



UKISCRS

United Kingdom & Ireland Society of Cataract & Refractive Surgeons



47th Annual Meeting

Leonardo Royal City Hotel

Wednesday 1st November - Friday 3rd November 2023



1.000.000
FINEVISION
IMPLANTED WORLDWIDE

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still the gold standard

About your society

Founded in 1976, UKISCRS is one of the oldest implant societies in the world. We have an active membership of Consultant Ophthalmologists, speciality grades, fellows, trainee grades and Allied Professions.

UKISCRS is at the forefront of promoting education and learning in cataract and refractive surgery. UKISCRS is a Charity Incorporated Organisation (CIO) with registered charity number: 1191256.

The Society comprises of Trustees, Officers and Council members along with elected representatives from the membership. The Society is managed, day to day, by the Society & Congress Manager.

Are you a member of UKISCRS?

Benefits include:

- Free membership of ESCRS
- Subscription to the Journal of Cataract & Refractive Surgery
- Subscription to the EuroTimes & CRSToday Magazine
- Reduced registration fees at the UKISCRS & ESCRS meetings
- Free UKISCRS & ESCRS membership to trainees in an NHS post
- Prizes for trainees for free-papers presented at the Annual Meeting
- Bursary for trainee members to present a paper at the ESCRS Annual Congress

**UKISCRS membership is tax deductible*

For more information on how to become a UKISCRS member please contact Gill Wood:

Please contact Gill Wood by email at: ukiscrs@ukiscrs.org.uk
visit: www.ukiscrs.org.uk

How to become a Council Member

Council members are elected for a three year term. Nominations for council are announced three months before the Annual General Meeting (AGM). Candidates are nominated and entered in to a ballot. The new council members from 2023 will be welcomed formally to council by the President in his welcome address.

47th Congress Programme Committee & Sub-committee Members

Mr. Romesh Angunawela, Dr. Miltos Balidis, Prof. Ben Burton, Prof. Bernie Chang, Ms. Laura Crawley, Mr. Nick De Pennington, Ms. Navpreet Dhillon, Dr. Lana Fu, Mr. Panos Georgoudis, Ms. Joanna Gould, Mr. Amir Hamid, Dr. Su-Yin Koay, Miss Masara Laginaf, Mr. David Lockington, Mr. James Lorigan, Mr. Shahzad Malik, Ms. Sarah Maling, Dr. Niraj Mandal, Ms. Bitu Manzouri, Prof. John Marshall, Dr. Laura Maubon, Ms. Artemis Matsou, Prof. Johnny Moore, Ms. Ritika Mukhija, Mr. Mayank Nanavaty, Prof. Dr. SORCHA NI DHUBHGHAILL, Mr. Milind Pande, Dr. Pantelis Papadopoulos, Mr. Gok Ratnarajan, Mr. Gerard Reid, Prof. Dan Reinstein, Dr. Georgios Roussopoulos, Mr. Mario Saldanha, Mr. Indy Sian, Dr. Dan Sibley, Dr. Petros Smachliou, Prof. David Spalton, Prof. Sathish Srinivasan, Mr. Alastair Stuart, Prof. Dr. Abdo Karim Tourkmani, Mr. Andrew Turnbull, Mr. Paul Ursell, Miss Louisa Wickham, Mr. Geraint Williams, Mr. Jonathan Wilson & Dr. Johnson Yan Ning Neo.

UKISCRS COUNCIL 2023

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Immediate Past-President

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YOP Consultant Lead

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Mario Saldanha

Andrew Turnbull

YOP Trainee Lead

Sunil Mamtara

UKISOP President

Rebecca Turner

Enquiries

Please direct all enquiries to
ukiscrs@ukiscrs.org.uk

Society & Congress Manager

Gill Wood Email:
gillwood@ukiscrs.org.uk

General Information

Registration

The registration desk is open as follows:

Wednesday	(YOP) in the Beauchamp Suite	09.00 - 17.00
Thursday	(Main Programme) in the Auditorium	08.00 - 17.30
Friday	(Main Programme) in the Auditorium	08.00 - 16.00

Once registered, please ensure you always wear your badge. Entrance will not be permitted to any area without a visible badge. All badges are printed on biodegradable card. Lanyards have been supplied by BVI, please keep your lanyard and reuse. There will not be a printed programme this year to help reduce carbon footprint.

You will receive, upon check-in, a delegate bag supported by Rayner, to pop all your goodies into and take home.

Exhibition & Catering

The exhibition is in the Crown & Gallery Suite. We are hugely grateful to our industry colleagues who are supporting us so generously this year. Thank you!

The exhibition area is free for speakers and delegates attending the meeting and is open from 08.30.

Registered delegates and exhibitors have full access to the exhibition.

Please visit all the stands to enjoy the educational and technological updates they provide.

Refreshments are provided throughout the day. Lunch will offer a hot & cold buffet with a vegetarian option and dessert. Please note that individual requirements cannot be catered for without pre-notification.

All lunches and refreshments will be served in the exhibition areas.

Members of the public/hotel guests are not permitted to enter these areas.

Drinks Reception & Gala Dinner

The Drinks Reception starts at 19.30 on Thursday evening in the Gallery, followed by the Dinner at 20.00 in the Auditorium. The dinner includes live entertainment throughout which we hope you all enjoy.

Please note that the Dinner is a ticket-only event and is fully-booked. Our theme this year is 'Masquerade'.

Dress code: Dress to Impress, with a mask!

CPD

The UKISCRS Annual Meeting, is self-validating, you will be awarded 1-point per hour of attendance up to a total of 17-hours/points:

Wednesday Dry Lab:	09.30 - 12.30	2.5 hours = 2.5 CPD points
Wednesday YOP session:	13.30 - 17.00	4 hours = 4 CPD points
Thursday Main Session:	09.00 - 17.30	6 hours = 6.5 CPD points
Friday Main Session:	09.00 - 16.00	5.5 hours = 5.5 CPD points

Your evaluation form will be sent electronically for completion and return. Your attendance certificate will then follow by email. You will need to use this attendance certificate to claim your CPD points.

Acknowledgement

UKISCRS would like to acknowledge and thank the following for the design and delivery of this meeting:

AV & Set design:	Oxford AV - James Hay and the team	
Graphic Design:	Creative Shock Wave	
Printing:	Walter Brown Printers Ltd.	
UKISCRS team:	Gill Wood - Society Manager	Dean Williams
	Graeme Cuerden (Official photographer)	Greg Williams
	Gaia Oikonomou	Andrew Wooderson
	Lillie Topp	

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President's Address



Dear delegates, Faculty, industry colleagues, Council and Trustees,

It gives me the greatest of pleasures to offer you a warm welcome to the 47th UKISCRS Annual Congress and a return to London.

On behalf of the Society, I would like to offer our sincere thanks and appreciation to the UKISCRS Council members and Trustees for their expertise and continued commitment. I am mindful of how much hard work and time you put into the Society and without your significant input we would not have the successful organisation that we have today.

The main aim of UKISCRS is to educate and bring together like-minds, friends, and colleagues in an engaging, educational environment. UKISCRS plays an important role in delivering education that includes internationally reputed chair-people and speakers with a wealth of experience who are at the forefront of their sub-specialties. They offer their expertise to present, discuss and debate their topics of interest in order to inform our membership about current developments and obtain a well-balanced view of current opinion. The result is content that provides you with a highly focused educational experience delivered in a short two and a half day meeting.

This year we are honoured to be presenting a UKISCRS lifetime achievement award to two titans of UK Ophthalmology. Paul Rosen is a Past President of UKISCRS, leader of one of the UK's largest departments in Oxford, educator, and researcher for over three decades and Past President of ESCRS. Dan Reinstein has been an acclaimed world leader and researcher into corneal laser refractive surgery from its very beginnings and continues to be one of the most

significant figures within this specialty. Their lectures promise to be inspiring and insightful, and we look forward to seeing you there and joining with us all in acknowledging their contribution to our discipline.

We are also delighted to have our inaugural Ridley Eye Foundation Award and Lecture. The Ridley Eye Foundation was created by Sir Harold Ridley, the creator of the world's first intraocular implant lens, and is a charitable foundation providing cataract surgery in the Himalayas and Nepal. This named lecture is to honour individuals who have had a significant and material impact on cataract surgery and will occur biannually. It is our great honour to have Professor John Marshall deliver this lecture who has had an enormous impact on cataract surgery and is Emeritus Frost Chair of Ophthalmology at the Institute of Ophthalmology in association with Moorfield's Eye Hospital, UCL & St Thomas's Hospital in London where the first implant was used by Sir Harold in 1949.

UKISCRS has developed fruitful and cordial relationships with our sister societies across the world. Because of this we are delighted that the Council of HSIOIRS have travelled to us from Greece and will be delivering our Presidents Plenary session on multifocal implants. I hope that you will show them a warm welcome and hear from their wisdom on this.

At UKISCRS we invest in our Young Ophthalmologists - the future drive of this society and ophthalmology. UKISCRS also provides education and hands-on learning to those professions allied to ophthalmology (UKISOP). Please attend these sessions to hear how different aspects of our profession are addressing the current dilemmas.

We are delighted and honoured to have a series of symposia that are reflective of the current issues concerning us all which have been carefully curated by the Council. They will inform and educate us all with the ensuing discussions clarifying the debates for us all.

UKISCRS has a proud history of working closely with our Trade colleagues without whom our meeting would not be possible. So many of the advances that we currently enjoy in treating our patients have been developed for us by Industry in conjunction with clinicians. They provide us with support to provide you with this meeting and

would love to hear from you and discuss the latest advances in the Trade Exhibition and over dinner. I would like to encourage all delegates to spend as much time with them as you can and discuss all aspects of clinical care with them.

Finally, we are introducing a new component to our program. We are running a competition to find the best surgeon at UKISCRS. Haag-Streit have kindly donated to us for the meeting an EyeSi machine and we are asking everyone to have a go. If you can 'Beat the President' and get a higher score than me, you will get onto the leader board. On Friday afternoon the top 5 surgeons will be invited on stage for a live shootout to find the best surgeon at UKISCRS and win prizes. Please enter and see if you are better than your trainees or if the new surgeons can take down the old guard!

The UKISCRS Council and I have worked with passion and education in mind whilst creating this meeting that will hopefully inform, challenge, and inspire you to continue developing your skills as ophthalmologists. It has been my aim during my presidency to make this meeting more sustainable and reduce our carbon footprint. We have moved to a digital programme, reusable lanyards, biodegradable name badges and have selected a venue that is itself working towards a positive impact on society.

I express gratitude to the UKISCRS Trustees, Officers and Council Members for their commitment, support, and hard work and also to Gill Wood, and her team for their service to the Society.

We sincerely hope you value the educational content whilst valuing the ability to enjoy yourselves.

Yours,

A handwritten signature in black ink, appearing to read 'P. G. Ursell', with a stylized, wavy flourish extending to the right.

Mr. P. G. Ursell

"Leonardo Hotels UK and Ireland are built on strong ethical values, and we want to do more than just grow a successful business. We want to have a positive impact - on society and the environment, today and tomorrow. That's why we've called our new responsibility strategy Positive Impact. It guides us to do more, by setting out goals and commitments for all our hotels. We've made some good progress to date, but there is still much more we can do. We'd love to hear any ideas you have for how we could be doing more."

Jason Carruthers, MD.

The 2023 Ridley Award Lecture

“See what everyone has seen, but think what no one has thought: Innovation”

Thursday 2nd November, 1630 - 1715

Prof. John Marshall MBE, BSc (Hons), PhD, FMedSci, FRCPATH, FRSB, CSci, DSc(Hon Glasgow Caledonian) DSc(Hon London Metropolitan) FRCOphth (Hon), FCOptom (Hon), FARVO, FAcadTM, FLIA, FRSA
Frost Professor of Ophthalmology.



Professor John Marshall is best known for inventing and patenting the revolutionary Excimer laser for the correction of refractive disorders with in excess of 70 million procedures now having been undertaken worldwide. For this innovation he has been recognised by colleagues throughout the world and by honours and awards from professional institutions. He cofounded the first company to receive FDA approval for laser refractive surgery. He also created the world's first Diode laser for treating eye problems of diabetes, glaucoma and ageing. His lifelong studies of the ageing retina have led to the development and patenting of a revolutionary new laser, 2RT, which is proving successful in the treatment of dry AMD. He has however kept a very low media profile.

Professor John Marshall is the Frost Professor of Ophthalmology and Director responsible for Enterprise and Innovation at the Institute of Ophthalmology, University College, London in association with Moorfields Eye Hospital. He is Emeritus Professor of Ophthalmology at Kings College London, Honorary Distinguished Professor University of Cardiff, Honorary Professor the City University and Honorary Professor Glasgow Caledonian University. His research over the past almost 60 years has ranged over a number of ocular problems but has concentrated on the development of lasers for use in ophthalmic diagnosis and surgery, the inter-relationships between light and ageing, together with the environmental mechanisms underlying age-related, diabetic and inherited retinal diseases. This work has resulted in over five hundred research papers, 44 book chapters and 7 books.

He is editor and co-editor of numerous international journals. He has successfully trained over 60 students for higher doctorates. He has given 55 eponymous lectures with 3 more to be presented this year, 2023, and has received numerous awards together with 25 prestigious medals including the Nettleship Medal of the Ophthalmological Society of the United Kingdom, the Mackenzie Medal, the Raynor Medal, the Ridley Medal, the Ashton Medal, the Ida Mann Medal, the Lord Crook Gold Medal of the Worshipful Company of Spectacle Makers, the Doynne Medal of the Oxford Congress, the Peter Watson Medal of the Cambridge Symposium, the Barraquer Medal of the International Society of Cataract and Refractive Surgery, the Kelman Innovator Award and Medal of the American Society for Refractive and Cataract Surgery, the Lim Medal of the Singapore National Eye Centre and the Junius-Kuhnt Award and Medal for his work on AMD. In 2014 he was honoured with the Zivovnjovic Award by the European Vitreo Retinal Society, a Lifetime Achievement Award by the UK & Irish Society for Cataract & Refractive Surgery, delivered the Bowman Lecture and received the Bowman Medal. He has been consistently voted onto the Ophthalmologist Power List of the most influential people in the world of Ophthalmology, and was the only scientist. He has been visiting professor at numerous universities on every continent.

He has more than fifty-five patents and has held posts chairing the medical advisory boards of many international companies and was a founder director of Diomed for some years, this being the leading supplier of diode laser systems for general surgery. He is a director of AlphaRet and the managing director of ApexLas.

He has sat on and chaired many national and international committees* concerned with protecting the public against the possible damaging effects of lasers and other artificial light sources. John played the leading role with the ICRC, chairing a scientific review committee and addressing the United Nations to obtain a Geneva Convention banning the use of anti-personnel laser weapons.

He was the Chairman of the Medical and Scientific Advisory Board of the British Retinitis Pigmentosa Society 1973-2011 and remains a founder Trustee, until 1995 he was Co-Chairman of the Medical and Scientific Advisory Board of the International Retinitis Pigmentosa Association. He was a scientific adviser and is a Vice President of the then National Eye Research Centre and is one of two Ambassadors of Fight for Sight. He is a trustee of the Frost Foundation, giving career development awards to young ophthalmologists, was a scientific adviser to Blind Veterans UK and is a member of the executive committee of Commonwealth Futures looking to harmonise eye care in the Commonwealth. He is a Fellow of the Royal College of Pathologists, a Fellow of the Association for Research in Vision and Ophthalmology and has been elected a Fellow of the Academy of Medical Sciences and a Fellow of the Royal Society of Biology. He is also an Honorary Fellow of the Royal College of Ophthalmologists, an Honorary Fellow of the College of Optometrists, a Fellow and past Director of the Laser Institute of America, a Fellow of the Royal Society of Arts and an Honorary Fellow of Cardiff University. He has a Senior Achievement Award of the American Academy of Ophthalmology and the Euretina Award of the European Society of Retinal Surgeons. In 2009 he was honoured with a Lifetime Achievement Award by the International Society of Cataract and Refractive Surgeons and the American Academy of Ophthalmologists. He is a Fellow of ophthalmological societies of several different countries, as well as being elected to the European Academy of Ophthalmology. During 2011-2012 he was the Master of the Worshipful Company of Spectacle Makers. In 2013 he was awarded the MBE in the 2013 New Year Honours List for services to Ophthalmology and an honorary DSc from Glasgow Caledonian University. In 2015 he was awarded an honorary DSc by the London Metropolitan University and elected Chartered Scientist by the Royal Society of Biology in 2017. He was appointed Honorary President of the International Society of High Technology in Ophthalmology in 2018. In 2019 he was awarded the Laser Ambassador Award of the Association of Industrial Laser Users for his work in promulgating lasers to the general public and was elected a Fellow of the European Academy of Translational Medicine Professionals. He delivered the 2019 Dame Ida Mann lecture to the Royal Australian and New Zealand College of Ophthalmologists. This year, 2023, he delivered the Joseph Colin Award Lecture to the American-European Congress of Ophthalmic Surgery, the 2023 DOC lecture at the 35th International Congress of German Ophthalmic Surgeons, the Dr K Bhujang Shetty Oration lecture and the inaugural Ridley Award Lecture of the United Kingdom and Ireland Society of Cataract and Refractive Surgeons.

