



Irish College of  
Ophthalmologists  
*Eye Doctors of Ireland*  
*Protecting your Vision*

**ICO Winter Meeting  
and  
Annual Montgomery Lecture  
2024**

**Albert Lecture Theatre,  
Royal College of Surgeons in Ireland**

**FRIDAY, 15th NOVEMBER 2024**

# About the ICO

*Established in 1992, the Irish College of Ophthalmologists (ICO) is the recognised training and professional body for medical and surgical eye doctors in Ireland.*

*The ICO is a registered Irish charity. We are committed to the advancement and improvement of eye health and patient safety and work to protect, enhance and promote the highest standards in the delivery of eye care.*

*The delivery of healthcare requires a lifelong commitment to learning and the ICO's goal is to provide and support education and learning for ophthalmologists in training, in practice and those who work alongside them as they deliver care to patients.*



Irish College of  
Ophthalmologists

*Eye Doctors of Ireland*

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## **Irish College of Ophthalmologists**

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# Programme

- 2.00pm WELCOME:**  
*Mr John Doris*  
President, Irish College of  
Ophthalmologists
- 2.05pm Short Presentations**
- Co-Chairs:**  
*Professor Conor Murphy*  
Consultant Ophthalmic Surgeon,  
Royal Victoria Eye and Ear  
Hospital, Dublin
- Ms Janice Brady*  
Consultant Ophthalmic Surgeon,  
University Hospital Waterford
- 2.08pm Indications and Outcomes of  
Iris-Claw Intraocular Lens  
Implantation:  
A Comprehensive Analysis of  
Lens Positioning**  
Sara Ahmed
- 2.16pm Audit of Community-Based  
Model of Care in Cataract**  
Anna Mulcahy
- 2.24pm Paediatric Corneal Cross-  
Linking in Children with Thin  
Corneas: A Retrospective Case  
Series in Australia and  
New Zealand**  
Charles Proxenos
- 2.32pm The Environmental Impact of  
Travel Related to Intravitreal  
Injections at MMUH**  
Daniel Broderick
- 2.40pm Is That Nerve Swollen?  
A Systematic Literature  
Review and our Proposed  
Paediatric Pathways**  
Alan Hopkins
- 2.48pm The Growing Challenge of  
Phacoemulsification Training  
for Early Career Surgical  
Trainees in Ireland**  
Fionn O Leary
- 2.56pm An Audit of Botox Treatment  
in Ophthalmology  
Department at Sligo  
University Hospital: Changing  
Indications for Botox in  
Ophthalmology Service**  
Farah Nadia Fadzil
- 3.04pm A Case Series of Malignant  
Proptosis**  
Nicole Heng Min Cur
- 3.12pm Levamisole-Adulterated  
Cocaine-Induced Mucous  
Membrane Pemphigoid:  
Case Reports and Literature  
Review**  
Daire Hurley
- 3.20pm Optimising Medications'  
Carbon Footprint in  
Ophthalmic Care**  
Emilie Mahon
- 3.30pm Refreshments**

## 4.00pm **What Might the Future of Practice Look Like?**

### **Chair & Moderator:**

**Mr Richard Comer**

*Consultant Ophthalmic Surgeon,  
Bon Secours Hospital, Galway*

This session aims to explore and discuss the changing landscape of public and private practice in Ireland and how that may continue to evolve over the coming years, with contributions from those in public and independent practice in ophthalmology and in general practice.

The presenters and panelists will share their impressions of the changing ownership and funding structures, and how the development of medicine as a business with the entrance of investment capital impacts the delivery of care.

### **Presenters:**

#### **Mr John Doris**

*Consultant Ophthalmic Surgeon,  
University Hospital Waterford;  
President, ICO*

#### **Mr James O'Reilly**

*Consultant Ophthalmic Surgeon,  
UPMC Aut Even Hospital,  
Kilkenny and UPMC Whitfield  
Hospital, Waterford*

#### **Dr Shane McKeogh**

*Principle GP, Solas Medical  
Centre, Dublin; ICGP/HSE GP  
Integrated Care Lead for Adult  
Respiratory Disease*

