were analysed, 70% were male, average age was 8.2 years (2-15 years), 70% were asymptomatic. All visually-significant cataracts requiring surgery were found at their first consultation- 50% referred from district general hospital, 30% from general paediatric ophthalmologists, 10% from another tertiary paediatric uveitis unit, and 10% at juvenile idiopathic arthritis uveitis screening. Mean preoperative vision was 1.24 LogMAR (0.7-NPL), improved to 0.29 LogMAR (0.02-NPL) post-operatively. 85% of eyes demonstrated visual improvement. 46% of eyes remained suboptimal due to coexisting ocular comorbidities. 1 CYP was registered as severe visual impairment.

All uveitic cataracts requiring surgical intervention presented to the MDT over the last 15 years were found at their initial presentation. Not all had demonstrable visual improvement after surgery, but the majority were beneficial.

Managing expectations is essential. The outcome is highly dependable on coexisting factors which are not always entirely known preoperatively. The pro-active management approach of uveitis in CYP within the MDT appeared to reduce the risk of developing cataracts substantially.

276 OUTCOMES OF LATE PROBING FOR CONGENITAL NASOLACRIMAL DUCT OBSTRUCTION (CNLDO) IN CHILDREN FOLLOWING COVID-19: OLDER CHILDREN SHARE SUCCESSFUL OUTCOMES

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Nasolacrimal duct probing is standard treatment for CNLDO when conservative management fails. Literature reports indicate lack of consensus on the initial management of CNLDO in older children.

We aim to ascertain outcome of delayed probing procedures after the age of two and to identify factors predictive of poor outcome.

We performed a retrospective study of patients undergoing initial probing between January 2019 and March 2024 at Southend Hospital. This allowed comparison between 'pre-Covid-19' (January 2019–February 2020) and 'post-Covid-19' (March 2020–March 2024). Data was sourced from theatres logbook. Persistent symptoms were defined as failure, and these patients were identified from clinical notes.

Eighty-two children/123 eyes underwent nasolacrimal probing. Due to Covid-19 disruptions, children were having treatment for CNLDO at older ages. The range was 12 months to 8 years. Children 4 years old, or older were excluded from analysis (n=15). Median age at procedure was 26 months pre-Covid-19, and 30 months post-Covid-19. This difference was not statistically significant (p=0.085). 82% of children had a successful procedure pre-Covid-19, compared to 89% post-Covid-19 (p=0.368). Indeed, there was no difference in success rates when stratified by age groups, 1-2 versus 2-4 years old (p=0.115).

There is no significant difference in outcome of treatment for patients treated before and after Covid-19; patients who had delayed treatment between 2-4 years had promising results from initial probing.

We conclude that nasolacrimal probing can be offered as first line treatment in patients >2 years, in absence of risk factors, eg. craniofacial anomalies, trauma or Down syndrome.

278 A RARE PAEDIATRIC CASE OF ANCA-ASSOCIATED VASCULITIS

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We report a rare case of paediatric-onset anti-Proteinase 3 (PR3), cytoplasmic-anti-neutrophil cytoplasmic antibody(c-ANCA) vasculitis accompanied with extensive non-specific orbital inflammation and a poor visual prognosis. An 8-year-old boy, background of severe autism and non-verbal, presented with acute bilateral eye swelling, proptosis, and profound subconjunctival haemorrhage with history of flu-like symptoms and vomiting. Previous self-resolving episode of only left eye swelling after a COVID-19 infection was noted. On admission, an emergency bilateral lateral canthotomy was performed for orbital compartment syndrome. Multiple examination under anaesthesia(EUA) was executed. Fundoscopy showed bilateral ischaemic retinopathy and choroidopathy while forced duction test showed very restricted movement of extra-ocular muscles(EOM). Computed tomography(CT) confirmed EOM swelling but no retrobulbar haemorrhage or orbital cellulitis. Muscle biopsies showed necrotising inflammation of tissue and the only positive bloodwork result was for anti-PR3 antibody. Diagnosis was made as ANCA-associated vasculitis and he was treated with steroids, antibiotics, and biologics. 4 months post discharge, EUA showed right eye: unreactive pupil, white reflex, no fundal view while left eye: unreactive pupil, dense pigmentation of fundus, attenuated vessels, no view of disc. Orbital inflammation did not recur, but bilateral vision loss occurred. This case highlights the diagnostic challenges from this rare clinical presentation, prompting inquiries into the sequence of events. Specifically, the emergence of significant non-specific orbital inflammation and fundoscopic changes associated with vasculitis and raises questions regarding the role of COVID-19 as a potential trigger for autoimmunity in ANCA-associated vasculitis development. Understanding this relationship will offer valuable insights for future cases.