He continues to play a very active role in industry having served on the board of Avellino, a genetic diagnostic company, and is now the chairman of their Executive Scientific Advisory Committee. He is a director of AlphaRet, the company building and distributing the 2RT Laser for AMD, which is currently undergoing clinical trial and the managing director of ApexLas Company constructing a solid-state Laser for refractive surgery. In the world of start-ups he is senior scientific advisor to Gebauer in relation to using pig corneal tissue to treat disease and refractive problems, a senior scientific consultant to Toku Eyes concerning the role of AI, and to Excelsius in developing novel refractive lasers. He also consults for a number of the major international companies in the field of ophthalmology. Outside ophthalmology, he is currently executive chairman of a company using nano technology to diagnose prostate cancer by using a device, rather like a pregnancy test, dipping male urine to give a colour change if a particular protein marker is present; the system will also be capable of simultaneously giving a response for PSA.

Reference:

* World Health Organisation (WHO), United Nations European Programme (UNEP), Non-ionizing Radiation Committee of the International Radiological Protection Association, International Electro-Technical Commission (IEC), British Standards Institution (BSI), European Community (EC), International Committee of the Red Cross (ICRC), National Radiological Protection Board (NRPB).

Lifetime Achievement Award

Thursday 2nd November, 1345 - 1435



Paul Rosen

BSc, MB ChB, FRCS, FRCOphth, MBA, CertLRS RCOphth, PGD Cat Ref Surg.

About Mr Paul Rosen



Paul Rosen completed his Medical training at Manchester University before specialist training at the Prince Charles Eye Unit, Windsor, St Thomas' Hospital and Moorfields Eye Hospital.

Paul has been a Consultant Ophthalmic Surgeon at the Oxford Eye Hospital, Oxford University Hospital Foundation Trust, since 1993. He was Head of Department from 1998 to 2004 and Clinical Director of the Specialist Surgery group from 2010 to 2016.

He is a past President of UKISCRS and ESCRS. He is a Trustee of UKISCRS and has just completed his term as Chairman of Trustees of the ESCRS. Other Society activities include Medical Editor of Eurotimes, Chairman of

the ESCRS Leadership and Business Innovation Committee and member of the Education, Publication and Finance Committees.

He was a founder examiner of the Cert LRS, and is an examiner for the Royal College of Surgeons in Glasgow and the FEBOS-CR exam.

He has an MBA from London Business School and is a mentor for the ESCRS Innovator's Den competition. He has over 50 publications and co-authored the NICE Cataract Surgery Guidelines in 2017.

Paul's principle clinical interests are Cataract, refractive and vitreo-retinal surgery.

Lifetime Achievement Award

Friday 3rd November, 1215 - 1300

Prof. Dan Reinstein

FRCSC FRCOphth DABO FEBO PGDipCRS CertLRSA.

Founder & Director London Vision Clinic MD MA(Cantab).



About Prof. Dan Reinstein



Professor Dan Z. Reinstein is the Founder and Medical Director of the London Vision Clinic, part of the EuroEyes Group. Dr. Reinstein is a board-certified ophthalmologist in the United States and Canada and holds professorships in the UK, New York and Paris. Since the 1990's he has dedicated himself solely to the specialty of Refractive Surgery. Over the course of his career, Dr. Reinstein developed and contributed the first measurements of the epithelium with mapping, developed and published extensively in the new diagnostic field of corneal layered 3D pachymetric imaging and biometry with VHF digital ultrasound, later adding OCT methodology. He has delivered over 1,000 lectures at professional meetings on 5 continents and published over 210 scientific papers in peer-reviewed medical journals. He is a leader in the field of Therapeutic Refractive Surgery, and founded this section for the

Journal of Refractive Surgery where he continues as Section Editor. He has authored a definitive textbook on SMILE, contributed to 44 book chapters and published proceedings, and is extensively published in the ophthalmic press. His work and patents related to VHF digital ultrasound administered by the Center for Technology Licensing at Cornell University (Ithaca, NY) led to the commercialisation of VHF digital ultrasound robotic scanning with the Insight 100 from ArcScan Inc., which together with his sizing formula is now the most accurate method of sizing the ICL. He developed PRESBYOND Laser Blended Vision, now part of the Carl Zeiss Meditec platform. He has been the Lead Refractive Surgery consultant for Carl Zeiss Meditec since 2001, has a proprietary interest in the Insight 100 technology, and consults for CSO Italia (MS39 OCT). He was awarded the Waring Medal in 2006, the Kritzinger Award in 2013 and the ISRS President's Award and the Senior Achievement Award from the America Academy of Ophthalmology in 2020. He has continued to play the saxophone and has held a monthly residency gig at 606 Club in Chelsea for over 20 years.

Programme:

Wednesday 1st November 2023



	A Dry Lab learning experience supported by Thea	
0900 - 0930	Registration	
0930 - 1100	Corneal Trauma Suturing	Bitu Manzouri, Mario Saldanha, Andy Turnbull, Lana Fu
1100 - 1115	Working Break	
1115 - 1230	Iris Trauma Suturing	Laura Maubon, Johnson Neo, Sunil Mamtara
1230 - 1330	LUNCH	
1330 - 1520	Update on Keratitis - Supported by BVI Medical Ltd	Johnson Neo, Sunil Mamtara & Mario Saldanha
1330 - 1340	Introduction of new YO committee and to next session	Laura Maubon and the new YO team
1340 - 1400	How to approach a corneal ulcer	Lana Fu
1400 - 1405	Q&A	
1405 - 1425	Update on bacterial keratitis	Su-Yin Koay
1425 - 1430	Q&A	
1430 - 1450	Update on herpetic keratitis	Dan Sibley
1450 - 1455	Q&A	
1455 - 1515	Update on fungal and acanthamoeba keratitis	Geraint Williams
1515 - 1520	Q&A	
1520 - 1540	Working Break	
1540 - 1700	Why You Should Do Private Practice - Supported by BVI Medical Ltd	
1540 - 1550	Personal insight: Setting up a business	Romesh Angunawela (OCL)
1550 - 1600	Personal insight: Training straight to the private sector	Alastair Stuart (Optegra)
1600 - 1610	Personal insight: Partnering in business	Bernie Chang (Newmedica)
1610 - 1620	Personal insight: Leaving the NHS for flexibility	Andy Turnbull (NHS/Self-Employed)
1620 - 1715	Round table discussion	
1715 - 1845	YOP SOCIAL - Supported by BVI Medical Ltd	
1700 - 1900	UKISCRS Council Meeting	
1930 - 2000	Faculty Drinks reception	
2000 - 2130	Speakers Dinner	

Programme:

Thursday 2nd November 2023



TIME	TOPIC	FACULTY	ROLE AND BASE
09:00	The emotional impact of sight loss	Lorcan Butler	Optical Engagement Manager, Brain Tumour Trust
09:20	Empowering Communication for Patients with Hearing Impairment in your clinics	Jayshree Vasani	Eyecare Professional, with live experience of hearing loss
09:40	How to maximise the ocular assessment of a person with learning disability	Louise Gow	Eye Health, Optometry and Low Vision, RNIB
10:00	Ocular oncology: what you need to know	Hibba Quhill	Sheffield Teaching Hospitals NHS Foundation Trust
10:20	Summary & questions		
10:30	Morning tea break		
11:00	E-referral, E-Consent and Happy Patients	Trusit Dave	Director, Optimed
11:20	Work force planning, staff retention and the role of voluntary registered practitioners	Pete Toomey	Clinical Scientist and Service Manager, Ophthalmic Imaging, Sheffield Teaching Hospitals NHS Foundation Trust
11:40	Innovations in Independent Practice and Myopia management	Brian Tompkins	Tompkins Knight & Son Optometrists
12:00	Summary & questions		
12:20	Scope Eyecare Case Study	Neda Qurashi	Specialist Advanced Orthoptist, South Tees Hospital
12:30	A methodical approach to ocular biometry Managing a new patient with post cataract refractive surprise in one eye & a cataract in the other	Purvi Thomson	Lead Optometrist, OCL Vision
12:45	Lunch break		
13:45	Join main symposium for Lifetime achievement award	Paul Rosen	Consultant Ophthalmologist, Oxford University Hospitals
14:45	Myopia mapping (Oculus)	Lyndon Bird	Tompkins Knight & Son Optometrists
15:15	Cataract dry-eye lab	Victoria Kerins	Bausch+Lomb
15:45	Blepharitis and dry eye management		Scope Eyecare
16:15	Oculera VR Visual field analyser & NeOs	Antonio Corona	Virtual Care
17:00	C L O S E		

Main Scientific Programme:

Thursday 2nd November 2023



0900 - 1040	The future provision of cataract surgery in the UK	Prof. David Spalton & Prof. Ben Burton
0905 - 0915	Introduction - the big issues	Prof. Ben Burton
0916 - 0926	The national perspective	Miss Louisa Wickham
0927 - 0937	The perspective of NHS England	Mr. James Lorrigan
0938 - 0948	Resident training	Miss Sarah Maling
0949 - 0959	The view from the independent sector	Mr. Amir Hamid
1000 - 1010	Financial implications to the Hospital Eye Service	Mr. Jonathan Wilson
1011 - 1040	Summary & Discussion	
1040 - 1120	COFFEE	
1120 - 1240	President's plenary symposia: Multifocal v edof v monovision	Mr. Paul Ursell & Mr. David Lockington
1120 - 1135	Correcting astigmatism with multifocal IOL	Dr. Pantelis Papadopoulos
1136 - 1151	Managing the unhappy Multifocal patient	Dr. Miltos Balidis
1152 - 1207	Surgical options for correcting residual refractive error	Dr. Georgios Roussopoulos
1208 - 1223	EDOF IOLs in post-LASIK patients	Dr. Petros Smachliou
1224 - 1240	Panel Discussion	Panel
1240 - 1340	LUNCH	
1345 - 1350	Lifetime Achievement Award Introduction	Intro by Prof. David Spalton
1350 - 1430	Ophthalmic Adventures	Mr. Paul Rosen
1430 - 1435	Presentation	Mr. Paul Ursell
1435 - 1540	My worse corneal case of the year	Mr. Mayank Nanavaty & Ms. Navpreet Dhillon
1435 - 1445	DMEK - You can't touch this..?	Mr. David Lockington
1446 - 1456	Endothelial Keratoplasty - variation from the routine	Mr. Indy Sian
1457 - 1507	CLAK. It never rains but it pours	Mr. Panos Georgeoudis
1508 - 1518	The enigma of recurrent corneal ulceration	Dr. Ritika Mukhija
1519 - 1529	Cornea in crisis; a tale of relentless keratitis	Dr. Artemis Matsou
1530 - 1540	A tale of two miseries	Prof. Dr. Sorcha Ní Dhubhghaill
1540 - 1620	COFFEE	
1620 - 1630	Introduction of the inaugural Ridley Eye Foundation Award	Mr. Paul Ursell
	An introduction to the Ridley Eye Foundation	Mr. Alistair Wood
1630 - 1715	Ridley Award lecture - "See what everyone has seen, but think what no one has thought: Innovation"	Professor John Marshall
1716 - 1730	Presentation & Summary and close	Mr. Nicholas Ridley & Mr. Paul Ursell
1930	DRINKS RECEPTION	
2000	GALA DINNER & Entertainment	

Programme:

Friday 3rd November 2023

0900 - 1000	Free papers	Chaired by Ms. Laura Crawley & Mr. Mario Saldanha
0750 - 0800	Introduction	Mr. Mario Saldanha
0800 - 0805	ISOPURE - An Underrated Monofocal Plus intraocular lens	Mr. Saj Khan
0806 - 0811	Local anaesthesia techniques and complications for cataract surgery in the United Kingdom: 10-year review	Dr. Yan Ning Neo
0812 - 0817	How good are we at choosing the correct three-piece intraocular lens in patients with posterior capsular rupture?	Dr. Sunil Mamtara
0818 - 0823	Management of incomplete cataract surgery due to development of a 'hard' eye	Dr. Zain Charfare
0824 - 0829	Incidence, management and outcomes of retinal detachment and endophthalmitis in OOKP eyes; UK experience 1996-2022	Dr. Madhavi Dave
0830 - 0835	SS3DP: Segment, Slice, and 3D Print workflow of 3D printing eye anatomy for clinicians: Proof-of-concept study	Dr. Bishoy Yassa
0836 - 0841	The Lanarkshire experience with Management of Elevated Intraocular Pressure Following EyeCee One Intraocular Lens Implantation	Dr. Huda Al-Hayouti
0842 - 0847	Improving Sustainability in Cataract Surgery in a Single NHS Trust	Dr. Victoria Barnett
0848 - 0853	Wales's first nurse led corneal cross-linking	Dr. Tasneem Elghazali Bakhiet
0854 - 0859	Evaluating the forces involved in bubble management in DMEK surgery; a mathematical and computational model with clinical implications	Dr. Gordon T Brown
0900 - 0905	A new Technique of XENIA Implant presents a fresh and novel approach towards keratoconus	Dr. Marwan Ghabra
0906 - 0911	Virtual Paediatric Ophthalmology with Digital Direct Ophthalmoscopy	Dr. Sunil Mamtara
0912 - 0919	Management of early Posterior Capsular Rupture (PCR) during phacoemulsification with use of 23G vitrectomy cutter with anterior approach	Dr. Neil Shah
0920 - 0927	Bimanual Decompression of Intumescent Cataract: Alternate Solution for Challenging Cases	Dr. Sam Myers
0928 - 0935	Self retaining Single pass Throw Pupilloplasty	Mr. Prateek Agarwal
0936 - 0943	Sutureless Capsular Tension Segment (CTS) with double flanged technique using 6-0 prolene with 30G hypodermic needle.	Dr. Neil Shah
0945 - 1045	Industry session - Start Up's	Chair: Ms. Bita Manzouri & Mr. Paul Rosen
0950 - 1000	CustomlensAI	Mr. Milind Pande
1001 - 1011	EndoArt	Prof. Dr. Sorcha Ní Dhubhghaill
1012 - 1022	AI in triage & prompts	Mr. Nick De Pennington
1023 - 1033	How to bring an innovative idea to fruition	Ms. Joanna Gould
1034 - 1044	Start-ups; from idea to investment	Mr. Shahzad Malik
1045 - 1115	COFFEE	
1115 - 1215	Wobbly lenses, aphakia, lens fixation	Mr. David Lockington & Mr. Andy Turnbull
1115 - 1125	Approach to the wobbly lens - segments and sutures	Mr. Gok Ratnarajan
1126 - 1136	Managing aphakia via the iris	Miss Masara Laginaf
1137 - 1147	Managing aphakia via sutured scleral fixation	Prof. Sathish Srinivasan
1148 - 1158	Managing aphakia via sutureless scleral fixation	Prof. Dr. Abdo Karim Tourkmani

1159 - 1215	Round table: Complications when you're planning a premium IOL - what do you do?	Panel
1215 - 1220	Lifetime Achievement Award Introduction	Intro by Mr. Milind Pande
1220 - 1300	Three decades of unwavering determination, generous collaboration, and the joyful journey to knowledge: Advancing and elevating the field of refractive surgery together	Prof. Dan Reinstein
1300 - 1305	Presentation	Mr. Paul Ursell
1305 - 1410	LUNCH	
1410 - 1440	EyeSi competition and play off's	Haag-Streit and Mr. Paul Ursell with finalists!
1440 - 1530	Expert Video Session - You make the call! Topics were videos have gone 'west'...	Chair: Johnny Moore & Saj Khan
1440 - 1450	Techniques for explanting an IOL during IOL exchange	Prof. Johnny Moore
1450 - 1500	Secondary IOL fixation: Efficiency and Workflow	Mr. Florian Kretz presented by Niraj Mandal
1500 - 1510	Minimally-invasive fixation using the belt loop technique	Dr. Stephen Stewart presented by Gerard Reid
1510 - 1520	Fixer upper after complicated cataract surgery	Mr. Florian Kretz presented by Niraj Mandal
1520 - 1530	Glaucoma Tube-Shunt Implant Surgery	Dr. Gerard Reid
1530 - 1535	AGM	UKISCRS Officers
1535 - 1545	Free Paper Prize giving	Mr. Paul Ursell
1545 - 1600	Meeting Summary, Objectives and close	Mr. Paul Ursell
	CONGRESS CLOSE	

Notes

TYPE YOUR NOTES HERE:

(Compatible with keyboard and tablet use)

Additional Notes

TYPE YOUR NOTES HERE:

(Compatible with keyboard and tablet use)

Chairs

Prof. Ben Burton



Ben Burton studied medicine at Cambridge University and University College London before doing MRCP and then training in Ophthalmology on the Moorfields Eye Hospital Rotation. He was appointed Consultant Ophthalmologist at James Paget University Hospital in 2007. In 2010 he set up the largest Retinal Research Trials Unit in East Anglia which has recruited in excess of 1000 patients to over 30 different studies. He was appointed clinical director for research and development at JPUH in 2015 and was appointed Honorary Professor at UEA in 2020.

Until recently he worked as a full time NHS consultant covering medical retina, uveitis, neuro-ophthalmology and cataracts. Having previously been an RCOphth regional rep he was elected as President of RCOphth in May 2023 having raised concerns nationally about NHS ophthalmology potentially failing like NHS dentistry because of the way the independent sector are being commissioned.

Ms. Laura Crawley



Laura Crawley is a consultant ophthalmic surgeon with specialist interests in glaucoma, cataract surgery and common red eye conditions such as blepharitis and conjunctivitis. Her expertise includes bespoke cataract surgery, glaucoma laser treatments, and minimally invasive and penetrating glaucoma surgery. Laura holds an NHS contract at Imperial College Healthcare NHS Trust where she covers planned and emergency ophthalmology. She is also an Honorary Senior Lecturer at Imperial College London.

Laura is active in Ophthalmic Research coordinating ophthalmology assessments in multi-disciplinary clinical trials at Imperial seeking new drugs in Oncology, Neurology and Dementia care.