### **Panel Discussion:**

#### **Mr Sean Gallagher**

*Entrepreneur; ICO Board Member.*

#### **Mr Aidan O'Reilly**

*Interim General Secretary, Irish  
Hospital Consultant Association*

#### **Professor Robert Scott**

*Consultant Ophthalmologist,  
St John and St Elizabeth  
Hospital, London*

### **Presentation of the John Blake Medal for Best Short Presentation**

## **Annual Montgomery Lecture 2024**

### **5.30pm Drinks & Canapes Reception**

### **6.30pm Welcome & Introduction**

Mr John Doris,  
*President, ICO*

### **Montgomery Lecture 2024**

#### **'Traumateyesed: Coping with Major Ocular Injuries'**

Professor Robert Scott MBBS,  
FRCS(Ed), FRCOphth, DM  
*Consultant Ophthalmologist,  
St John's and St Elizabeth's  
Hospital, London*

## Speaker Biographies



Mr John Doris

### Mr John Doris

*Consultant Ophthalmic Surgeon, University Hospital Waterford;  
President, ICO*

Mr John Doris is a Consultant Ophthalmic Surgeon at University Hospital Waterford with a specialist interest in vitreoretinal surgery. He has 20 years of experience working within the United Kingdom's NHS and Ireland's HSE. He graduated in medicine from Queen's University Belfast in 1998 and is dual qualified as a medical physician and an ophthalmic surgeon. He trained as a Medical Physician at the Royal Victoria Hospital, Belfast and received a membership of the Royal College of Physicians in 2001. His basic ophthalmic surgical training was at the Royal Victoria Hospital in Belfast and his higher ophthalmic surgical training was in Manchester Royal Eye Hospital.

In 2009, he undertook a dual medical retinal and vitreoretinal ASTO /Fellowship at Manchester Royal Eye Hospital. During that year, he was a co-investigator for a Wet ARMD clinical trial (GMAN Trial). He was awarded a Fellowship of the Royal College of Ophthalmologists UK in 2010.

Mr Doris completed three additional years of specialist vitreoretinal surgical Fellowship training at three internationally renowned centres of excellence which include Manchester Royal Eye Hospital, Southampton University Hospital and Moorfields Eye Hospital, London. He was appointed Consultant Vitreoretinal surgeon at the Royal Victoria Eye and Ear Hospital in Dublin and the NHS Royal Liverpool University Hospital before taking up his current post at University Hospital Waterford in 2014.

His surgical expertise encompasses vitreoretinal surgery and micro-incisional cataract surgery. He has expertise in macular hole surgery, retinal detachment surgery, epiretinal membrane surgery, diabetic eye disease, age-related macular degeneration and treatment of floaters.



## Mr James O'Reilly

*Consultant Ophthalmic Surgeon, UPMC Aut Even Hospital, Kilkenny and Whitfield Hospital, Waterford*

Mr James O'Reilly is a Consultant Ophthalmic Surgeon, who has been in Full Time Private Practice since 2003.

He is on the Register of Medical Specialists in the division of Ophthalmic Surgery, is a Fellow of the Royal College of Ophthalmologists, a Diplomate of the European Board of Ophthalmology and a member of both the European Society of Cataract and Refractive Surgeons and the American Academy of Ophthalmology.

Mr O'Reilly sub-specialised in corneal transplantation and anterior segment reconstruction at the world renowned Coreoplastic Unit in East Grinstead in the UK. This was the site of the first Eye Bank in the UK and remains one of the world's leading corneal and anterior segment eye surgery units. Since his appointment as a consultant in 2003, Mr. O'Reilly has built a solid reputation based on surgical skill, good communication and personal patient care before, during and after the day of surgery. His main areas of interest are: cataract surgery, corneal conditions, and age-related macular degeneration.



## Dr Shane McKeogh

*ICGP/HSE GP Integrated Care Lead for Adult Respiratory Disease; Principle GP, Solas Medical Centre, Dublin*

Dr Shane McKeogh is a GP in Solas Medical Centre in Rathfarnham, Dublin. He graduated from UCD in 2000, completed General Medicine training with MRCPI in 2003 and completed specialist General Practice training on the RCSI Scheme with MICGP in 2006. He is a GP Principal in a multi-doctor General Practice located in Ballyboden Primary Care Centre in Dublin 16.

Dr McKeogh is a GP Trainer with the TCD/HSE Specialist Training Scheme in General Practice.

He was Director of the ICGP NEGs group from 2006 to 2008, when he co-authored the ICGP publication "Signposts to Success"

dealing with the business aspects of being a GP in Ireland. He is a Founder of GPBuddy.ie, a long-established online information database and educational resource for GP's.

Dr McKeogh is the current ICGP/HSE GP Integrated Care Lead for Adult Respiratory Disease.

He has an interest in Health Strategy and Delivery, has worked internationally as a GP in the UK and Australia and is a current member of the IMO GP Committee.