283 ANTI-ADALIMUMAB ANTIBODY DEVELOPMENT IN CHILDREN AND YOUNG PEOPLE TREATED FOR NON-INFECTIOUS UVEITIS AND RHEUMATIC DISEASES WITH ADALIMUMAB BIOLOGIC

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Adalimumab is an effective first line biologic therapy used to treat Children and Young People (CYP) with non-infectious uveitis and juvenile idiopathic arthritis (JIA). However, development of anti-Adalimumab antibodies (AAA) may compromise its efficacy. All CYP treated with Adalimumab between 2015-2023, managed within specialist paediatric rheumatology services at a single tertiary centre, were included in this retrospective study. Potential factors influencing AAA development and its implications for CYP were explored.

Data was collected from hospital systems including patient databases, clinical records and blood test result software.

390 CYP initiated Adalimumab treatment between 2015-2023. 112/390 (28.7%) were tested for AAA, with 156 individual tests performed. 51/112 (45.5%) CYP had positive AAA (>10mG/L), with an average detection time of 2.4 years (range:0.3-5.8yrs). 52.3% (11/21) CYP without concurrent disease-modifying anti-rheumatic drugs (DMARD) and 44.4% (24/54) CYP on sub-therapeutic dose (<15mg/m2) methotrexate had detectable AAA, compared to 21.1% (12/57) on full therapeutic dose (15-20mg/m2) methotrexate. Within-patient fluctuations in AAA levels (range: 13-522mG/L) were observed in 7 CYP despite no changes to regular medications (excluding use of corticosteroids).

Notable AAA incidence is described amongst our cohort of CYP receiving Adalimumab, with no significant difference found between non-infectious uveitis and JIA cohorts. Concurrent DMARD use at full therapeutic dosage alongside Adalimumab may reduce risk of developing AAA. Within-patient fluctuations in AAA levels question the clinical relevance of a positive antibody test. Decisions regarding Adalimumab discontinuation should be based on comprehensive clinical review rather than AAA levels alone. Future multi-centre collaboration is necessary to explore this further.

228 PREMATURITY PROFILE AND RESPONSE TO INTRAVITREAL RANIBIZUMAB IN INFANTS TREATED FOR RETINOPATHY OF PREMATURITY: A CASE SERIES

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Reactivation of retinopathy of prematurity (ROP) frequently occurs following primary anti-VEGF treatment. We report our experience with intravitreal ranibizumab (IVR) and use prematurity descriptors to analyse our cohort of patients.

A retrospective review of 16 consecutive infants undergoing IVR 0.2mg/0.02 ml for ROP at a tertiary NICU in the South-West Peninsula, between January 2020 and December 2023.

Mean gestational age (GA) at birth was 24.31 weeks (23+0 to 25+3). Mean birthweight (BW) was 577.75 grams (393 to 842). 31.25% of infants had a GA≤23+6 weeks and 50% had a BW≤550 grams. Median postmenstrual age (PMA) at treatment was 34.57 weeks (31+5 to 38+5). There was regression of ROP and vascularization into zone III in 56.25% of eyes following one IVR alone. 37.50% of eyes required additional treatment due to ROP reactivation (10/32 eyes) or persistent avascular retina into zone II at PMA 70 weeks (2/32 eyes). Retreatment was delivered at a mean of 8.99±2.73 weeks after first IVR. One infant died of sepsis during follow-up.

Our retreatment rate was higher than in the RAINBOW study (31%) or the UK National Surveillance study (35.7%). This might be due to the higher degree of prematurity in our cohort when compared to the RAINBOW (mean GA 26.1 weeks, BW 834.4 grams) or UK Surveillance (mean GA 25 weeks, BW 706 grams) studies.

ROP reactivation following IVR typically occurs after 2-3 months. It is more likely in eyes with initial severe posterior