Ms Crawley qualified in medicine from the University of Bristol in 1999. There, she won the Gold Medal and Supple prizes for medicine and surgery. Having completed physician training and becoming a member of the Royal College of Physicians she undertook Ophthalmology training in Oxford, Moorfields and Imperial. She won the National Alcon Glaucoma Prize in 2009. The Royal College of Ophthalmologists awarded her the Treacher Collins prize in 2012. She won the Imperial College Ophthalmic Research Group Medal in 2011.

Laura publishes and lectures widely. Her lecturing commitments include the UCL Ophthalmology MSc course and BMJ Masterclasses for GPs series. She is passionate about medical education and has published widely in this field and glaucoma.

Ms. Navpreet Dhillon BMedSc, MBChB, FEBO, FRCOphth, PG(Dipl), Cert LRS



Ms. Navpreet Dhillon is a Consultant Ophthalmologist based at University Hospitals of Leicester.

Navpreet has a subspeciality interest in cornea, cataract, refractive surgery and immunosuppression for corneal conditions.

Mr. Saj Khan, M.B.B.S (London), FRCSEd (Ophth)



Consultant Ophthalmologist who specialises in cataract and vision correction surgery. Experienced in the diagnosis and management of complex corneal problems, including those following refractive surgery, Mr Khan is actively involved in the teaching of other ophthalmologists, optometrists, nurses and other healthcare providers, both nationally and internationally. In addition to cataract surgery, intraocular lenses and laser vision correction, Mr Khan has a particular interest in dry eyes and visual problems related to driving. Unlike many ophthalmologists Mr Khan has himself undergone laser vision correction.

Mr. David Lockington, MB BCh BAO (Hons) FRCOphth PhD



Consultant Ophthalmologist at Tennent Institute of Ophthalmology, Glasgow. David has been at the Tennent Institute since January 2014 following sub-specialist Cornea, Cataract and Anterior Segment fellowship training in Auckland, New Zealand. He has an active interest in research and education, achieving over 100 peer-reviewed publications leading to a PhD by publication. David has received 11 awards at national and international conferences for his research and multiple oral presentations, is a council member for UKISCRS, the national Simulation Lead for the Royal College of Ophthalmologists and recently became the co-editor of EyeNews magazine.

Ms. Bita Manzouri



Bita Manzouri is a consultant corneal and cataract surgeon, with extensive experience in leading the corneal and eye casualty services as well as in clinical governance. She graduated from University College London with a first class honours intercalated degree in molecular biology and biochemistry, for which she was given the University of London medal, as well as honours in her medical degree. Prior to entering ophthalmology, she undertook general medical training to obtain her MRCP. She underwent her ophthalmic training at Moorfields Eye Hospital and undertook research leading to a PhD degree in the immunopathology of vernal keratoconjunctivitis in children. She has dual fellowship training in cornea/external disease and paediatric ophthalmology. She is an Honorary Clinical Senior Lecturer at Barts & the London Medical School where she is actively involved in teaching of medical students as well as students in various specialities affiliated with medicine.

Professor Johnny Moore, FRCOphth, PhD



Consultant Ophthalmic Surgeon and Clinical Director of Cathedral Eye Clinic. Prof. Moore specialises in ocular surface reconstruction, laser refractive surgery, cataract and other intra-ocular eye surgery and has personally completed approximately 25,000 treatments. In addition to performing surgery, Johnny was involved in teaching, training and helping to run an online PGDip/MSc Cataract and Refractive Surgery course through the University of Ulster. This course is designed to train surgeons, optometrists, laser technicians and others involved in this area from around the world in the intricacies of laser and refractive cataract surgery.

Mr. Mayank A. Nanavaty, MBBS, DO, FRCOphth, PhD



I am a cataract, cornea and refractive surgery Consultant at the Sussex Eye Hospital, Brighton & Sussex University Hospitals NHS Trust, Brighton and honorary senior clinical lecturer at the Brighton & Sussex Medical School.

My areas of clinical interests are medical and surgical cornea, external eye disease, cataract and refractive surgery. I am the lead for cataract, corneal crosslinking, contact lens & research departments at the Sussex Eye Hospital. I have received several research grants from the prestigious institutions and industry to conduct clinical studies in the National Health Services (NHS). My areas of research interest include, astigmatism, wavefront aberrations, ectatic corneal disorders, endothelial disease, lamellar corneal transplant surgeries, quality of vision in pseudophakes, cataract surgical techniques, intraocular lenses and posterior capsule opacification. I regularly publish and have several publications including randomized controlled trials, Cochrane review, case-control studies, cohort studies and retrospective studies in high impact peer-review literature and over 300 national and international presentations. I regularly contribute as a organizer, committee member, panelist or faculty at several national and international ophthalmology meetings and organizations including the ESCRS, ASCRS, AAO, RCOphth, BSRS, etc. I am a member of Scientific Committee, the Senior Examiner for Certificate of Laser refractive Surgery Examination committee and Cataract surgery workforce committee at the Royal College of Ophthalmologists. I am on the UKISCRS council since 2014 and has been the programme lead for UKISCRS since 2018 and Hon. Secretary since January 2021. I am an external examiner at Ulster University.

Mr. Paul Rosen FRCS FRCOphth



Mr Paul Rosen FRCS FRCOphth is a Consultant Ophthalmic Surgeon at the Oxford Eye Hospital and was Head of Department from 1998 to 2004. His special interests are postgraduate teaching, cataract/refractive surgery, laser refractive surgery, vitreoretinal/trauma surgery and medico-legal reporting.

He is a senior lecturer at the University of Oxford, Visiting Ophthalmologist, Refractive Service Moorfields Eye Hospital, President, UK and Ireland Society of Cataract and Refractive Surgeons, Medical Editor of 'Eurotimes', a publication of the European Society of Cataract and Refractive Surgeons (ESCRS), Elected Council member of the European Society of Cataract and Refractive Surgeons (ESCRS), an Honour Award recipient from the American Academy of Ophthalmology and a Royal College of Ophthalmologists Examiner.

Prof. David Spalton



David Spalton trained at Moorfields Eye Hospital and St Thomas' Hospital. He did fellowships in uveitis, medical and neuro-ophthalmology at St Thomas' Hospital and the Hospital for Neurology and Neurosurgery, Queen Square, London. In 1981 he was appointed Consultant Ophthalmologist at the Charing Cross Hospital and in 1983 moved to St Thomas' Hospital where he established a special interest in cataract surgery, complex cataract surgery and intraocular lens design. In 2010 he was appointed Professor of Ophthalmology at King's College, London in recognition of his research work. In 2012 he moved into private practice from which he retired in 2018 and now has a busy medico legal practice as well as consulting for Ocular Express and a number of ocular device companies. He was Honorary Consultant Ophthalmic Surgeon to the Royal Hospital Chelsea, King Edward VII's Hospital for Officers, London and Civilian Advisor to the Metropolitan Police and the ophthalmic adviser to the Motor Sports Association.

He is a Past President of UKISCRS and has given both the Choyce Medal and the Rayner Medal lectures and received the Gold Medal Award in 2010 and the Lifetime Achievement Award in 2013 and is now a UKISCRS Trustee. He was President of the ESCRS from 2016 - 2017 and has served on the ESCRS Program Committee, the Research Committee, and Executive, Finance, General Purposes, Ethics and Charity committees and the Board of Examiners for the specialist exam in cataract and refractive surgery (FEBO-CRS).

He has published over 180 scientific papers and his book, 'An Atlas of Clinical Ophthalmology', won the prize for the Best Medical Textbook of the Year in 1984 for the 1st edition and 2005 for the 3rd edition, a unique feat in medical publishing. It is now translated in 10 languages and was voted one of the 100 most important ophthalmic textbooks of the 20th century by Archives of Ophthalmology.

Mr. Paul Ursell



Paul Ursell is President elect of UKISCRS and consultant at Epsom & St Helier University NHS Trust. He has published over 30 peer reviewed papers on and been a leader in cataract surgery in the UK for 20 years. Paul sits on the RCOph International Committee & Exams Committee and is RCOph rep to EBO & UEMS in Europe. He is an honorary consultant at the Royal Marsden Hospital Drug Development Unit and Liveryman of the Worshipful Company of Spectacle Makers. Previously he has been President of Epsom Medial Society and Trustee of SeeAbility. Paul's current research interests are cantered mainly on cataract surgery in people living with Dementia.

YOP Chairs

Dr. Sunil Mamtora

Sunil Mamtora obtained his medical degree from Newcastle University and worked in the North-East as a foundation doctor before commencing training in Ophthalmology. He is currently an Ophthalmology Registrar in the South-West of England and serves as a Young Ophthalmologists Programme (YOP) representative for UKISCRS. He is also the Chair of the Ophthalmologists Training Group (OTG) as well as the OTG representative for the Severn deanery.

Sunil Mamtora is an Academic Clinical Fellow at the Bristol Eye Hospital and holds the post of Honorary Clinical Lecturer at Bristol University. Sunil's is particularly interested in technology and its application within Ophthalmology. His previous publications and ongoing research have explored the utility of smartphone-based technology in imaging, something that has become particularly relevant in light of COVID-19.



Dr. Laura Maubon

Laura Maubon has recently completed a prestigious corneal transplant fellowship at Moorfields Eye Hospital. She is now currently completing her training in South London, prior to taking time out for her second child. Laura has presented many times for both UKISCRS and ESCRS, winning the UKISCRS best cataract paper in 2016, and ESCRS cataract bursary award in 2017. These led onto her joining the young ophthalmologist programme (YOP) committee in 2018. She had been the committee lead since 2020 which nurtures her interests in anterior segment and surgical education and training.

Most recently she has published work on returning to cataract surgery following a hiatus which reviews the impact of deskilling and surgeons subjective experiences on their returns to operating. With the YOP committee she has delivered innovative new teaching, utilising remotely supervised simulation surgery at home in order to overcome the physical barriers to accessing surgical learning resources.

Laura intends to pursue further cataract and anterior segment studies in addition to developing her teaching portfolio. Outside of medicine she enjoys experimenting with patisserie and wine tasting which she holds a WSET qualification and prior experience as international wine and spirits (IWSC) associate judge.



Dr. Johnson Neo

Johnson is a senior ophthalmology registrar of the North London deanery. He currently works across sites at both Western Eye Hospital, Imperial College Healthcare NHS Trust and Moorfields Eye Hospital. Johnson is the latest recipient of the prestigious RCOphth BOSU Research Bursary to carry out the epidemiological study in primary lens exchange after cataract surgery. He is also the ophthalmologist representative to the UK Cataract National Ophthalmic Database (NOD).



Since joining ophthalmology residency in London, Johnson has had a strong track record in leading quality improvement projects which translated to improved patient care locally and regionally. He was awarded the coveted Health Education England / London KSS School of Ophthalmology Leadership Prize for four consecutive years. He is a board-certified fellow of the Royal College of Ophthalmologists, European Board of Ophthalmologists and Higher Education Academy UK.

Mr. Mario Saldanha

Mr. Mario J Saldanha is currently a Consultant Ophthalmologist at Singleton Hospital, Swansea. He holds an Honorary Senior Lecturer position with Cardiff University. He has over 20 years experience in ophthalmology.

He has completed a prestigious fellowship at the University of Toronto in Cornea and Refractive Surgery, where he mastered the technique of Cornea Transplantation, Lamellar Keratoplasty (DMEK). He is the lead for Cross-linking for Keratoconus in Wales. He is invited faculty to teach cornea transplantation techniques at the American Academy of Ophthalmology and the European Board of Cataract and Refractive Surgeons. His interests lie in multifocal, EDOF and RLE surgeries.

Outside work he enjoys walking, films and spending time with family.



Mr. Andrew Turnbull

Andy Turnbull is a Consultant Cataract and Refractive surgeon based on the South Coast of England. After completing two corneal fellowships, including one with Professor Graham Barrett in Australia, Andy worked as a refractive surgeon for two years at Optegra Eye Hospital alongside his NHS post at University Hospitals Dorset, where he is now College Tutor and Clinical Lead for Cataract Surgery. His private practice, South Coast Vision, is now established in Bournemouth and he performs laser vision correction at Laser Vision Eye Centre near Southampton.

Andy is a Visiting Professor at Ulster University and leads the PGDipCRS modules on lens surgery, phakic lens implants and astigmatism. He has been an elected Council Member of UKISCRS since 2022 and in 2023 was nominated as one of the inaugural Fellows of the World College of Refractive Surgery and Visual Sciences.



UKISOP Chair

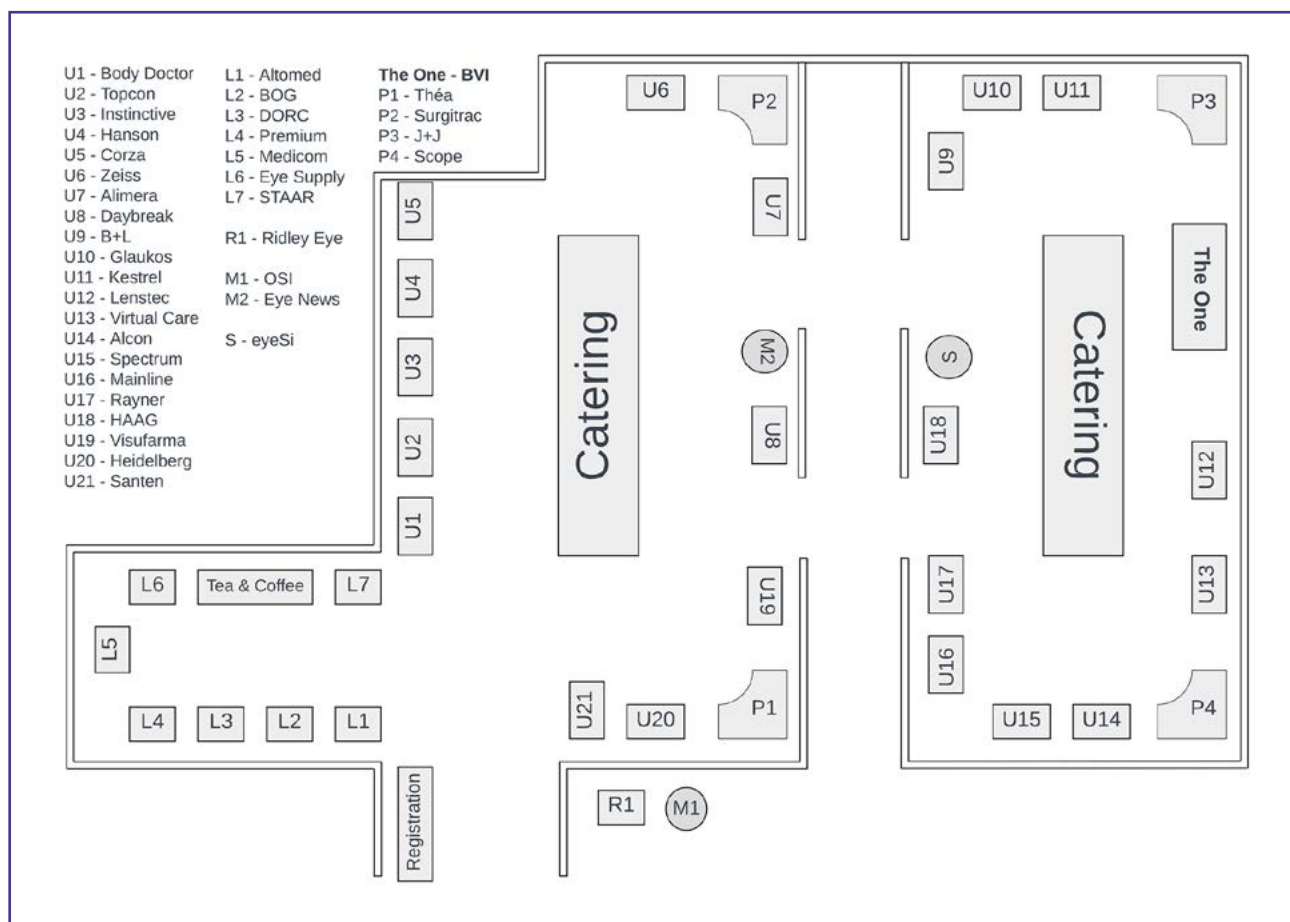


Mrs Rebecca Turner



I first became “addicted” to Ophthalmology as a third year student nurse at the Norfolk and Norwich Hospital. I then joined the team at the Oxford Eye Hospital in 1986 having studied as a specialist Ophthalmic nurse at Moorfields. I was appointed as Consultant Nurse in Oxford in 2015 and have had many years in senior nursing/leadership roles at the Oxford University Hospitals Trust, both within and outside Ophthalmology. Now part time, I am delighted to be back, working clinically within the Ophthalmology family and lead on listing patients for cataract surgery. I have had the great privilege to have worked with UKISCRS council in the development of UKISOP since its inception in 2010.

Industry Exhibition Floor Plan



Ophthalmic Product Exhibitors

UKISCRS would like to thank our industry colleagues, whose ongoing support for our charity/society is not unnoticed and is gratefully received. Their show of support for this, return to London, 47th annual congress is fantastic and the Council extend their heartfelt thanks.

Recent feedback from the industry has detailed that they appreciate the UKISCRS annual meeting as the audience is always very interactive and approachable. We are delighted to hear this. Please thank our trade partners by visiting their stands and asking about their innovations in their specialist field. The company representatives will be delighted to engage in conversation and take you through a demonstration or provide further product information.

Industry Support

The best Free Paper submissions have been selected from abstracts, by an expert panel, and invited to present a rapid-fire free paper. The Society award the Founder's Medal to the trainee who wins the prize for the best overall paper. This year the following prizes are available for Paper, Poster & Video submissions. See paper abstracts at the end of this programme.