Mr Sean Gallagher

## Mr Sean Gallagher

*Entrepreneur; ICO Board Member.*

For over 25 years, Sean Gallagher has been immersed in the world of business and economic development, working firstly with Government Enterprise Agencies and later as an entrepreneur himself.

With a passion for coaching, Sean has over that period trained or mentored hundreds of emerging entrepreneurs.

A University of Ulster MBA graduate and a former finalist in the Ernst and Young Entrepreneur of the Year Awards, Sean was one of the first investors on the popular Irish TV Show, Dragons' Den.

He is a director and shareholder in a number of businesses in the biotech and pharma engineering sectors in both Ireland and the US.

Sean joined the Board of the Irish College of Ophthalmologists in 2022.



Mr Aidan O'Reilly

## Mr Aidan O'Reilly

*Interim General Secretary, Irish Hospital Consultant Association*

Aidan O'Reilly is a senior executive and currently Interim Secretary General with the Irish Hospital Consultants Association. A qualified solicitor and MBA graduate, Aidan has worked with the Association for over 13 years representing and advising its members on a wide range of professional and contract matters including employment rights, private practice issues, clinical indemnity, health insurance and GDPR.

## Montgomery Lecture 2024



Professor Robert Scott

### Professor Robert Scott

*MBBS, FRCS(Ed), FRCOphth, DM, Consultant Ophthalmologist, St John and St Elizabeth Hospital, London*

Professor Robert Scott qualified from St Thomas' Hospital in London in 1987, his eye specialist training was at Queens Medical Centre Nottingham and his retinal specialist and cataract specialist training was at Moorfields Eye Hospital London. He was awarded Fellowship of the Royal College of Ophthalmologists and the Royal College of Surgeons of Edinburgh in 1993, was appointed as a consultant ophthalmologist in 1998 and awarded a postgraduate Doctorate of Medicine by the University of Nottingham for his research on eye immunology and wound healing.

Prof Scott was appointed as a Royal Air Force consultant at the Birmingham and Midland Eye Centre (BMEC) and Royal Centre for Defence Medicine (RCDM) at Queen Elizabeth Hospital in Birmingham for 15 years, sub-specialising in eye trauma, advanced cataract and vitreoretinal surgery.

He served as the Royal Air Force and Defence Medical Services Consultant Advisor for Ophthalmology for a decade and was appointed as the Defence Medical Services and Royal College of Ophthalmologists Professor of Ophthalmology in 2012 and honorary Professor of Ophthalmology at the University of Birmingham in 2015.

He has supervised a generation of military and civilian PhD students and was awarded the RCOPhth John Lee MRC Fellowship to study neuroregeneration and two Wellcome trust grants to develop skin and ocular anti-scarring agents. He pioneered artificial vision for totally blind patients, who interpret a video picture of the outside world through stimulation of their tongues. This was featured in the BBC documentary 'Frontline Medicine'. He served as the clinical ophthalmic lead for the National Institute of Health Research in the West Midlands.

He is an accomplished medical teacher and trained a large number of consultants in the UK and abroad. He was voted by his peers as President of the Midland Ophthalmological Society in 2009 and honoured by the Royal College of Surgeons of



England who awarded him the Lady Cade Medal for meritorious research in 2015.

In 2018 he founded ScottHealth Ltd to provide and develop modern ophthalmic treatments and is developing new treatments for scarring of the eye after retinal detachment surgery, keratoconus, new eye drops to treat age-related macular degeneration and certain eye and brain cancers.

Prof Scott holds clinics in London and Birmingham. In London, at the Hospital of St John and St Elizabeth in St John's Wood and at Harley Street. In Birmingham, he practices at Edgbaston Eye Consultants Clinic at 22 George Road, Edgbaston, deep in the heart of the Edgbaston Medical Quarter.

## About the Montgomery Lecture

The establishment of the Montgomery Lecture in 1916 was of great significance to the specialty of ophthalmology in Ireland.

Dr Robert Montgomery served as an Ophthalmic Surgeon to St Mark's Hospital and the Royal Victoria Eye and Ear Hospital until his passing in 1912.

The Montgomery Lecture was the first medical lecture to be founded in Trinity College Dublin. Robert Montgomery established the prize with £5000 pounds, a large sum but with few conditions bar insertion of the name "Mary Louisa Prentice" (his mother's name) in its title and that it should rotate between Trinity College Dublin and the Royal College of Surgeons in Ireland.

Initially the lecture was given as a research lecture by early career ophthalmologists but since the second war the Annual Montgomery Lecture has been delivered by the leading figures in ophthalmology both from Ireland and abroad, and including neurologists, behavioural scientists and molecular ophthalmologists.