Best Poster	£500	Best Video	£500
Best Refractive Surgery Paper	£500	Best Corneal Surgery Paper	£500
Best Cataract Surgery Paper	£500	Best Overall Paper wins the Founder's Medal & certificate	

The following Industry Partners have supported these cash prizes:

Best Video Prize:

Bausch+Lomb

Best Poster Prize:

BVI

Best Cataract Paper Prize:

Théa Pharmaceuticals Ltd.

Best Refractive Paper Prize:

Bausch+Lomb

Best Corneal Surgery Paper:

Scope Eyecare

YOP Symposia &

Drinks Reception Support:

BVI

YOP Dry Lab Support:

Théa Pharmaceuticals Ltd.

UKISOP Best Case Study:

Scope Eyecare

UKISOP Workshop Support:

Bausch+Lomb, Scope Eyecare & Virtualcare Ltd.

Thursday Plenary Symposia Support:

BVI

Lanyards provided by:

BVI

Delegate bags provided by:

Rayner IOLs



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Paul Rosen

David Spalton

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2012 - 2015	Paul Ursell
2010 - 2012	David O'Brart
2008 - 2010	Som Prasad
2002 - 2008	Tayo Akingbehin
1996 - 2002	John Roberts-Harry
1994 - 1996	Tayo Akingbehin
1991 - 1994	William Haining
1984 - 1991	Stephen Haworth
1976 - 1984	Piers Percival

Historical Lectures

Choyce Medal Lecture:

2021	Mr Richard Packard
2019	Mr Julian Stevens
2017	Mr Robert Stegmann
2015	Mr Larry Benjamin
2013	Burkhard Dick MD
2011	Professor R Foster
2009	Mr Sheraz Daya
2007	Mr Peter Barry
2005	Dr G Barrett
2003	Mr PI Condon
2001	Mr D Spalton
1999	Professor L Buratto
1997	Professor G Baikoff
1995	Professor P Sourdille
1993	Professor T Neuhaus
1991	Professor M Blumenthal
1989	Professor D Apple
1987	Dr R L Lindstrom
1985	Professor K W Jacobi
1983	Mr J L Pearce
1981	Mr D P Choyce

Pearce Medal Lecture:

2021	Professor Tara Moore
2019	Professor Oliver Findl
2017	Dr Boris Malyugin
2015	Mr Ike Ahmed
2013	Professor K. Meek
2011	Mr C Peckar
2009	Dr A Glasser
2007	Professor Ray Applegate
2005	Dr J Colin
2003	Professor K W Jacobi
2001	Dr J T Holladay

Lectures in Honour of:

2012	Eric Arnott by Richard Packard
2010	Neil Dallas by Larry Benjamin

Lifetime Achievement Awards:

2020	Prof Micheal O'Keeffe
2018	Mr Patrick Condon
2017	Mr David Boase
2016	Mr Clive Peckar
2015	Mr Richard Packard
2014	Professor John Marshall
2013	Mr Emanuel Rosen
2013	Professor David Spalton

Abstracts

Poster 1

RAPID FIRE

Title:

ISOPURE - An Underrated Monofocal Plus intraocular lens

Date & Time: 03/11/23 - 0800 - 0805

Lead Author: Saj Khan

Co-Authors:

Sheraz Daya; Centre For Sight, East Grinstead, UK

Marcela Espinosa Lagana; Centre For Sight, East Grinstead, UK

David Shahnazaryan; Centre For Sight, East Grinstead, UK

Introduction: We evaluated the functional performance of the Isopure Monofocal Plus lens 6 weeks postoperatively and compared to the ANSI standard for EDOF lenses.

Method: Retrospective evaluation of 54 eyes of 27 patients bilaterally implanted with the Isopure (Physiol/BVI, Belgium) intraocular lens. Dominant eye was targeted for plano, and the non-dominant between -0.75 to -0.95D. Binocular visual performance and patients' level of spectacle independence was assessed.

Results: No surgical complications occurred. At 6 weeks postoperatively spherical equivalent was -0.08D (SD 0.44) in the dominant eye group and -0.61D (SD 0.47) in the non-dominant group. UDVA in the dominant group was =20/30 in 93% and =20/20 in 52%. UDVA in the non-dominant was =20/30 in 74% and =20/20 in 33%. UDVA binocularly was =20/30 in 96% and =20/20 in 72%. dominant eyes and 78% of non-dominant eyes; at 80cm it was 89% and 96% respectively. Binocular UIVA 60cm was =20/30 in 89% and at 80cm 96% were = 20/25. 20 of 27 patients reported complete spectacle independence with 7 only using glasses for prolonged reading.

UNVA (40cm) was =20/30 in 48% of the dominant group, 56% of the non-dominant group, and 74% binocularly. UIVA (60cm) was =20/30 in 74% of the dominant group.

Discussion: The Isopure intraocular lens reliably provides an increased range of focus and excellent binocular performance, reducing spectacle dependence. The intermediate vision performance exceeds the ANSI standard for extended depth of focus (EDOF) lenses. Consideration should be given to classifying this intraocular lens as an increased range of focus lens (IROF).

Poster 2

RAPID FIRE

Title:

Local anaesthesia techniques and complications for cataract surgery in the United Kingdom: 10-year review

Date & Time: 03/11/23 - 0806 - 0811

Lead Author: Yan Ning Neo

Co-Authors:

Marta H Gruszka-Goh: The Royal College of Ophthalmologists' National Ophthalmology Audit

Paul HJ Donachie: The Royal College of Ophthalmologists' National Ophthalmology Audit

John C Buchan: Leeds Teaching Hospitals NHS Trust

Introduction: To describe variation in local anaesthesia techniques and complications over a 10-year period for cataract surgery in the United Kingdom.

Method: Data from the Royal College of Ophthalmologists National Ophthalmology Database was used. Eligible for analysis were 1 195 882 cataract operations performed using local anaesthesia between 01/04/2010 and 31/03/2020 in 80 centres..

Results: Overall, topical anaesthesia alone was used in 152 321 (12.7%) operations, combined topical and intracameral anaesthesia in 522 849 (43.7%), sub-Tenon; in 461 175 (38.6%), and peribulbar/retrobulbar anaesthesia in 59 537 (5.0%). In National Health Service (NHS) institutions, 48.3% operations were topical with/without intracameral vs 88.7% in independent sector treatment centres (ISTC). 45.9% were sub-Tenon; in NHS vs 9.6% in ISTC. 5.8% were peribulbar/retrobulbar in NHS vs 1.7% in ISTC. Anaesthetic complication rates decreased from 2.7% in the 2010 NHS year to 1.5% in the 2019 NHS year (overall, 2.1% for NHS; 0.2% for ISTC). Overall anaesthetic complication rates were 0.3%, 0.3%, 3.5% and 3.1% for topical alone, combined topical/intracameral, sub-Tenon; and peribulbar/retrobulbar respectively. Complication rates were higher for sharp needle anaesthesia (peribulbar/retrobulbar) in patients taking warfarin rather than direct oral anticoagulants (4.8% vs 3.1%; $p=0.024$).

Discussion: Combined topical and intracameral is the most common choice of anaesthesia for cataract surgery in the United Kingdom and is associated with lower anaesthetic-related complication rates than sub-Tenon; and peribulbar/retrobulbar anaesthesia. Variation in anaesthetic choice exists between centres and between NHS & ISTC sectors.

Poster 3

RAPID FIRE

Title:

How good are we at choosing the correct three-piece intraocular lens in patients with posterior capsular rupture?

Date & Time: 03/11/23 - 0812 - 0817

Lead Author: Sunil Mamtora

Co-Authors:

Jordan Chervenkov, Bristol Eye Hospital

Ketan Kapoor, Bristol Eye Hospital

John Ferris, Cheltenham General Hospital

Introduction: Cataract surgery complicated by posterior capsular rupture (PCR) usually necessitates the insertion of a three-piece lens in the ciliary sulcus rather than a single-piece lens in the capsular bag. This anterior change in effective lens position requires modification of the intraocular lens (IOL) power.

Method: A retrospective audit was performed of 16,251 patients undergoing cataract surgery in the previous 5 years using the Medisoft Electronic Medical Record (EMR) of which 202 were identified as having PCR. Documentation was reviewed to identify the pre-operatively determined single-piece IOL and intended refractive outcome, the intra-operatively selected three-piece IOL, whether there was optic capture or the optic was placed in the ciliary sulcus and the post-operative refraction.

Results: Ninety-five patients were included in the analysis. The correct lens as determined by local guidelines (doctor-hill.com) was selected in 19 patients (20%). The selected lens was within 0.5 dioptres of the correct lens in 52 patients (55%). The difference between selected IOL and correct IOL ranged between -1.5 and +1.5. There was no significant difference in the likelihood to select the correct IOL based upon the grade of surgeon.

Discussion: We have identified widespread incorrect selection of the appropriate three-piece IOL in patients with PCR irrespective of grade of surgeon. At the time of writing a college guideline related to three-piece IOL selection in this patient group does not exist. Additional learning resources to aid clinician understanding are required. This issue is unlikely to only affect our department and other units should also audit their outcomes.

Poster 4

RAPID FIRE

Title:

Management of incomplete cataract surgery due to development of a 'hard' eye

Date & Time: 03/11/23 - 0818 - 0823

Lead Author: Zain Charfare

Co-Authors:

Naomi Shehara Wijesingha: Bedfordshire Hospitals NHS Foundation Trust.

Jack Bradbury: West Suffolk NHS Foundation Trust.

Anant Sharma: Moorfields Eye Hospital NHS Foundation Trust (Bedford).

Introduction: Development of a hard eye during cataract surgery which does not allow the entry of instruments can be an intimidating complication that means surgery cannot continue. It is important to understand further management options to optimise patient outcomes.

Method: 5 cases of cataract surgery were identified which developed a hard eye due to elevated intraocular pressure (IOP) at different stages which meant the procedure had to be abandoned - 3 during hydrodissection and 2 during lens insertion. In the cases complicated during hydrodissection, patients were monitored with B-scan which revealed an intact capsule and no posterior pole pathology. Surgery was delayed from 2 days to 2 weeks due to raised IOP, corneal oedema and anaesthetic requirements. In the cases complicated during lens insertion, monitoring was less intensive as important structures were visible. Surgery was delayed by 1 week and 6 weeks, due to raised IOP and for posterior choroidal engorgement to settle.

Results: All cases were completed successfully. From the hydrodissection cases, learning points included managing refractory high IOP with mannitol pre-operatively, a cloudy cornea which took several days to recover and permit surgery, and pseudocorneal oedema which was actually due to lens material adhering to the cornea. For the other 2 cases, delay in secondary intraocular lens implantation should be minimised in order to avoid fibrotic adhesion of the capsule.

Discussion: This case series demonstrates completion of abandoned cataract surgery is possible in such difficult cases. Careful management, particularly of IOP and corneal oedema, should allow surgery to be completed sooner.

Poster 5

RAPID FIRE

Title:

Incidence, management and outcomes of retinal detachment and endophthalmitis in OOKP eyes; UK experience 1996-2022

Date & Time: 03/11/23 - 0824 - 0829

Lead Author: Madhavi Dave

Co-Authors:

Professor Christopher Liu OBE, Sussex Eye Hospital, Brighton and Sussex Medical School.

Introduction: This study describes the incidence of retinal detachment and endophthalmitis in a cohort of patients with Osteo-odonto-keratoprosthesis (OOKP) and discuss the management, and outcomes in these cases.

Method: Review of 95 OOKP surgery cases was performed at the Sussex Eye Hospital between 1996 and 2022 where the UK National OOKP centre was based. Further data was collected for patients who had developed either of these complications. Details included: duration after surgery complication occurred, visual acuity before complication, precipitating factors, presentation of symptoms, overall visual outcome, treatment summary and microbiological details.

Results: The most common indications for OOKP surgery included primary diagnoses of Stevens-Johnsons Syndrome (46%) and Mucous Membrane Pemphigoid (14%). A total of 18 eyes out of original 95 cases (20%) developed either one of the complications. The overall incidence of retinal detachment was 7.4% (n = 7 cases). Mean duration from surgery to retinal detachment occurring was 26 months. Retinal reattachment was attempted on 6 patients with 2 cases successful at retaining vision. The overall incidence of endophthalmitis was 11.6% (n = 11 cases). Mean duration from surgery to endophthalmitis was 74 months. Lamina resorption was a precipitating factor in 7 cases. 2 eyes were able to retain a 6/36 visual acuity, 2 cases of light perception and the remaining 7 cases with no perception of light.

Discussion: Complications arising in OOKP eyes are associated with a poor visual prognosis. Factors such as early lamina resorption detection, maintaining eye hygiene and utilising a multidisciplinary team approach are crucial for improved visual outcomes.

Poster 6

RAPID FIRE

Title:

3D Printing and Rapid Prototyping Revolutionise Ocular Care: Addressing Challenges in Global Eye Health

Date & Time: 03/11/23 - 0830 - 0835

Lead Author: Bishoy Yassa

Co-Authors:

Chayabhan Limpabandhua, Zion Tsz Ho Tse
 Centre of Bioengineering, School of Engineering and Materials Science, Queen Mary University of London, London, UK.

Introduction: 3D printing is becoming increasingly important as time passes, with the latest technologies driving innovation in many fields, including ophthalmology. However, little is known about how clinicians can become innovators in their daily practice without needing expert engineering knowledge of the underlying technologies.

Method: We developed a simple 3-step pipeline called SS3DP: Segment, Slice, and 3D Print that was tested on fabricating a 3D printed eyeball.

Results: Our segmentation was imperfect, with a few gaps in the tissue and some rough parts, owing to the difficulty of segmenting tiny structures like the eyes. From our experience, segmentation is more complex, esp. if you are not a fully qualified ophthalmologist with years of clinical experience, but as always, the more we practised it, the easier it became. The learning curve was steep initially, but the situation improves once someone spends more time on the platform.

Discussion: Innovation in medicine is stifled if its main participants, clinicians, cannot engage with it due to a lack of knowledge. Our pipeline has many implications for nearly all specialities as they can use it to construct anatomical structures for teaching, surgical planning or ocular implants, paving the way to more patient-specific treatments at the point of care.

Poster 7

RAPID FIRE

Title:

The Lanarkshire experience with Management of Elevated Intraocular Pressure Following EyeCee One Intraocular Lens Implantation

Date & Time: 03/11/23 - 0836 - 0841

Lead Author: Huda Al-Hayouti

Co-Authors:

Osman Yunus - NHS Lanarkshire - Tennent Institute of Ophthalmology - West of Scotland Deanery

Nina Ruddy - NHS Lanarkshire

Douglas Lyall - NHS Lanarkshire

Introduction: The Medicines and Healthcare products Regulatory Agency (MHRA) has issued a patient safety alert after becoming aware of cases of increased intraocular pressure in people recently implanted with the EyeCee One preloaded intraocular lens (IOL) implant. Initial reports suggest 2-4% of people fitted with this lens since October 2022 experience increased IOP. The exact cause of the raised intraocular pressure remains unclear.

Method: This is a single-centre observational study on patients that presented with high IOP after phacoemulsification and implantation of an EyeCee One (manufactured by Nidek and distributed by Bausch + Lomb). All patients were retrospectively identified from hospital records.

Results: A total of 691 cataract surgeries were performed between 28/09/2022 to 18/01/2023.

26 eyes of 26 patients were identified to have significantly increased postoperative intraocular pressure. The mean Preoperative visual acuity was 0.71 (range 0.10 -1.9) and mean final VA was 0.53 (range -0.10 - 2.3)

Seven patients had IOL exchange, and 1 patient had IOL explanation. Four patients had trabeculectomy as a primary IOP managing procedure and 2 patients had trabeculectomy following IOL exchange."

Discussion: Our cases were management on individual basis as it was unclear what the insulting agent was and what the subsequent management should have been. Our impression following this experience was that some form of permanent damage to the trabecular meshwork might have occurred.

Poster 8

RAPID FIRE

Title:

Improving Sustainability in Cataract Surgery in a Single NHS Trust

Date & Time: 03/11/23 - 0842 - 0847

Lead Author: Francesca Harman

Co-Authors:

Victoria Barnett - Hillingdon Hospital NHS Trust

Francesca Harman - Hillingdon Hospital NHS Trust

Introduction: Cataract surgery has a high disposable instrument component and high carbon footprint in the UK. Demand for eye care continues to increase therefore this is an ideal area to target carbon reduction strategies. We conducted a quality improvement project to identify ways of reducing carbon footprint in our cataract service.

Method: The EyeSustain Carbon Estimator was used to determine the carbon footprint of a single phacoemulsification. Information was obtained from the sustainability team at our trust. Changes implemented to improve sustainability included removal of unnecessary items in the phacoemulsification pack, increasing reusable items and introducing alcohol-based hand rub solution.

Results: Prior to changes made, total waste per phacoemulsification was 1481g with plastic waste contributing to 1182g. Approximate total carbon emissions per phacoemulsification was 664 kilograms of carbon dioxide equivalents (KgCO₂e). Approximate total annual carbon emissions was 628,021 KgCO₂e.

Discussion: The EyeSustain calculator will be repeated following final implementation of the carbon footprint reduction strategies listed in the methodology. Other options to consider include increasing topical anaesthetic use, sequential bilateral cataract surgery and exploring the possibility of on-site sterilisation for same day cases. Off-the-shelf life cycle assessment methods for carbon emissions show some variability in CO₂ emissions, and we believe our slightly higher than average value was related.

Poster 9

RAPID FIRE

Title:**Wales's first nurse led corneal cross-linking****Date & Time:** 03/11/23 - 0848 - 0853**Lead Author:** Tasneem Elghazali Bakhiet**Co-Authors:**

Tasneem Elghazali Bakhiet/Swansea Bay University Health Board

Mr Mario Saldhana/Swansea Bay University Health Board

Shoaib Hassan/Swansea Bay University Health Board

Introduction: Corneal cross-linking has emerged as the most effective method to halt the progression of keratoconus. Service delivery in the NHS support the utilization of the accelerated CXL protocol due to its shorter exposure time to ultraviolet radiation while preserving the epithelium. Cross-linking was approved in 2021 in Wales and one centre has recently introduced its first specialist nurse practitioner led CXL program.

Method: This retrospective comparative study aims to compare the outcomes of accelerated (7.2 J/cm) corneal collagen cross-linking for patients with keratoconus, performed independently by specialist nurse practitioners. Sixty eyes of 45 patients with progressive keratoconus undergoing accelerated corneal cross-linking were examined. Patients' visual acuity (logMAR) and Pentacam analysis, measuring K1, K2, Kmax, and CCT were recorded before and approximately 10 weeks after treatment. Additionally, patients were reviewed for any post-procedural adverse effects.

Results: The study participants had a mean age of 25 years, with 16 females and 29 males. The results showed a significant improvement in BCVA, with a mean difference of -0.05 ($p=0.02$). While there was no significant difference in Kmax readings before and after treatment ($p=0.48$), a change in central corneal thickness ($p=0.027$) was observed, with a mean difference of 23.7. No post-procedural adverse effects were noted.

Discussion: Accelerated corneal crosslinking is a safe and effective treatment option that can be independently performed by specialist nurse practitioners without any adverse effects.

Poster 10

RAPID FIRE

Title:**Evaluating the forces involved in bubble management in DMEK surgery; a mathematical and computational model with clinical implications****Date & Time:** 03/11/23 - 0854 - 0859**Lead Author:** Gordon T Brown**Co-Authors:**

Lukasz Kaczmarczyk: James Watt School of Engineering, University of Glasgow.

Chris Pearce: James Watt School of Engineering, University of Glasgow.

David Lockington: Tennent Institute of Ophthalmology, Gartnavel General Hospital, Glasgow.

Introduction: Ophthalmic corneal transplant surgery has been revolutionised and refined following the development of specific lamellar techniques. We aimed to model the post-operative forces involved in DMEK tissue adherence and bubble management, including the impact of surface tension on graft support, with a view towards clinical applications.

Method: Mathematical modelling of biphasic flow and interaction of gas, liquid and tissue within the anterior chamber for static horizontal Scenario A (adherent DMEK with mobile bubble) and dynamic vertical Scenario B (release of bubble due to pupil block following DMEK), with further computer simulation.

Results: The model assumed incompressibility for both fluids within realistically achievable pressure ranges. Cahn-Hilliard Navier-Stokes equations were discretised through the application of the Finite Element Method. Mathematical modelling and computer simulation showed bubble size, corneal curvature and force intensity influences surface tension support for DMEK tissue in Scenario A. Scenario B demonstrated complex, uneven distribution of surface pressure on the DMEK graft during uncontrolled bubble release. Triggered local tissue warping and air/fluid displacement was observed via capillary waves generated on the fluid-air interface, adversely impacting DMEK graft support.

Discussion: We have quantitatively and qualitatively modelled the forces involved in DMEK adherence in normal circumstances. We have shown releasing air/gas intra- or post-operatively can abruptly reduce DMEK tissue support via the negative effect on surface tension forces. Surgeons should consider these principles to reduce DMEK graft dislocation rates via optimised bubble size to graft size, longer acting bubble support and avoiding rapid decompression where possible.

Poster 11

RAPID FIRE

Title:

A new Technique of XENIA Implant presents a fresh and novel approach towards keratoconus

Date & Time: 03/11/23 - 0900 - 0905

Lead Author: Marwan Ghabra

Co-Authors:

Professor John Marshall, Professor of Ophthalmology at the Institute of Ophthalmology in association with Moorfield's Eye Hospital, UCL.

Dr Abed Rahman Salman MD, Consultant Eye Surgeon.
Honorary lecturer Teshreen Unive

Introduction: The XENIA corneal implant is a medical device designed for the treatment of advanced keratoconus and is fully compliant with the latest EU Medical Device Regulation 2017/745. Treatment involves inserting a customized, cross-linked natural collagen implant of animal origin into a surgically constructed pocket in the posterior corneal stroma. This stabilizes patient corneas, regularizes corneal topography, reduces HOA implant offers an attractive alternative to corneal corneal transplantation.

Method: Five eyes, Four patients with advanced keratoconus who had undergone corneal collagen cross linking more than one year prior underwent XENIA implantation, the XENIA inla (The lenticules are extracted from porcine tissue, subjected to decellularized process, intensely crossed linked, sterilized and packed with 44 \pm 5 micron thickness, They are 7.5-8.0 mm in diameter using a modified technique in which the device was inserted into a manually constructed pocket in the posterior corneal stroma

Results: The modified technique of posterior corneal stromal XENIA implantation with pocket creation via manual delamination in combination with anterior corneal collagen cross linking is safe and results in significant improvements in corneal parameters: Central Cornea Thickness increased from 429 \pm 22.19 to 463 \pm 21.89, the maximum keratometry decreased from 63.4 \pm 7.73 to 49.92 \pm 2.37, and total higher-order aberrations decreased 3.0778 \pm 1.2 to 1.8924 \pm 0.379, decrease staging from 3-4 to 1-2 and improve patient vision.

Discussion: The results of this case series show that manually creating pocket and implanting the XENIA corneal implant Fourth generation in the posterior corneal stroma in patients who have previously CXL using the Ghabra technique 100 microns from cornea endothelium safe and results in a significant improvement in visual acuity, significant decrease anterior and posterior elevation, decrease in keratometry, reduction in HOA XENIA posterior pocket may become the standard surgical treatment Keratoconus.

Poster 12

RAPID FIRE

Title:

Virtual Paediatric Ophthalmology with Digital Direct Ophthalmoscopy

Date & Time: 03/11/23 - 0906 - 0911

Lead Author: Sunil Mamtara

Co-Authors:

Jordan Chervenkov, Bristol Eye Hospital

Rebecca Jones, Bristol Eye Hospital

John Ferris, Cheltenham General Hospital

Introduction: There is a nationwide shortage of paediatric ophthalmologists necessitating innovation within this sub-specialty. We document our experience of a paediatric ophthalmology clinic performed by an Ophthalmology Specialty Trainee (OST) with remote supervision from a Paediatric Consultant Ophthalmologist.

Method: To facilitate high quality remote supervision of children we used a panoptic ophthalmoscope with a smartphone adapter (Welch Allyn PanOptic, NcPlus Ophthalmoscope with Welch Allyn iExaminer® SmartBracket, Nc accessory, HillRom, USA). A smartphone (iPhone SE, Apple, California, USA) was connected to this system; live images of patient examination were viewed on the display of the smartphone in real time. To facilitate remote supervision and consultation the smartphone was connected to Microsoft Teams.

Results: Thirty patients were examined by the OST with supervision by the Consultant Ophthalmologist. Twelve consultations were recorded with permission of the parents. A variety of pathology was documented and was clearly visible to both the OST and the supervisor including ptosis, craniofacial abnormality, meibomian gland dysfunction, corneal scarring, congenital cataract, and optic disc swelling.

Discussion: A considerable proportion of children attending the hospital eye service are found to have no ocular pathology and are discharged after their first visit. In this group, high-fidelity remote assessment may offer a safer alternative to attendance to the hospital eye service whilst reducing burden on outpatient capacity.

Poster 13

RAPID FIRE

Title:

Management of early Posterior Capsular Rupture (PCR) during phacoemulsification with use of 23G vitrectomy cutter with anterior approach

Date & Time: 03/11/23 - **VIDEO** 0912 - 0919

Lead Author: Neil Shah

Co-Authors:

Mr Rajesh Deshmukh, Moorfields Eye Hospital

Introduction: We present a video of surgical management following a PCR during early stage of phacoemulsification sculpting

Method: Vitreous was pushed back with viscoelastic and the soft lens was prolapsed into the anterior chamber then removed with a vitrectomy cutter. An intraocular lens was inserted with 'optic capture'.

Results: The operation was completed safely without the need for Vitreoretinal referral and unaided visual acuity of 6/7.5 Snellen was achieved post-operatively on day one.

Discussion: This case demonstrates a safe and effective use of a vitrectomy cutter to phacoemulsify soft cataract with judicious use of cut-IA and IA-cut options available on the phacoemulsification machine for completion of safe surgery.

Poster 14

RAPID FIRE

Title:

Bimanual Decompression of Intumescent Cataract: Alternate Solution for Challenging Cases

Date & Time: 03/11/23 - **VIDEO** 0920 - 0927

Lead Author: Sam Myers

Co-Authors:

Sam Myers: Moorfields Eye Hospital NHS Foundation Trust

Neil Shah: Moorfields Eye Hospital NHS Foundation Trust

Rajesh Deshmukh: Moorfields Eye Hospital NHS Foundation Trust

Introduction: Intumescent white cataracts are challenging due to the higher risk of intraoperative complications and poor outcomes. Several techniques have been proposed to mitigate the altered lenticular dynamics; however, they require surgical expertise or additional costly devices. We describe a bimanual decompression technique using a standard irrigation-aspiration (IA) setting to puncture and decompress intumescent cataracts.

Method: A 25G microvitrectomy blade is used to create two side-port incisions. The anterior chamber is filled with 0.06% Trypan Blue. The phacoemulsification machine (Centurion® Alcon) is set to IA mode. The standard bimanual 21G 5/8in irrigation cannula is connected to the irrigation port of the phacoemulsification fluidic management system. A 25G 5/8in needle is connected to the aspiration port. The residual vision blue is aspirated from the anterior chamber and the anterior capsule is breached with the needle bevel down with simultaneous aspiration of liquefied cortex to decompress the lens. The 25G needle can be manoeuvred side to side to ensure liquefied cortical material trapped posterior to the nucleus and accessible locules is aspirated.

Results: The described technique has been used in 75 consecutive intumescent cataract cases during 2020 - 2023. There were no capsular tears or intraoperative complications associated with this technique.

Discussion: We describe a bimanual decompression technique, which utilises existing IA preferences - with slight modification - for safe decompression of intumescent cataracts. In conclusion, easy availability and the relatively small cost of the 25G needle provides economic and ergonomic viability for this proposed technique.

Poster 15

RAPID FIRE

Title:**Self retaining Single pass Throw Pupilloplasty****Date & Time:** 03/11/23 - **VIDEO** 0928 - 0935**Lead Author:** Prateek Agarwal**Co-Authors:**

Neha Mithal, University Hospitals Morecambe Bay NHS

Introduction: "70 Year old male had history of open globe injury in late teens with inferior hemi-sectoral loss of iris. Underwent cataract surgery elsewhere in Community and referred to us at NHS by local optician for any possible intervention due to much increased Glare and incessant photophobia after cataract surgery. Unaided vision 6/12 right eye improving to 6/9 Best Corrected with -0.50 Dsph/-0.75 DCyl @95"

Method: Subtenons Local anaesthesia given, Paracentesis made at 8 o'clock and 4 O'clock. Micrograsper forceps introduced grasping the iris and pulling it towards the center of the pupil. This stretches the iris as much to minimise any cheese wiring. A straight needle 10-0 Prolene suture is inserted in proximal iris anterior to posterior iris. From the other end, a 26-Gauge needle is passed through a clear-corneal incision into the distal iris again anterior to posterior iris. The straight needle is docked into the lumen of the 26 gauge needle, and the two are withdrawn together through the distal incision. A loop is created at the suture exit side with a Kuglens hook, and four throws of the distal end of the suture are made through this loop. The ends of the suture are pulled apart to yield a self-locking, helical knot that lies flat against the iris. The suture ends are trimmed with a microscissors

Results: "Significant decrease in pupil diameter in photopic conditions from baseline 7.0mm in longest axis to 3.5mm photopic conditions and 5.0 mm in Scotopic Conditions. Remarkable subjective improvement in glare and photophobia. Unaided visual acuity 6/9, Best Corrected 6/6 Enhanced cosmetic Appearance"

Discussion: Its technically easier, less maneuvering needed as compared to cerclage procedure. In Cerclage we are performing second or third pass, there is more manipulation of the anterior chamber, and risk of damage to the iris and cornea. This is technically easier, less time-consuming, and as effective as other pupilloplasty techniques.

Poster 16

RAPID FIRE

Title:**Sutureless Capsular Tension Segment (CTS) with double flanged technique using 6-0 prolene with 30G hypodermic needle.****Date & Time:** 03/11/23 - **VIDEO** 0936 - 0943**Lead Author:** Neil Shah**Co-Authors:**

Rajesh Deshmukh, Moorfields Eye Hospital

Sam Myers, Moorfields Eye Hospital

Introduction: We present a video of surgical management following 6 clock hours of zonular dialysis and aphakia from primary phacoemulsification.

Method: A sutureless CTS with double flanged technique is used to centre the intraocular lens (IOL) bag complex.

Results: The operation was completed with a well centred IOL bag complex and unaided visual acuity of 6/6 Snellen was achieved post-operatively on day one.

Discussion: This case demonstrates a sutureless, effective technique for managing cases with zonular dialysis and other zonular issues.

Poster 17

POSTER ONLY

Title:

Audit of One-stop Cataract Clinics: Improvement of Cataract Pathways at a Tertiary London Ophthalmic Centre

Date & Time: 03/11/23

Lead Author: Priyanca Jeyabaladevan

Co-Authors:

Mana Rahimzadeh: Moorfields Eye Hospital

Miss Ourania Frangouli : Imperial College Healthcare NHS Trust/ Western Eye Hospital

Introduction: One-stop cataract clinic provides a pathway for carrying out pre-assessment, biometry and clinical review in one visit, as recommended by the Royal College of Ophthalmologists. This audit of the one-stop cataract clinic assesses effectiveness and efficiency of the pathway and aims to improve it. The primary objectives evaluate the appropriateness of referrals, identify triaging issues, assess clinic outcomes, enhance productivity by increasing surgical listing, and streamline the service.

Method: Retrospective data from 01/08/2022 - 31/01/2023 was collected from 2 documentation platforms. 540 patient referrals were analysed for outcomes, including referral source and reason, refraction, Past Medical History (PMH), social history, clinic diagnosis, investigations, and clinic outcome.

Results: 72.6% of referrals were from opticians and GPs, with 32-39% of these referrals not including PMH and refraction. Of note, 8.1% of patients had no referral letter. 96.4% of patients were referred for cataracts with 3.6% of other referral reasons including various eye conditions. 89.3% of clinic diagnoses were cataract-related, with 14.1% of these patients being asymptomatic. Overall, 74.3% of cataract patients were listed for surgery, with the rest discharged, referred to another specialty, or placed under monitoring.

Discussion: This audit identifies areas for improvement, particularly in triaging and patient selection. To address this, a nurse-led telephone pre-assessment is recommended to ensure only symptomatic patients are seen with sufficient patient information before consultations. A patient questionnaire will also be used before telephone appointments to streamline the pre-assessment process, alongside a patient information leaflet and new clinic letter to improve patient experience and enhance efficiency.

Poster 18

POSTER ONLY

Title:

Comparison of visual outcomes, spectacle independence and patient satisfaction with micro-monovision implantation of two aspheric intraocular lenses (IOLs) in the public health sector: Preliminary results of a prospective, randomised, controlled study

Date & Time: 03/11/23

Lead Author: Ashmal Jameel

Co-Authors:

Vijay Wagh - St Thomas' Hospital

Scott Robbie - St Thomas' Hospital

David O'Brart - St Thomas' Hospital

Introduction: To compare the visual outcomes, spectacle independence and patient satisfaction of bilateral implantation of either monofocal plus IOLs or standard aspheric monofocal IOLs, using a micro-monovision technique.

Method: Patients with bilateral cataracts, and no other significant ophthalmic problems, were randomised to receive either bilateral insertion of Alcon SN60WF or the Eyhance ICB00 IOL with micro-monovision.

Results: Thirteen patients were randomised to the SN60WF group (6M:7F, mean age 72.2 yrs), and 9 to the Eyhance ICB00 group (4M:5F, mean age 67.1yrs) and completed 6-week follow-up. Mean unaided distance vision of the targeted, dominant, emmetropic eye (UADV) in the Alcon group was 0.02 logMar (-0.08 to 0.22), and 0.03 (-0.13 to 0.16) in the Eyhance group. There was a statistically significant difference ($p < 0.05$) in mean unaided near vision of the myopically targeted (-0.75 to -1.0 diopter), non-dominant eye (UANV), which was N8.4 in the Alcon group (N6 to N12.5) and N6.4 in the Eyhance group (N5 to N10). Fifty-four percent of the Alcon group reported using reading glasses after surgery, compared to only 11% of the Eyhance group. There were no significant differences in, patient reported outcome measures, contrast sensitivity or stereoscopic vision.

Discussion: Preliminary data demonstrates benefits of receiving Monofocal Plus IOLs with monovision over a standard aspheric monofocal IOLs in a public health care setting. Further data and longer follow-up will be presented.