Through this lectureship, the small Montgomery family have retained their influence in ophthalmology and the name of Robert Montgomery has become widely known, particularly in contemporary ophthalmology, alongside other ophthalmological luminaries such as Dr Sir Arthur Jacob and Dr Sir William Wilde.

# Indications and Outcomes of Iris-Claw Intraocular Lens Implantation: A Comprehensive Analysis of Lens Positioning

**Sara Ahmed, Eammon O'Connell**

*Cork University Hospital/South Infirmery Victoria University Hospital, Cork*

### Objectives

1. To evaluate the clinical indications for Iris-Claw Intraocular Lens (Artisan IOL) implantation.
2. To assess the incidence of complications associated with the position of the implanted Iris-Claw Intraocular Lens.
3. To estimate the visual outcomes following Iris-Claw Intraocular Lens implantation, particularly in relation to preexisting ocular comorbidities.

### Methods

#### *Study Design:*

This is a descriptive, hospital-based study conducted at Cork University Hospital and South Infirmery Victoria University Hospital.

#### *Study Population:*

The study included a total of 42 eyes from 39 patients who underwent Artisan IOL implantation surgeries.

#### *Study Period:*

The period between April 2022 and January 2024, and all patients who underwent Artisan IOL implantation within this period were included in the study.

#### *Inclusion Criteria:*

All patients who received Artisan Intraocular Lens implantation during the specified period at the two hospitals were included in the analysis.

### Results

This study demonstrates that there are no specific age or gender limitations for Artisan lens implantation. The primary indications for the procedure were aphakia, followed by dislocated or subluxated intraocular lenses (IOLs).

No significant association was observed between the position of the implanted lens and the incidence of complications. However, a higher percentage of patients with retropupillary implantations developed elevated intraocular pressure.

Regarding visual outcomes, the majority of patients achieved a visual acuity (VA) between 6/12 and 6/24 (35.7%), while most best-corrected visual acuities (BCVA) ranged from 6/6 to 6/9 (54.8%), regardless of the presence of pre-existing ocular comorbidities.

## Conclusion

Artisan lens implantation is a versatile and effective procedure, with no significant age or gender restrictions for patient eligibility. While the position of the implanted lens does not appear to influence the overall incidence of complications, retropupillary implantation was associated with a higher occurrence of elevated intraocular pressure.

In terms of visual outcomes, the majority of patients achieved satisfactory results, with most best-corrected visual acuity (BCVA) falling between 6/6 and 6/9, regardless of pre-existing ocular comorbidities. These outcomes suggest that Artisan lens implantation offers favorable visual recovery and can be considered a reliable option for patients with complex lens conditions.



## *Compilation of Community-Based Model of Care in Cataract*

**Anna Mulcahy, Simon Neary, Margaret Morgan, Donal Brosnahan**

*Royal Victoria Eye and Ear Hospital, Dublin*

## Objectives

Cataract extraction was Ireland's most frequently performed surgical procedure in 2022, with over 39,000 procedures carried out that year<sup>1</sup>. With demand for eye services in Ireland eclipsing service supply, a regionalised, community-based model of care was introduced in 2017. This model aims to provide surgeons with more time to carry out in-hospital procedures to meet increasing demand by transferring the perioperative care of stable patients into the community<sup>2</sup>. This audit aimed to assess the clinical success of this community-based model of care.

## Methods

An audit was carried out on 576 consecutive cataract extractions in tertiary care referred through the Ophthalmology Modernised Care Pathway. Eight key performance indicators including the rate of good visual acuity, biometry accuracy, posterior capsule rupture and endophthalmitis were evaluated.

## Results

All eight of the audit standards were achieved<sup>3–5</sup>, with good post-operative visual acuity in 95.92% of eyes without other visual comorbidities, and biometric accuracy within 1 dioptre in 89.88%. The intraoperative posterior capsule rupture rate was 0.069% and there were no cases of postoperative endophthalmitis.

## Conclusion

These results compare favourably with international standards. This highlights the success of the community-based model of care in delivering high-quality patient-centred care while enabling improved service access. The use of this model can be expanded to help meet the increasing demand for cataract extraction in Ireland.



# ***Pediatric Corneal Cross-Linking in Children with Thin Corneas: A Retrospective Case Series in Australia and New Zealand***

**Charles Proxenos**

*Save Sight Institute, Sydney Eye Hospital, Australia*

## Objectives

To report the post-operative outcomes of eyes in keratoconic paediatric patients with thin corneas receiving corneal cross-linking at 6 months and 1 year.

## Methods

A total of 18 patients with 19 eyes aged 18 or younger with corneas 400 microns or less prior to crosslinking from 9 practices were included. Outcome measures were visual acuity (habitual, pinhole) corneal topography and pachymetry.

## Results

For visual acuity, an average improvement of 2.7 letters was found at 12 months with more than 40% of eyes improving by 10 letters or more. Stabilisation of the cornea topography was noted with flattening of the K2 and Kmax of 1.8D and 2.1D at respectively at 6 months and 3.6D and 4.0D respectively at 12 months. Stabilisation of the corneal pachymetry with a change in mean thickness of 7.9 microns at 6 months and 2 microns at 12 months. One eye developed a serious adverse event, microbial keratitis, and required penetrating keratoplasty.

## Conclusion

Corneal cross-linking in paediatric patients with thin corneas can improve vision and stabilise keratometry but has the risk of serious adverse events.



# **The Environmental Impact of Travel Related to Intravitreal Injections at MMUH**

**Daniel Broderick**

*Mater Misericordiae University Hospital, Dublin*

## Objectives

To assess the environmental impact related to IVI with regard to patient travel distances

## Methods

The IVI team at Mater Misericordiae University Hospital (MMUH) evaluated the roundtrip distances travelled by our patients to reach our service from January-June 2024 and projected 2024 total figures by extrapolation (Fig. 2). Each “episode” represents one injection, meaning one roundtrip journey to our site. One patient therefore accounts for multiple episodes. County of origin was utilised for evaluation home addresses were not accessed. Graphical representation of county of origin (2024) is demonstrated ± Dublin in Fig. 3 and Fig. 4. Total episodes from 2023 are demonstrated (Fig. 5) for comparative purposes.

Fig. 6 estimates roundtrip distances from “high volume” counties. Using larger population centres as a proxy point of origin (Navan, Dundalk, Cavan town and Monaghan town), roundtrip distances were estimated. The imprecision of proxy origins vs home addresses was tolerated to avoid accessing personal data. In any case, proxy origins are likely a conservative measure of distance travelled.

## Results

By July 2024, 5,591 journeys were made to MMUH for IVI treatment with 54% of episodes originating from the Dublin region. When excluding Dublin, the most common origins were Meath (37%), Louth (24%), Monaghan (15%) and Cavan (13%). Projections estimate 11,182 journeys by end of 2024, a year-on-year increase of 2,994 or 36% increase in episodes recorded by the service.

The environmental impact of a journey for IVI depends on distance travelled and mode of transport. Anecdotally, most non-Dublin MMUH patients arrive by car (or are collected by car) to attend the service. Some are even collected by a family member originating in a different county. In spite of this, our estimates of mode of travel are conservative (60% car, 20% bus, 20% train).

Estimates are based on a 2021 MMUH study which found car journeys to be higher (2). Using these approximations, one can estimate the carbon emissions using the UK government greenhouse gas (GHG) conversion scale (Fig. 6).

## Conclusion

The IVI service at MMUH is growing rapidly year on year. Unfortunately, the parallel environmental impact of the service grows in tandem. Given that nearly 50% of patients are travelling from outside of Dublin to reach the clinic, the greatest and most achievable environmental improvements would likely come via decentralisation of the IVI service, by mobile van or the expansion of existing peripheral services. This would drastically reduce travel distances, improve patient satisfaction and cut the environmental impact significantly.



# *Is That Nerve Swollen? A Systematic Literature Review and Our Proposed Paediatric Pathways*

**Alan Hopkins, Sarah Chamney**

*Children's Health Ireland at Crumlin Hospital, Dublin*

## Objectives

For several reasons there has been an increase in referrals to paediatric hospitals for patients with suspected optic nerve swelling in recent years. Most notably, a well-publicised court case involving a community optician, but also a wave of improved fundal imaging/ scanning being completed in the community setting without sufficient expertise to interpret them. Frequently, such patients are asymptomatic and in perfect health. Given the possible life threatening associations these referrals require urgent review, causing parental stress and concern as well as considerable burden on paediatric clinics. We reviewed the available literature regarding the screening of possibly swollen nerves in children and used this information to develop guidelines for their review.

## Methods

We conducted a systematic review of the available literature, the initial search yielded 382 returns and post extensive refinement by two reviewers we found a limited number of studies which met our search criteria. We filtered with the aim of finding studies that focused on paediatric referrals in patients that were otherwise well prior to referral. The goal being to identify evidence relating to the type of referrals that come from a community optician. We then completed a secondary review of these 382 articles for articles relating to relative benefits of different ophthalmological investigations in the assessment of the optic nerve and other clearly relevant papers in this paediatric population of which 36 papers were identified / agreed upon by the two reviewers.