Poster 19

POSTER ONLY

Title:

Safety-net technique for descemet membrane endothelial keratoplasty (DMEK)

Date & Time: 03/11/23

Lead Author: Yan Ning Neo

Co-Authors:

Bruce Allan. Moorfields Eye Hospital NHS Foundation Trust

Alfonso Vasquez-Perez. Moorfields Eye Hospital NHS Foundation Trust

Introduction: To describe the “safety-net technique” - a low-cost, accessible technique modification for descemet membrane endothelial keratoplasty (DMEK) in unicameral eyes with aphakia or a large iris defect to reduce the risk of posterior donor graft dislocation, as well as in eyes with deep anterior chamber to assist donor graft unfolding.

Method: The safety-net suture technique is based on a continuous 10-0 polypropylene suture placed across the anterior chamber in a cat’s-cradle pattern anterior to the trabecular meshwork, which creates a temporary, partial barrier between the anterior and posterior chamber. This safety-net suture is removed at the end of each surgery after an air or gas tamponade is achieved. We described the key surgical steps in achieving a successful safety-net technique and ways to mitigate situations where a continuous safety-net was not achieved. Five DMEK cases were included in this series.

Results: All 5 cases were completed with no intraoperative complications. A partial postoperative detachment in 1 case was successfully treated with repeat air tamponade. The corneas remain clear 12 months after surgery.

Discussion: The “safety-net technique” is an effective, low-cost surgical modification for DMEK in challenging cases, where donor graft is easier to unfold in eyes with deep anterior chamber and the risk of intraoperative donor graft posterior dislocation is reduced in unicameral eyes.

Poster 20

POSTER ONLY

Title:

A Randomized Controlled Trial Comparing Microthin Descemet Stripping Automated Endothelial Keratoplasty With Descemet Membrane Endothelial Keratoplasty: Three-Year Report

Date & Time: 03/11/23

Lead Author: Rathin Pujari

Co-Authors:

Artemis Matsou, Cambridge Eye Research Centre, Cambridge University Hospitals

Jufen Zhang, Anglia Ruskin University, Vision and Eye Research Institute

Madhavan S Rajan, Cambridge Eye Research Centre, Cambridge University Hospitals

Introduction: Best practice standards for corneal endothelial decompensation continues to evolve with the use of Descemet Membrane Endothelial Keratoplasty (DMEK) and Ultrathin or Microthin Descemet Membrane Stripping Automated Endothelial Keratoplasty (UT-DSAEK or MT-DSAEK). We present the three-year study results of the double blind randomised controlled trial to compare DMEK and MT-DSAEK in relation to visual outcome and complication rates.

Method: 56 patients were randomised either to DMEK or the MT-DSAEK (28 eyes in each arm). Inclusion criteria included eyes with endothelial decompensation affecting vision but with no other ocular co-morbidities influencing visual potential. Patients randomised to each arm were matched for age, pre-operative Best Spectacle Corrected Visual Acuity (BSCVA). Secondary outcome measures included BSCVA, complication rates and visual related Quality of Life (QoL) at 36 months.

Results: There was no statistically significant difference in BSCVA between the DMEK and MT-DSAEK groups at the 3-year time point similar to the 2 year results but in contrast to the 1-year results previously reported. Complication rates showed no statistical difference between the two groups. The mean vQoL scores between DMEK and MT-DSAEK indicated similar patient satisfaction between the groups at 36 months.

Discussion: In summary, the trial showed no significant difference in BSCVA at 36 months between the DMEK and MT-DSAEK groups. Both techniques continued to demonstrate comparable outcomes for complication rates, and patient-reported vQoL scores.

Poster 21

POSTER ONLY

Title:

Refractive and visual outcomes of refractive lenticule extraction in the first series of eyes treated with SmartSight

Date & Time: 03/11/23

Lead Author: Allon Barsam

Introduction: To report the refractive and visual outcomes of refractive lenticule extraction in the first series of eyes treated in the UK with SmartSight® (SCHWIND eye-tech-solutions, Kleinostheim, Germany) for the correction of myopia with astigmatism.

Method: "This was a retrospective analysis of the first consecutive patients treated with SmartSight lenticule extraction between November 2022 and June 2023. Patients older than 18 years, with astigmatism up to -3.25D and myopia up to -9.00D were treated with a refractive target of emmetropia. Follow-up was at 1-day, 1-2 weeks, and 3-months after surgery. Uncorrected distance visual acuity (UDVA) and best-corrected distance visual acuity (CDVA), and subjective refraction were measured.

Results: Data was analysed for 90 eyes (N= 90) of 47 patients. Mean age was 33 +/- 8 years; mean preoperative spherical equivalent (SEQ) was -5.86-1.72. Mean UDVA was 0.13 - 0.18 logMAR Day-1, and -0.05 - 0.17 logMAR at Month-3. All eyes were within -1.00 diopter of intended, 78% were within -0.50 diopters of intended 48% were within -0.13 Diopters of intended. SEQ at Month-3 was -0.16 - 0.65 D, showing a small myopic regression compared to week 1-2. One eye suffered a small radial cap tear peri-operatively and 2 eyes suffered mild haze up to the 3 month time point.

Discussion: SmartSight was a safe and effective refractive procedure in this first series of eyes in the UK. Refractive accuracy could be improved further with a small nomogram adjustment for high myopes.

Poster 22

POSTER ONLY

Title:

How close are our bilateral cataract patients refractive to their predicted refraction

Date & Time: 03/11/23

Lead Author: Mr Kieran O'Kane

Co-Authors:

Mr Indy Sian, Musgrove Park Hospital

Introduction: Immediate Bilateral sequential cataract surgery (IBSCS) is becoming more commonplace in an attempt to reduce waiting lists affected by Covid and the Doctor; industrial action. The question we pose is 'Do the refractive results of our bilateral surgeries adhere to the RCOphth guidance (when both eyes are taken into consideration) and if so, should we be performing IBSCS more frequently'?

Method: Retrospective notes review of all phacoemulsification; performed at Musgrove Park Hospital between Jan 2019 and May 2023 was conducted to isolate all bilateral phacoemulsification surgeries.

Results: 70 bilateral phacos were performed during the study period, compared with 8018 unilateral surgeries (0.87%). The average age was 76.0 (range 56-92), 22 (63%) were female and 27 (77%) were under GA. 39 eyes (55.7%) in 20 patients (57.1%) had refractive data. The mean spherical deviation was +0.16, and 35 of the 39 (89.7%) eyes achieved the RCOphth standard of 1.0D, and 31 of the 39 eyes were within 0.5D. 17 of the 20 patients (85%) achieved less than 1D in both eyes, whereas 13 patients (65%) were within 0.5D.

Discussion: Bilateral surgery comprises a small percentage of cataract surgeries performed currently. The refractive results and the percentage of patients achieving the RCOphth standard of 1.0D in both eyes are at first glance encouraging, however when using a more stringent refractive target (0.5D) the results are less impressive. Further work is needed, which we are attempting to perform by rolling the study out to all hospitals in the local deanery.

Poster 23

POSTER ONLY

Title:

Video presentation on a new technique of deep corneal foreign body removal

Date & Time: 03/11/23

Lead Author: Dr. Mehru-nisah Hanif

Co-Authors:

Adela Hulpus/Betsi Cadwaladr University Health Board

Trisha Sharma/Betsi Cadwaladr University Health Board

Hanif Muhammad/Betsi Cadwaladr University Health Board

Introduction: To highlight a successful and new technique in a challenging case of deep corneal metallic foreign body at the level of Descemet's membrane.

Method: A case report of 30 years old male who is asymptomatic and presented to eye casualty after noticing a black spot on his right cornea in the mirror. He recalls about having some scratchy feeling in the same eye about two weeks ago while doing some work. Examination confirms deep stromal metallic foreign body just above the Descemet's membrane. Informed consent was taken. Surgical removal of foreign body was planned. Risk of displacement of metal into the eye explained during procedure due to the unusual location of the metal. Surgery is successful through anterior approach with a new technique. All relevant imaging of cornea conducted pre and post operatively.

Results: Removal of deep metallic foreign body is a challenging situation for a surgeon due to high risk of Descemet's membrane rupture and displacement into anterior chamber, but this technique is safe and avoids risk of complications.

Discussion: Metallic corneal foreign body is very common ophthalmic emergency. Corneal foreign body usually involves anterior stroma that is easily removable in outpatient setting. This deep stromal corneal foreign body removal requires surgical intervention.

Poster 24

POSTER ONLY

Title:

Herpetic keratitis complicated by corneal perforation

Date & Time: 03/11/23

Lead Author: Kirupakaran Arun

Co-Authors:

Panagiotis Georgoudis, Whipps Cross University Hospital

Introduction: Herpetic keratitis is a common presentation and can present it many different ways. The aim of this report is to highlight clues to the diagnosis and how it should be managed.

Method: A 70 year old presented to the eye emergency department with a 4 day history of painless reduced vision (PL) and redness. He reported chronically using FML drops given by his GP for 'itchy eyes'. On examination intraocular pressure was 3. Anterior segment examination revealed 1+ conjunctival injection and a geographic ulcer involving 50% of the cornea with a central corneal perforation and iris tamponade with minor leak present. The anterior chamber was flat inferiorly. Corneal swab, scrapes and PCR were sent for culture and sensitivity. Cyanoacrylate glue was applied over the area of perforation and he was started on topical moxifloxacin, oral acyclovir and oral doxycycline.

Results: Corneal scrapes came back positive for Klebsiella and PCR confirmed HSV-1 DNA. His symptoms improved with treatment but after 3 months the perforation started to leak despite repeat corneal gluing and emergency penetrating keratoplasty was performed. Over the last 18 months, the graft has remained clear and vision has returned to 6/9 pinhole. He remains on maintenance dose oral acyclovir.

Discussion: We report this case to highlight the key clinical features compatible with herpetic keratitis as well as the risks associated with long term topical steroid use. Various options for perforation secondary to herpes keratitis can be considered to address both the perforation as well as visual rehabilitation.

Poster 25

POSTER ONLY

Title:**Aciclovir prophylaxis for Herpetic Keratouveitis****Date & Time:** 03/11/23**Lead Author:** Ramendra Bakshi**Co-Authors:**

Brinda Shah, Yeovil District Hospital, Somerset NHS Foundation Trust

Paritosh Shah, Yeovil District Hospital, Somerset NHS Foundation Trust

Introduction: Aim: To evaluate the role of oral Aciclovir in preventing Herpetic keratouveitis recurrences.**Method:** Retrospective review of 22 eyes of 22 patients who presented with presumed herpetic keratouveitis in Yeovil District Hospital, Somerset NHS Foundation Trust, Outpatient Eye clinic, between April 2018 to March 2023.**Results:** "Mean age was 76.8 years. There were 14 females and 7 males. Mean Follow up was 25.66 months. Number of recurrences ranged from 0-4. Average number of recurrences was 1.66 for the study group. Of the 22 patients, 15 received a prophylactic maintenance dose of oral Aciclovir (400mg BD), whereas 7 did not receive any maintenance dose. 57% (4/7) had recurrences from the group that did not receive a maintenance dose.

Of the ones that received a prophylactic dose, only 20% (3/15) had recurrences "while on treatment. Amongst the treatment group, 46% (7/15) patients had recurrences after stopping the prophylactic dose.

Once patient who had 3 recurrences whilst on treatment was diabetic, had eczema and poor immunity.

Another patient who had 2 recurrences on treatment was switched to Valaciclovir (possible Aciclovir resistance) and has been recurrence free.

One patient showed 1 recurrence after switching to a lower prophylactic dose of 200 mg BD and was shifted back to 400mg BD. while on treatment. Amongst the treatment group, 46% (7/15) patients had recurrences after stopping the prophylactic dose.

Once patient who had 3 recurrences whilst on treatment was diabetic, had eczema and poor immunity.

Another patient who had 2 recurrences on treatment was switched to Valaciclovir (possible Aciclovir resistance) and has been recurrence free.

One patient showed 1 recurrence after switching to a lower prophylactic dose of 200 mg BD and was shifted back to 400mg BD.

Discussion: Conclusions: Oral Aciclovir is effective in preventing recurrences in herpetic keratouveitis. The treatment reduces the recurrence rates from 57% to 20% in patients who are on prophylactic dose. However, a recurrence rate of 46% was noted in our series once there the treatment is discontinued.**Poster 26**

POSTER ONLY

Title:**A simple and effective technique for corneal gluing simulation****Date & Time:** 03/11/23**Lead Author:** Ritika Mukhija**Co-Authors:**

Ritika Mukhija, Sussex Eye Hospital

Matthew Maguire, Sussex Eye Hospital

Mayank A Nanavaty, Sussex Eye Hospital

Introduction: Corneal gluing with cyanoacrylate tissue adhesives is an essential and RCOphth mandated procedural skill that ophthalmologists should learn during their training. However, it is often challenging for trainees to practise as corneal perforations present infrequently and in the acute setting. Furthermore, there is no dedicated simulation model. Herein, we describe a novel, simple and inexpensive corneal gluing simulation method.**Method:** Two cataract surgery simulation eyes with artificially created full thickness corneal perforations (Philip; studio, UK) were mounted on a large cork coaster using board pins to simulate right and left eye. This reusable setup was then mounted on slit-lamp, similar to the patient position and was utilized for corneal gluing and bandage contact lens application simulation using a previously described standardized technique. Participants were encouraged to support the model with one hand while performing the procedure, thereby mimicking clinical scenarios.

All participants were requested to complete an 11-point questionnaire including questions regarding the overall quality of the session, and their confidence in performing the task before and after simulation on a 0-5 ordinal scale.

Results: A total of twelve doctors, including eleven ophthalmologists-in-training and one medical student, took part in the simulation. Nine participants completed the questionnaire, of these, 8/9 (89%) reported confidence to be ambivalent, low or very low (mean score 2.4). Following the session all participants reported confidence to be high or very high (mean score 4.3).**Discussion:** We describe a low-cost and easily reproducible corneal gluing simulation model to help ophthalmologists gain confidence in a potentially sight-saving emergency procedure.

Poster 27

POSTER ONLY

Title:**When cataract surgery goes wrong****Date & Time:** 03/11/23**Lead Author:** Cara Campbell**Co-Authors:**

Andrew Turnbull, Royal Bournemouth Hospital, University Hospitals Dorset NHS Foundation Trust

Introduction: Cataract surgery is the most frequently performed elective surgical procedure globally and enjoys high success rates. While serious complications are rare, their impact and implications may be significant.

Method: Case study: A patient referred following complicated right cataract surgery elsewhere, exploring what went wrong during the primary surgery, subsequent management with secondary lens implantation and iris reconstruction and finally, the learning points from this case.

Results: There were complications during primary cataract surgery, resulting in iris damage and aphakia. During the secondary surgical repair, a 3-piece +13.0D Tecnis ZA9003 intraocular lens was placed in the sulcus. The two large iris defects were repaired with four 10/0 prolene sutures using sliding Siepser knots. Examination one week postoperatively showed a round pupil with significant reduction of transillumination defects. UDVA was 6/9 with a plano refractive outcome. Early PCO was present and a YAG posterior capsulotomy was performed three months later with improvement in UDVA to 6/7.5. The patient was delighted and relieved with the postoperative outcome, with no photophobia and excellent quality of vision.

Discussion: This case offers a helpful learning opportunity to reflect on the mechanism of iris trauma during cataract surgery, factors increasing risk, how to avoid iris trauma and how to manage trauma when it occurs. It allows for discussion of different options for lens implantation, morbidity of iris defects, management options for iris defects and holistic patient care. Against this background, pupilloplasty can achieve excellent functional and cosmetic results.

Poster 28

POSTER ONLY

Title:**Refractive Outcomes of RayOne Preloaded Hydrophilic Intraocular Lens (IOL) in Short Eyes****Date & Time:** 03/11/23**Lead Author:** Mohamed Elghobaier**Co-Authors:**

Mohamed Elghobaier: Sussex Eye Hospital

Ritika Mukhija: Sussex Eye Hospital

Mayank Nanavaty: Sussex Eye Hospital

Introduction: This study aims to assess the difference between the predicted post-operative spherical equivalent and the actual post-operative spherical equivalent outcomes for patients with short eyes (axial length<22mm) who underwent RayOne hydrophilic intraocular lens implantation in uneventful phacoemulsification operations.

Method: A retrospective analysis of patients' electronic medical records for those who had routine phacoemulsification in short eyes (21.44-0.46 mm) at the Sussex Eye Hospital between October 2017 and May 2023. A total of 1155 short eyes were operated on at this period from which, we have included 55 eyes (of 55 patients) with full postoperative refractive data available to analyse and include in the study. The primary outcome measure was the difference between biometry-predicted spherical equivalent and the actual spherical equivalent, determined by the 6-week manifest refraction following uncomplicated phacoemulsification with IOL implantation in the bag.

Results: The study included 55 eyes with complete data with an average age of 74.4-8.2 years. The data analysis showed that there was no statistically significant difference between the predicted refraction and the postoperative spherical equivalent refraction following RayOne intraocular lens implantation in short eyes with mean absolute error (MAE) 0.41 D and mean deviation from the predicted postoperative refraction (PPOR) 0.44 D.

Discussion: This study tested the predictability of refractive outcomes achieved with RayOne preloaded hydrophilic intraocular lens (IOL) in short eyes. The data does not indicate any statistically significant difference when comparing the predicted refraction with the actual postoperative spherical equivalent refraction.

Poster 29

POSTER ONLY

Title:

It's all in the label: refractive surprise from mislabelled intraocular lens; a case report

Date & Time: 03/11/23

Lead Author: Grace Kiew

Co-Authors:

Chit Choa Kiew: Beacon Hospital, Malaysia

Introduction: We describe a case of refractive surprise after routine cataract surgery and implantation of a monofocal toric intraocular lens(IOL), subsequently found to be due to a mislabelled IOL.

Method: A 78-year-old lady had uneventful right phacoemulsification surgery in 2021 with in-the-bag placement of a monofocal toric IOL(Rayner, 21.5D cyl1.5D at 6 degrees). Post-operative visual acuity was counting fingers at 2 feet with a refraction of +12.75/-0.50x90, best corrected 6/9. Investigation found no errors during biometry, formula or IOL choice, or IOL implant placed. Given the excessively large refractive surprise, it was suspected that a possible mislabelling of the IOL might be the source of the error.

Results: She underwent uncomplicated IOL exchange using repeat biometry with a Rayner monotoric IOL 22.5D cyl1.5D. Post-operative visual outcome was improved at 6/18 unaided, corrected to 6/6 with a refraction of -1.25/-0.50x65. During the exchange it was noted that the original IOL lacked the convexity expected of an IOL of its presumed power, supporting the likelihood that the IOL had been mislabelled. This was subsequently confirmed by Rayner.

Discussion: This case demonstrates an unusual cause of refractive surprise due to inaccurate labelling of the IOL, pointing to an error in the quality control process of manufacturing/packaging instead of the usual factors of biometry errors, formula or IOL choice. These errors are often only picked up when the refractive surprise is so large it forces the surgeon to consider a manufacturing problem, but is likely to be underreported in cases with smaller refractive errors.

Poster 30

POSTER ONLY

Title:

Challenging cataract surgery in failed therapeutic penetrating keratoplasty

Date & Time: 03/11/23

Lead Author: Haoyu Wang

Co-Authors:

Haoyu Wang; Rotherham NHS Foundation Trust

Mouhamed Al-Aqaba; Rotherham NHS Foundation Trust

Introduction: A 30-year-old Caucasian female who was a monthly contact lens wearer with no prior history of contact lens use in swimming or bath developed a pseudomonas corneal ulcer refractory to medical management. Presenting visual acuity was hand movement. Subsequently, this led to corneal melting, descemetocoele and perforation. Corneal glue was used on three occasions with no success of anterior chamber reformation.

Method: After lengthy discussion with patient and family, an emergency therapeutic penetrating keratoplasty was planned to salvage the eye knowing a high risk of corneal graft rejection and a prolonged post-operative visual rehabilitation. Within four months, corneal rejection occurred despite intensive topical and systemic corticosteroid therapy, ultimately resulting in fundus-limiting cataract formation, cornea scarring with pannus and neovascularisation. This surgical video is to showcase challenges faced in performing this phacoemulsification cataract surgery with poor surgical view and to offer useful learning points.

Results: Firstly, the aim is to optimise view to do safe cataract surgery. This included removal of diseased epithelium, use of iris hooks, vision blue at multiple stages to stain anterior capsule and corneal coating with hydroxypropyl methylcellulose (HPMC). Whilst performing phacoemulsification, careful intracapsular manipulation was observed as there was a concern of incomplete capsular rhexis due to poor view. Anterior capsular tear occurred with no posterior extension and three-piece intraocular lens was successfully implanted to sulcus with good centration.

Discussion: After successful cataract surgery, endothelial keratoplasty can now be considered for potential visual benefits.

Poster 31

POSTER ONLY

Title:

**Intravitreal Injections for Retinopathy of Prematurity;
International Survey of current practice**

Date & Time: 03/11/23

Lead Author: Eleanor McCance

Co-Authors:

Patrick Watts: University Hospital of Wales

Introduction: A national surveillance study in the UK reported that 8% of neonates with type 1 retinopathy of prematurity (ROP) received off-label anti-VEGF injections as first-line treatment in 2014, which increased to ~33% in a recent smaller survey of 14 units in 2019. In the UK, 67% infants were treated in the neonatal unit with the neonate intubated in 50% cases. The recent 2022 ROP guidelines recommend monitored sedation and topical anaesthesia provide satisfactory conditions for the infant and treater.

Method: Two short online surveys disseminated to both the Paediatric Ophthalmologist, and Paediatric neonatologist communities to gain an insight into the current practice of primary anti-VEGF therapy for ROP treatment.

Results: "56 responses from; UK (20), USA (16) and worldwide (30).

First-line anti-VEGF agent was Bevacizumab (62%), Ranibizumab (34%), and Aflibercept (4%). A variety of dosing schedules were employed.

Primary Anti-VEGF was used for all type 1 ROP (25%), only type 1 in zone 1 and posterior zone 2 (52%), only aggressive ROP (9%), other (14%).

Anaesthetic practice for non-ventilated neonates was topical only (39%), sedation and topical (61%), and general anaesthesia (9%). For ventilated neonates, 59% used topical drops alone, 32% IV sedation, 7% pancuronium, 7% general anaesthesia, and 7% other."

Discussion: Our survey results highlight the marked worldwide variation in current practice in primary anti-VEGF treatment for ROP. There is a lack of consensus on treatment indication, agent, dosing and anaesthetic protocol. Our results suggest that recent formal guidelines have not led to standardisation of practice.

Poster 32

POSTER ONLY

Title:

**Rescue Technique If Lenticule Tear Happens In Lenticular
Intrastromal Surgery (SMILE)**

Date & Time: 03/11/23

Lead Author: Prateek Agarwal

Co-Authors:

Neha Mithal, Consultant Ophthalmologist
University Hospitals Morecambe Bay NHS

Introduction: Purpose: To describe the Rescue technique for removing Lenticule remnant if Lenticule tear happens during Lenticular Intrastromal Surgery

Method: Young Myope 24 year old RE-1.50 diopeters Sph/-0.50 DCyl LE -1.50 Diopeters Sph/-0.50 D cyl planned for Bilateral Small Incision Lenticule extraction.

Intraoperative planes identified, Thin and sticky lenticule with few translucent areas in centre on Bubble pattern. challenging dissection during removal through forceps Inferior one third of lenticule tear happened. Further lenticulorhexis was not attempted to avoid further small tears. the delivered lenticule secured safely. Using blunt dissector, gentle sweeping motions were performed into the anterior and posterior planes cleaving the lenticule completely from the inferior attachments.

The free Lenticule delivered out carefully through the incision and zig saw puzzle of lenticule completed to ascertain the total complete removal.

The interface was irrigated to minimise the inadvertent implantation of any epithelial cells."

Results: Patient Achieved 6/9 vision, Day 1 Post op, Improved to 6/6 unaided after 1 month .

slight irregularity on Bowmans membrane on OCT which disappeared after 1 month Discussion : Swipe gently over the lenticule remnant and then below the remnant with gentle sweeping motions in both the planes.

This cleaves the lenticule from attachments and is a rescue technique.

Its is important to align the torn pieces together on Cornea(jigsaw puzzle) to ascertain complete removal

Discussion: Conclusion/Take home message:

- Lenticule tear can happen in lenticule extraction refractive surgery, particularly in low myopes with thin lenticule if there are sticky /strong adhesions.
- Take your time to ensure complete dissection in both planes upto the periphery.
- Avoid repeated manipulations using forceps as it increases the chances of tear of remaining lenticule along with risk of incision tear.

If tear happens, avoid further traction with forceps.

Poster 33

POSTER ONLY

Title:

Posterior capsular rupture during cataract surgery: when does it occur?

Date & Time: 03/11/23

Lead Author: Akshay Narayan

Co-Authors:

Yan Ning Neo: Moorfields Eye Hospital NHS Foundation Trust, London, UK

David Lockington: Tennent Institute of Ophthalmology, Gartnavel General Hospital, Glasgow, UK

Alexander C Day: Moorfields Eye Hospital NHS Foundation Trust and UCL IoO, London, UK

Introduction: Posterior capsular rupture (PCR) occurs in 0.9% of cataract surgeries conducted within the NHS and is associated with a higher risk of vision-threatening complications. The main aim of this study was to describe the stage at which PCR occurred and the association with anterior capsular (AC) tears.

Method: This retrospective observational cohort study included cataract surgery cases conducted in Moorfields NHS Foundation Trust complicated by PCR, between January 2014 and December 2018. The primary outcome measure was the stage of cataract surgery in which the PCR occurred. The secondary outcome measures were incidence of AC tears, zonular dialysis and description of the location of intraocular lens (IOL) implantation.

Results: 1042 eyes were included in the study. In 619/1042(59.4%) eyes, the rupture occurred during the quadrant removal, 248/1042(23.8%) during IA, 87/1042 (8.3%) during lens implantation. Of those with PCR, VL occurred in 835/1042(80.1%). Approximately 15% of PCR cases were associated with an AC tear. Of cases with PCR, 624/1042(59.9%) patients had a sulcus lens, 117/1042 (11.2%) lens in the bag, 24/1042(2.3%) AC lens, 87/1042 (12.7%) aphakic. There is significant difference in the location of IOL implantation in those with AC tearout vs without AC tearout ($p < 0.01$). 47/1042 (4.5%) PCR cases were associated with ZD. In 123/1042 (11.8%) PCR cases, nuclear fragments were lost to the vitreous.

Discussion: PCR is most likely to occur during the quadrant removal stage of cataract surgery. Surgeons should be aware that the presence of an AC tear alongside PCR is likely to affect the choice of IOL implantation location.

Poster 34

POSTER ONLY

Title:

Corneal Epithelial Remodelling Following Descemet; Membrane Endothelial Keratoplasty

Date & Time: 03/11/23

Lead Author: Chimwemwe Chipeta

Co-Authors:

Elizabeth Law: Southend University Hospital, Southend, UK

Jesse Panthagani: Southend University Hospital, Southend, UK

James Myerscough: Southend University Hospital, Southend, UK

Introduction: Corneal epithelial thickness (ET) profile changes following Descemet; Membrane Endothelial Keratoplasty (DMEK) are not well reported. Understanding the pattern and timeframe of epithelial remodelling following DMEK surgery would likely improve the refractive outcomes of any secondary intervention, be it lens or corneal based surgery. The purpose of this study was to report the pattern and timeframe of epithelial remodelling following DMEK.

Method: A prospective single-centre study using anterior segment (AS)-OCT images pre- and post-operatively at 1 week and 1, 3 and 6 months. Control patients undergoing cataract surgery without corneal pathology or previous ocular surgery were used. ET changes at the central 3 mm (CET) and the paracentral 3 - 6 mm (PET) were investigated.

Results: 57 DMEK patients (57 eyes, mean age 67.2 (-13.8 SD) years, 62.2% female) and 49 age-matched control patients (49 eyes, mean age 73.3 (-10.7 SD) years, 71.4% female) were analysed. At baseline, no significant differences between the two groups were observed. CET and PET were significantly increased at 1 week from baseline (both $p < 0.001$), with continued thinning to below baseline at 1 and 3 months for CET (both $p < 0.01$), with a non-significant trend towards baseline at 6 months. PET remained thicker than baseline at 1 month, returning to baseline at 3 months ($p < 0.01$ and $p = 0.14$ respectively).

Discussion: Immediately following DMEK, there is epithelial thickening both centrally and paracentrally. The PET returns to baseline faster than the CET (3 and 6 months respectively). Secondary intervention should ideally be delayed for at least 6 months after DMEK for predictable refractive outcomes.

Poster 35

POSTER ONLY

Title:

Restricted diet causing irreversible visual impairment in four children with autistic spectrum disorder

Date & Time: 03/11/23

Lead Author: Toby Boote

Co-Authors:

Ruth Hamilton: Department of Clinical Physics and Bioengineering, NHS GGC

Jasleen Jolly: Oxford Eye Hospital, Oxford University Hospitals NHS Foundation Trust, Oxford, UK

David Mansfield: Ophthalmology Department, Inverclyde Royal Hospital, NHS GGC

Introduction: To investigate the association between micronutrient deficiency, caused by Avoidant/Restrictive Food Intake Disorder (ARFID), and ocular sequelae.

Method: Self-controlled case series:

Six paediatric male patients with ARFID were managed in outpatient ophthalmology clinics. They had their eyes examined, visual acuities measured, and visual evoked potentials recorded. Additionally, their micronutrient levels were monitored, and replacement therapy was initiated appropriately.

Results: The patients presented with a range of visual acuities. Vitamins A, B9, B12, C, D, E as well as the minerals zinc, copper and selenium were found to be depleted to varying degrees in our patients. Four of the patients showed some improvement in acuity following replacement therapy, however, two patients unfortunately showed no improvement.

Discussion: Patients with ARFID can develop significant deficiencies in micronutrients, which can affect their vision. If these deficiencies are prolonged, particularly in vitamins A, B12, E as well as the minerals zinc and copper, irreversible blindness can occur. Therefore, ARFID patients must be identified as early as possible and supplementation started imminently. More research is required to establish a micronutrient regimen with regards to dosing and delivery best suited to each individual.

Poster 36

POSTER ONLY

Title:

Cefuroxime and the AC: size doesn't matter

Date & Time: 03/11/23

Lead Author: Maiar ElHariry

Co-Authors:

Yusuf Abdallah: Wye Valley NHS Trust

Phillip Wright: Wye Valley NHS Trust

Simon Madge: Wye Valley NHS Trust

Introduction: Intracameral cefuroxime is the mainstay of endophthalmitis prophylaxis in the UK. Antibiotics must reach a minimum inhibitory concentration (MIC) to be effective. This study examines whether the intracameral cefuroxime dose needs alteration based on the axial length (AL), anterior chamber (AC) depth and resultant AC volume.

Method: This study examined the biometry of 100 eyes including IOLmaster AC depth (mm) and AL (mm) in addition to Pentacam AC volume (mm³) and AC depth (mm). Calculations of MIC assumed 1mg of cefuroxime was injected intracamerally in the AC as per the ESCRS study of prophylaxis of postoperative endophthalmitis after cataract surgery.

Results: The average concentration of cefuroxime in the AC was calculated to be 7mg/ml: it ranged from 3.86mg/ml to 13.5mg/ml. Cefuroxime bactericidal effects are correlated to the amount of time where levels exceed microbial MICs (dependant on species). Maximum killing effects occur at 4-5 times the MIC. The highest MIC in literature was 100ug/ml and held by a gram-negative species. The smallest AC in the study achieved a concentration 135 times the MIC required while on average, 70 times the MIC was.

Discussion: This study demonstrates that while AL and AC depth theoretically influence the concentration of cefuroxime achieved, the 1mg in 0.1ml dose of cefuroxime is sufficient to account for any variation whereby even in the largest of chambers, a high enough MIC is achieved.

Poster 37

POSTER ONLY

Title:

Evaluation of an Optometrist Led Virtual Keratoconus Monitoring Service

Date & Time: 03/11/23

Lead Author: Nikhil Jain

Co-Authors:

Nikhil Jain, Luton and Dunstable Hospital

Masara Laginaf, Luton and Dunstable Hospital

Introduction: To evaluate the safety and efficacy of an optometrist led virtual monitoring service for keratoconus patients.

Method: Retrospective analysis of all patients reviewed in the virtual Keratoconus monitoring service at a local district general hospital ophthalmology service in the United Kingdom over a 2-year period from 01/01/2021 to 01/01/2023. Patients requiring diagnosis or with more complex needs were excluded from the clinic and were reviewed face to face.

Results: 156 appointments were reviewed. Patients attended for a questionnaire, visual acuity and Pentacam before leaving. Results were reviewed by an optometrist and outcomes conveyed by letter. 75% of attendances were deemed 'stable' and discharged or retained under routine review. 15% of attendances were deemed 'borderline' and brought in for face to face ophthalmologist review. 10% of the attendances were deemed to have 'progressed' and listed for crosslinking or reviewed by an ophthalmologist.

Discussion: An optometrist led virtual keratoconus monitoring service can be a safe and effective way of routinely following up keratoconus patients thereby reducing the demands on waiting room space, face to face ophthalmologist or optometrist appointments and thereby improving clinic flow and capacity.

Poster 38

POSTER ONLY

Title:

How has Dry Eye Disease prescribing changed since the COVID-19 pandemic?

Date & Time: 03/11/23

Lead Author: Sunil Mamtara

Co-Authors:

Sachin Shah, Watford General Hospital

Ronak Patel, Watford General Hospital

Laura Maubon, Moorfields Eye Hospital

Introduction: Dry eye disease (DED) is increasing in prevalence due to numerous factors including increased screen-time. DED represents a significant burden to quality of life for patients. The number of consultations and prescriptions issued for DED in both primary and secondary care have increased significantly in recent years. We report trends in prescribing for DED over a 23-month period.

Method: A retrospective review of all prescribing for dry eye disease in primary care was undertaken using data supplied by GPrX. Prescribing data was recorded for 23 months between September 2020 and August 2022 including classes of treatments used, brands of treatments prescribed, cost of all prescriptions issued, number of packs issued per prescription and the location of prescriptions. The data was subsequently analysed to identify trends over time and regional prescribing variation.

Results: A total of £199,097,641.00 was spent on dry eye prescribing in primary care during the study period with an average spend of £8,219,819.73 per month. Sodium hyaluronate based treatments accounted for 44% of total expenditure for dry eye disease. Dry eye prescribing accounts for 38% of all primary care Ophthalmology prescribing costs. No significant increase in cost over time was observed. An increase in the proportion of preservative-free treatments was seen although this was not significant. Significant differences in regional and national prescribing data were identified.

Discussion: Dry eye disease prescribing represents a significant financial burden on the NHS. There are significant regional and national variations in prescribing behaviours for both brand and classes of treatment. Strategies to standardise dry eye prescribing may result in a significant reduction in expenditure for the NHS.

Poster 39

POSTER ONLY

Title:

Does Using a Shared Decision-Making Tool Increase Cataract Conversion Rate?