## Results

5 studies met our primary criteria, with a total of 720 patients in an array of study designs with just one being prospective. Nonetheless, all had useful findings relating to our research question. It was found that assessment of fundal images alone is not sufficient, even when examined by expert reviewers (sensitivity approached 100% however, specificity was too low). Reassuringly, symptoms suggestive of raised intracranial pressure were found to be most useful in identifying cases of true papilledema and headache alone was a common nonspecific symptom. Studies that measured the true rate of papilledema included symptomatic children as well as asymptomatic. Two of the studies reported the true papilledema rates to be 5% and 6% respectively. Li et al. reported their rate of true disc swelling at 16%, but of note this was in a major tertiary site and included referrals from paediatric specialists and ophthalmologists and included all causes of disc swelling not just papilledema. OCT RNFL was found to be significantly higher in true disc swelling and a lack of temporal change in this metric supports a diagnosis of an anomalous disc appearance over pathology. Multiple studies agreed that review by an ophthalmologist and a pragmatic approach or pathway reduced unnecessary investigation/ exposure to radiation and admissions to hospital compared to when these patients were primarily evaluated by paediatricians.

## Conclusion

Potentially swollen nerves are an anxiety inducing issue for many. In the community the fear of missing serious pathology is leading to increased referrals to tertiary centres. In a busy ophthalmology centre such patients represent a significant time burden as they require multiple investigations, and time for consideration. The evidence supports a pragmatic approach in which patient safety remains the highest consideration. This review is reassuring in that a full history with ophthalmological examination and investigation the majority of these patients require no neuro-imaging nor invasive testing such as lumbar puncture or FFA. Indeed, in the absence of red flag symptoms and an otherwise normal functional exam the evidence supports our practice of a short interval review to demonstrate stability of the examination (with clear discussion with the child's guardian as to the red flag signs and to return urgently should they occur).

In our region we are moving toward community review with high risk patients being quickly referred to our main unit. The pathway advises general emergency department staff of when urgent inpatient review and investigation is needed versus urgent outpatient review. Neuroimaging prior to ophthalmic review is discouraged for children without neurological symptoms/ red flags. The ophthalmology guideline is based on multiple imaging modalities, functional assessment and review by an experienced clinician. For low risk patients a virtual clinic with an experienced ophthalmologist with assessment/investigations completed in the community by a technician, will result in one of three decisions; discharge, short interval virtual review or urgent referral to our tertiary setting. The evidence from this review supports that this is safe, will reduce inpatient admissions, protect in hospital clinic slots and avoid unwarranted scans/ invasive investigations. We will look to validate this pathway as it progresses.



## ***The Growing Challenge of Phacoemulsification Training for Early Career Surgical Trainees in Ireland***

**Fionn O’Leary**

*Galway University Hospital, Galway*

### **Objectives**

Phacoemulsification can be a difficult skill to learn for the novice surgeon, particularly from cases 0-150. Case selection during this period is of critical importance, and “routine cataracts” are preferred. The definition of a “routine case” is not a concrete definition. However, factors which increase the risk of complication and particularly PCR have been identified by various authors. These factors can be patient related (increasing age, ability to lie flat, movement, alpha blocker), intraocular related (corneal opacity, axial length, shallow anterior chamber, pxf, phacodonesis, vitrectomised eye, small pupil, cataract density) and surgeon related (Consultant, Registrar, SHO).

Much attention has been given recently in the NHS to the decreased opportunities of these “routine cases” for early career trainee ophthalmologists. This is thought to be mainly caused by the expansion of the so called “private independent sector”, which only operate with lists consisting of routine cataract cases. As a result, more complex cases including the risk factors discussed above, are increasingly dominating surgical lists in the NHS where trainees solely operate. As these cases are particularly unsuitable for early year trainees, senior surgeons are more likely to complete most cases on a list. The RCOphth has reported trainees are increasingly missing out on crucial cases early in their training which develop their surgical skills allowing them to tackle more difficult cases later.



Whilst the presence of the independent sector is lower in Ireland, it is growing and the presence of the NTP (national treatment purchase fund) is already well established.

This study aims to quantify the complexity of public cataract cases in a tertiary teaching hospital on one operating list in a six month period in 2024 using published risk assessment tools, and thus show what cases are present for a surgical trainee with less than 150 case experience.

## **Methods**

This study was carried out retrospectively. Patient identification numbers were obtained from the theatre logbook. Data was then gathered from the electronic medical record system in the hospital. Clinical notes, operation records and biometry measurements were analysed to obtain risk factor data for each cataract case. 72 cases were identified. Excel version 16 was used for analysis.

## **Results**

46% of cases were completed by an early career trainee. 35% of cases were completed by a consultant. 19% of cases were completed by both trainee and consultant.

3% of cases had four risk factors. 17% had three risk factors. 22% had two risk factors. 47% had one risk factor. 11% of cases had zero risk factors (ie "routine cases").

The top two risk factors identified were age>80 years (33%) and presence of small pupil/IFIS/need for pupil expansion device (25%). The addition of SHO surgeon is not included in risk factor analysis for simplicity.

## **Conclusion**

This research shows the limited number of cases (11%) that can be classified as "routine" using published risk assessment tools. 47% of cases had one risk factor, which may or may not make them suitable for early experience trainees. 42%, or nearly half, of cases consisted of two or more risk factors, probably making them unsuitable for early year trainees. The addition of SHO level surgeon increases these percentages further.

Some trainees may struggle to reach the required number of cases in order to progress through the training pathway. Consideration may need to be given when designing lists with trainees operating. Future research is planned to increase the sample size. Analysis of results from other training hospitals would be useful.

# **An Audit of Botox Treatment in Ophthalmology Department at Sligo University Hospital: Changing Indications for Botox in Ophthalmology Service**

**Farah Nadia Fadzil, Ann Marie Mongan, Clare McCloskey**

*Sligo University Hospital*

## **Objectives**

This audit aimed to determine the percentage of patients receiving Botox treatment, analyse patient demographics, and assess the rate of neuroimaging conducted over a one-year period in SUH.

## **Methods**

A retrospective review of patient records who received Botox treatment across various diagnosis groups (BPS, HFS, Migraine, and others) from June 2023-June 2024 was conducted using the Medisoft electronic system in SUH.

## **Results**

87 patients were included in the analysis. 39 (44.8%) were diagnosed with chronic migraine, 30 (34.5%) with BPS, 16 (18.4%) with HFS, and 2 (2.3%) with other diagnoses like Meige syndrome. Most patients were aged 45-70. Migraine patients were younger (40-50 years), while BPS and HFS patients were older (60-70 years). In the BPS group, 63.3% were female, with gender distribution equalizing in the 80-90 age group. The HFS group had 75.0% females, with most cases seen in middle-aged females. None of the BPS patients had imaging and only 18.75% of HFS patients had prior neuroimaging. Migraine patients were predominantly female (82.1%), and all were referred by neurologists after negative imaging and failed treatments. Side effects (ptosis and unilateral droopy lips) were noted in 3 patients (3.44%).

## **Conclusion**

This audit highlights a shift in ophthalmology Botox clinics from primarily treating BPS (18.4%) to managing more complex diagnoses, such as HFS, migraine, and Meige syndrome, which require thorough evaluation and interdisciplinary collaboration with neurology. Given the rise in migraine referrals since the 2010 PREEMPT study, Botox administration may be more appropriately managed by neurology, with other alternative treatments worth exploring. Neuroimaging is essential for HFS patients to distinguish between primary and secondary causes prior to Botox treatment. This shift in the patient profile emphasizes the need for comprehensive diagnostic protocols and effective management strategies for conditions beyond ophthalmology's traditional scope.

# **A Case Series of Malignant Proptosis**

**Nicole Heng Min Cur, Glynis Hanrahan, John Stokes**

*University Hospital Waterford*

## **Objectives**

Proptosis is the anterior displacement of the orbit of the globe. This is a small case series discussing three patients who presented with proptosis that were found to be of malignant origin, including a brief review of primary and secondary causes of orbital malignancy in adults.

## **Methods**

This is a prospective and retrospective study conducted in a tertiary care hospital in the South-East of Ireland. Information was acquired from the patient's medical records, laboratory and radiology reports.

## **Results**

We included three patients in our series, two females and one male that ranged in age from 53 to 77 years. All patients presented with proptosis with associated symptoms such as pain, diplopia and visual loss. There was no unifying primary pathology found in our cohort. The underlying diagnoses were squamous cell carcinoma, adenocarcinoma of the transverse colon and melanoma.

## **Conclusion**

Orbital metastasis is an uncommon presentation to general ophthalmology clinics. This is an interesting case series that highlights how crucial it is to keep it as a differential diagnosis in patients who present with proptosis and patients with a relevant medical history.

# **Levamisole-Adulterated Cocaine-Induced Mucous Membrane Pemphigoid: Case Reports and Literature Review**

**Daire Hurley, Elke Thijs, Brendan Cummings, Dirk Elewaut, Nick Verougstraete, Ilse Claerhout, Prof. Conor Murphy, Prof William Power, Dimitri Roels**

*Royal Victoria Eye and Ear Hospital, Dublin,*

*Department of Ophthalmology, Ghent University Hospital, Ghent, Belgium*

## **Objectives**

The aim of this study was to report 2 cases of levamisole-adulterated cocaine-induced mucous membrane pemphigoid.

## **Results**

This study is a review of case reports and literature

## **Results**

Two patients presented with bilateral severe purulent conjunctivitis, corneal ulceration, and rapidly progressive forniceal shortening. Both patients were active cocaine users. A complete blood analysis showed a positive antineutrophil cytoplasmic antibody immunofluorescence with a mixed perinuclear antineutrophil cytoplasmic antibody and cytoplasmic-staining antineutrophil cytoplasmic antibody pattern. Direct immunofluorescence examination of conjunctival tissue showed linear deposition of component 3 and immunoglobulins at the basal membrane. A diagnosis of levamisole-adulterated cocaine-induced mucous membrane pemphigoid was made. In case 1, this suspicion was confirmed by investigating remnants of cocaine on the patient's debit card using mass spectrometry, which contained traces of levamisole. In both cases, aggressive immunosuppressive therapy combining systemic corticosteroids and rituximab was able to control the disease. However, by the time these therapies were initiated, significant corneal injury had occurred requiring corneal grafts in both patients.

## **Conclusion**

Given the rising abuse of cocaine, it is important that ophthalmologists are made aware of its association with severe atypical cicatricial conjunctivitis. To the best of our knowledge, we present the first case proving the causal relationship between levamisole and ocular cicatricial pemphigoid.

# Optimising Medications' Carbon Footprint in Ophthalmic Care

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## Objectives

The objective of this project is to offer a reproducible manner of comparing the carbon footprint of the active pharmaceutical ingredients (API) and packaging of ophthalmic medications used in the perioperative period of cataract surgery and herpes simplex keratitis management.

## Methods

A list was made of the 116 ophthalmic medications most commonly used, which were identified through RVEEH clinical practice, British National Formulary (BNF), Monthly Index of Medical Specialities (MIMS) and Health Products Regulatory Authority (HPRA) review. The nine-step calculation of carbon emissions for medications' molecular structure was applied, allowing the calculation of carbon emissions based on a medication's API. Lastly the carbon footprint of medications' packaging was calculated based on their weight and composition.

## Results

When assessing the carbon footprint of oral and topical ointment acyclovir for the management of herpes simplex keratitis, selecting topical over oral acyclovir would allow for a reduction of 773.41g of CO<sub>2</sub>eq for the same 10-day duration of treatment.

The difference in carbon emissions between using single-use minims as is current practice during preparation for cataract surgery, and using multi-use bottles with a no-touch technique between patients would allow a yearly reduction of 264.3kg CO<sub>2</sub>eq in the RVEEH performing 4800 cataract operations.

Lastly, comparing two perioperative regimens for medications used in cataract surgery revealed a difference of only 1.27g of CO<sub>2</sub>eq between both regimens.

## Conclusion

While the method currently most often reported in the calculation of carbon emissions for medications is the environmentally-extended input-output (EEIO) analysis, which estimates the carbon impact of a medication solely based on its economic cost, this provides only an estimate of carbon emissions generated. Utilising the combined method described here of calculating the carbon footprint of a medication's API and packaging allows for more refined results to be used for comparison and selection of treatment options with the lowest environmental impact.

## John Blake Medal



John Blake

**John Blake,**  
**MCh, FRCSI, FRCSEd, FRCS, FRCOphth**  
**1932-2011**

John Blake was born in Cork, studied Medicine at University College Cork on a scholarship and trained in Ophthalmology in Nottingham, London and Heidelberg. He was a consultant at the Royal Victoria Eye & Ear Hospital and St Vincent's Hospital, Dublin. Research into Road Traffic Accidents and eye injury led him to lobbying the government successfully to make seatbelt wearing compulsory and changed windscreens from toughened to laminated. These changes virtually eliminated perforating eye injuries from road traffic accidents.

The John Blake Medal was first awarded in 2019 for the best research paper at the annual conference of the Irish College of Ophthalmologists.





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