Date & Time: 03/11/23

Lead Author: Hugo Whyte

Co-Authors:

Lauraine Jones, Commissioning Manager at Bath North East Somerset Swindon and Wiltshire (BSW) NHS ICB

Robert Gudgeon, Senior Quality Manager at BSW NHS ICB

Matthew Wakefield, Consultant Ophthalmologist Salisbury NHS Trust & Lead at BSW

Introduction: Demand for cataract surgery is expected to increase by 25% within the next decade (Dhillon et al., 2021). To reduce unnecessary referrals, GIRFT (2009) suggested utilising 'cataract conversion rate' (CCR) as a metric. They advised providers with a CCR below 80% (with 95% as the current gateway metric target) to use a shared decision-making tool, aiding those patients unlikely to be listed to exit before the face-to-face appointment, increasing the CCR.

Method: In response to GIRFT; recommendations and NHS Trust reported 69-71% rates, the BSW Eyecare Network produced a decision-making tool and implemented a pilot study assessing its effectiveness.

In August 2021, cataract referrals received by BSW RMC were randomised to either receive the decision-making tool (n=106) or receive standard care (n=145). In May 2022, outcomes were analysed and classified as either successful or failed cataract conversions.

Results: Only 5 patients (4.7%) within the study group exited their pathway following the decision-making tool. Furthermore, the control group; CCR was significantly higher than in the trust; original report. Investing resources implementing a similar tool.

Discussion: Our findings demonstrate that a shared decision-making tool did not significantly improve the CCR. This is likely because BSW; actual CCR was far higher than the Trusts reported, a combination of non-rigorously collected Trust data and Independent Sector rates not being included. Also, many patients who could have exited due to the intervention still wanted a face-to-face consultation. BSW has therefore not implemented the tool and cautions other ICBs to carefully assess their true CCR before.

Poster 40

POSTER ONLY

Title:

Short Arc length Intrastromal corneal Ring in Keratoconus

Date & Time: 03/11/23

Lead Author: Ramendra Bakshi

Introduction: To report a case of the use of short arc length (90 degrees) Intrastromal corneal ring segment in a case of keratoconus with high astigmatism.

Method: A 27 year old gentleman presented with progressive Keratoconus both eyes. (Left more than Right) He underwent CXL both eyes. A year later he came for visual rehabilitation in in left eye as his UCVA and BCVA were not good. Refraction in the left eye was -8.25 D sphere/6 D cylinder @180 improving to 6/60 only. Corneal ring left eye was planned for him. Patient had a central cone with myopia and high cylinder. Hence 2 Short Arc length INTACS (90 degree) were planned, 0.4 mm thickness each.

Results: 1st post op day, there was a fall in Apical curvature on Sirius Scan from 65.61 dioptres to 60.60 dioptres (around 5 dioptres) Refraction and tangential curvature on the scan showed a marked reduction of cylinder from 5.08 dioptres to 1.89dioptres) with improved UCVA and BCVA both.

Discussion: Short Arc length Intrastromal corneal rings work best for reduction of Astigmatism(cylindrical component of refraction) in keratoconus with improvement in BCVA and UCVA.

Poster 41

POSTER ONLY

Title:

Patient reported outcome measure collection following cataract surgery using an artificial intelligence automated telephone assistant

Date & Time: 03/11/23

Lead Author: Christopher King

Co-Authors:

Aisling Higham: Royal Berkshire NHS Foundation Trust

Mike Adams: Buckinghamshire Healthcare NHS Trust.

Sarah Maling: Buckinghamshire Healthcare NHS Trust

Introduction: We report preliminary data on the use of Dora to collect post-operative PROMs data for patients having routine cataract surgery at Buckinghamshire Healthcare NHS Trust. Dora is a validated, UKCA marked conversational clinical assistant already used in our cataract pathway to complete routine post-operative symptom reviews.

Method: Patients received automated post-operative calls from Dora after routine cataract surgery to complete the post-operative questions from the CAT-PROM 5 questionnaire. Calls were screened by trained reviewers to confirm the reliability of Dora; scoring and net promoter scores were collected.

Results: 1424 calls were attempted by Dora with 63% of patients answering the call with an average age of 75 in keeping with a standard UK cataract cohort. 90% of patients answering the call successfully completed the questions. The average Net Promoter score was 8.02 out of 10. Agreement between Dora and the human call reviewers was high at 92%.

Discussion: Dora is an effective and reliable tool to collect PROMs data for cataract patients with high patient acceptability. It enables high volume automated data collection highly accessible to typical cataract patients speaking naturally over the phone without the need for internet or smartphone access.

Poster 42

POSTER ONLY

Title:

Remote Consent Platform As Part Of Regular Practice In Cataract Surgery In Public Health Care

Date & Time: 03/11/23

Lead Author: Andrea Viteri

Co-Authors:

Andrea Viteri: Moorfields Eye Hospital CUH

Pei-Fen Lin: Moorfields Eye Hospital CUH

Rishi Ramessur: Moorfields Eye Hospital

Introduction: Remote consent is being used in various services such as company contracts, banking, and legal documents. However, public healthcare does not commonly include this option. In the NHS patients receive information and sign on the day or months prior to surgery. Neither is ideal as both do not comply with the principle of a 2 step consent with a cooling off period in between. Signing on the day of surgery also incurs extended pre-op ward round time which affects the efficiency of operating lists.

Method: We tested a remote consent platform during a 1-week-high-volume cataract drive. Patients were pre-selected based on cataract complexity and medical background. Patients verbally consented in clinics when listed. 2 weeks prior to operation, the platform was used to send patients a link to a consent form by SMS and email. Patients were then able to review risks and benefits of surgery to make informed decisions. The link allows electronic devices to become a signature pad, signature is captured electronically, and sent to hospital. A time-motion study was done to measure the efficiency of using the platform on the day of surgery to either confirm or re-sign consents. Also, a survey was collected from patients and surgeons on the ease of use.

Results: 0 women and 30 men, 45 to 90 years old were included. 75 patients used remote consent. 48% signed before the cataract drive week 52% signed on the surgery day. The average time to verify consents already signed was 19 seconds. The average time for patients to sign in on the day was 1'33". The average time to register a patient for consent was 2'30". 60 patients answered the questionnaire about remote consent. 83% found it either somewhat easy or very easy to use, 97% were somewhat satisfied or very satisfied with the digital process, and 94% would likely or very likely recommend it. Regarding surgeons: 100% were very satisfied or somewhat satisfied with the process, and 100% likely or very likely to recommend it to another clinician.

Discussion: Remote consent is extensively used by several public and private institutions. However, it is not yet popular in public health, even if it can optimize diverse processes. In the cataract drive, the majority of patients found the technology easy to access and use, and were satisfied using the remote consent. Surgeons were also very pleased with the process. Although there are aspects that can still be refined we consider remote consent a promising tool to be used in public health practice.

Poster 43

POSTER ONLY

Title:

Outcomes of diffractive multifocal lens implantation following prior corneal laser ablative refractive surgery

Date & Time: 03/11/23

Lead Author: David Shahnazaryan

Co-Authors:

Marcela Espinosa Lagana: Centre for Sight UK

Cristia Sunga: Centre for Sight UK

Sheraz Daya: Centre for Sight UK

Introduction: To evaluate the outcomes of diffractive multifocal lens implantation in patients with previous corneal refractive surgery.

Method: 102 eyes with previous corneal laser ablative surgery (44 for hyperopia and 58 for myopia) underwent cataract or refractive lens exchange (RLE) procedures with diffractive multifocal lens implantation. Preoperative evaluation ensured there were no visually destructive asymmetric corneal aberrations. The Holladay 2 formula using Equivalent Keratometry readings from Pentacam Holladay report was used to determine lens power. The uncorrected distance, intermediate, and near visual acuities (UDVA, UIVA, UNVA), corrected distance visual acuity (CDVA), spherical equivalent (SE) at 6 weeks were assessed. Data about visual symptoms, refractive outcomes, enhancement surgery and complications were also collected.

Results: Of 102 eyes Acrlisa 376D bifocal lens was implanted in 4 eyes, while the remainder received trifocal lens implants (90 BVI Finevision and 8 Zeiss ATLisaToric 839MP). At 6 weeks mean SE and cylinder were -0.11 - 0.50D and 0.41 - 0.46D respectively, wherein, 82% were within -0.5D and 94% within -1D of desired emmetropia. Monocular UDVA was =6/9.6 in 88% and binocular UDVA was =6/6 in 65%. Monocular UNVA (40cm) was =6/9.6 in 84% and binocular UNVA was =6/7.5 in 85%. At 6 weeks 99% had =6/9.6 binocular UIVA (60cm) and 80% =6/7.5. Postoperative refractive enhancement was required in 6 eyes (5.9%).

Discussion: Diffractive multifocal lens implantation, in carefully selected patients with prior corneal laser refractive surgery results in excellent refractive and visual outcomes with low enhancement rates. Special attention to corneal aberrations and lens calculations contributes to predictable outcomes.

Poster 44

POSTER ONLY

Title:

Comparison of IOL powers calculated using an Optical Low Coherence Interferometry Biometer (Lenstar) and a Swept Source OCT Biometer (Anterion)

Date & Time: 03/11/23

Lead Author: Chris Ashton

Co-Authors:

Mana Rahimzadeh, Western Eye Hospital, Imperial College Hospital Trust

Valerie Saw, Western Eye Hospital, Imperial College Hospital Trust

Melanie Corbett, Western Eye Hospital, Imperial College Hospital Trust

Introduction: The purpose of this study was to investigate the agreement between the intraocular lens (IOL) power calculated using an Optical Low Coherence Interferometry Biometer (Lenstar) and a Swept Source Optical Coherence Tomography Biometer (Anterion).

Method: Retrospective data was collected between November 2021 and June 2022 at Imperial College Hospitals. All patients with measurements from both biometers were included. Patients with previous refractive surgery, cornea surgery and pterygium were excluded. IOL power calculations for emmetropia were compared between biometers using the HofferQ and SRK/T formulas. Statistical Analysis was conducted using excel. Paired t-test was used to determine the difference between the measurements. All analysis was conducted for the Hoya250 IOL (A constant 118.5).

Results: The data included 144 eyes from 101 patients (mean age of 69.9 +/- 12.7 years) with biometry measurements taken between November 2021 and June 2022. Using the HofferQ formula, there was a statistically significant difference between the IOL powers calculated by the two biometers (mean difference -0.18D, p=0.002). The same IOL was selected in 39.6% eyes and within +/-0.5D in 86.8% of eyes. Using the SRK/T formula, there was no statistical significance between the IOL powers calculated by the two biometers (mean difference -0.080, p=0.134). The same IOL was selected in 45.9% eyes and within +/-0.5D in 92.4% using SRK/T. The range of IOL power differences were between -2.5D and +5.0D using HofferQ and -2.5 to +4.0D using SRK/T.

Discussion: Accurate biometry measurements and subsequent IOL power calculation is essential in cataract surgery. For Hoffer-Q Lenstar and Anterion biometry measurements can result in significantly different IOL power calculations for the same eye. This has implications for patients with an axial length of <22mm as it is the formula recommended by RCophth.

Poster 45

POSTER ONLY

Title:

PCR rates amongst trainees with significant exposure to surgical simulation training

Date & Time: 03/11/23

Lead Author: Yarrow Scantling-Birch

Co-Authors:

Yarrow Scantling-Birch, North Middlesex University Hospital

Adam Hatoum, Whipps Cross University Hospital

Ahmed Elkarm, Whipps Cross University Hospital

Hadi Zambarakji, Whipps Cross University Hospital

Introduction: Simulation training improves trainee performance and is a mandatory part of the ophthalmology specialist training programme. We compare the posterior capsular rupture (PCR) rates between consultants and trainees in an East London cataract training unit with significant simulation exposure.

Method: Whipps Cross University Hospital (WXUH) is one of four London sites with an in-house simulator (EyeSi). A single-centre retrospective 2-year audit of PCR rates between January 2021 and December 2022 was conducted. All trainees at WXUH had allocated weekly simulation time. PCR risk factors were scored to generate a cataract complexity score. Data was collected from electronic records (Medisoft) and analysed using descriptive statistics and non-parametric tests.

Results: The incidence of PCR was 1.48% (63 out of 4259 procedures): 33 consultant cases and 30 trainee cases. There was no significant difference in PCR incidence between consultants and trainees (1.56% vs 1.41%, OR 0.90, $P=0.70$, respectively). The mean time spent per trainee per year on the EyeSi simulator was 35 hours. Median LogMAR best corrected preoperative visual acuity (BCVA) and cataract complexity scores were not significantly different between trainees and consultants (0.9 vs 0.7, $P=0.66$ and 3.0 vs 4.0, $P=0.45$, respectively). There was no difference in postoperative BCVA between trainees and consultants at 1 month (0.4 vs 0.3, $P=0.61$) and at 6 months (0.7 vs 1.1, $P=0.53$).

Discussion: Ophthalmology trainees in an East London cataract training unit exposed to regular integrated simulation sessions have low PCR rates, similar to those observed amongst a consultant group and in keeping with acceptable NOD standards.

Poster 46

POSTER ONLY

Title:

Designing and Validating an Infographic Patient Leaflet on the risks of Cataract Surgery Using the Double Diamond Approach

Date & Time: 03/11/23

Lead Author: Wei Zhuen Chew

Co-Authors:

Anna Blake University Hospital Crosshouse, NHS Ayrshire and Arran

Sahib Tuteja University Hospital Crosshouse, NHS Ayrshire and Arran

Zachariah Koshy University Hospital Crosshouse, NHS Ayrshire and Arran

Introduction: "Cataract surgery is among the most common operations in the NHS. (1) Patient anxiety is well-recognised pre-operatively and studies indicate that providing information about the upcoming surgery reduces patient; pre-operative anxiety. (2,3) Patient information leaflets (PIL) are a useful method of conveying information. (4)

The aim of this project was to design a PIL for ease of reading and maximal patient comprehension."

Method: "The PIL design was inspired by the Royal College of Anaesthetists leaflet documenting the risks of general anaesthesia. (5) A draft leaflet was created using information from the ophthalmology team and other major centres. (6, 7, 8)

This draft was circulated to patients undergoing elective cataract surgery in University Ayr Hospital from the 10/10/22 to 15/2/23. They received our designed leaflet alongside the current PIL in circulation. They were then asked to provide feedback regarding the designed leaflet across data points like font size satisfaction, satisfaction with information content, understanding of leaflet, understanding of risks and confidence to have surgery, leaflet preference and a space for free text.

Three plan-do-study-act cycles were performed while incorporating the Double Diamond approach. (9) The final draft was circulated among other key stakeholders; the Royal National Institute of Blind People, Northeast Sensory Group, Area Optometry.

Results: All questions domains consistently scored over 70% satisfaction. Each cycle demonstrated an increase in patient satisfaction levels.

The leaflet design evolution is displayed below to illustrate the design process.

Discussion: The leaflet has been formally incorporated into our hospital; literature for patient circulation.

Poster 47

POSTER ONLY

Title:

“Twist And Out” - A Simple Technique To Explant Intraocular Lenses

Date & Time: 03/11/23

Lead Author: Bharpoor Singh

Co-Authors:

Rohan Hussain, Moorfields Eye Hospital

Rajesh Deshmukh, Moorfields Eye Hospital

Introduction: “Explantation of a one piece intraocular lens (IOL) can be challenging. We propose a simple technique to folding the IOL in one move to explant safely and efficiently. Explanting IOLs can often result in ocular trauma to the zonules, capsular bag, cornea and iris. We will present 5 cases of this technique to our viewers which show how safe our technique is. We hope this will give confidence to ophthalmologists across the world when explanting IOLs.”

Method: Video of 5 cataract surgeries with consent

Poster 48

POSTER ONLY

Title:

Sustained practice of immediate sequential bilateral cataract surgery (ISBCS) in a post-COVID era: 3-year experience from Sheffield

Date & Time: 03/11/23

Lead Author: Haoyu Wang

Co-Authors:

Haoyu Wang; Ophthalmology Department, Sheffield Teaching Hospitals NHS Foundation Trust

Joel Jong; School of Medicine, University of Sheffield

Jennifer Tan; Ophthalmology Department, Sheffield Teaching Hospitals NHS Foundation Trust

Introduction: In the first year following Covid-19 recovery (July 2020-June 2021), safe and successful practice of ISBCS were demonstrated in 208 eyes of 104 patients in Sheffield following the RCOphth recommendations. This study aimed to share our experience on the sustained routine practice of ISBCS in the post covid era and to evaluate the cohort characteristics and safety profile.

Method: Retrospective case series analysis of all patients who underwent ISBCS between July 2021 and June 2023. 540 eyes of 270 patients were identified and their data were evaluated.

Results: The mean age was 72.7+/-11.8 years and 61% were female. 474 eyes (88%) were performed under local anaesthesia with 375 eyes (79%) were deemed routine. Other main ocular risk factors included: short eyes requiring pre-operative mannitol (10%), high myopia (3%), and post-vitreectomy (1%). Intra-operative complications were observed in 5 eyes (1%) in the second eye (iris trauma (n=1), aqueous misdirection (n=1) and posterior capsular rupture (n=3) and 1 eye in the first eye (zonular dialysis). Post-operative complications were reported in 31 eyes with cystoid macular oedema being the commonest (n=9, 2%), followed by posterior capsule opacification (n=6, 1%) and post-op inflammation (n=5, 1%). No endophthalmitis was observed. 165 eyes (31%) were operated by trainees. Patient discharge rate was 89%. No significant differences were found in pre-operative features, complication rates and post-operative outcomes between consultant and non-consultant surgeons ($p>0.05$).

Discussion: Our experience continued to show safe and successful practice of ISBCS in a UK academic teaching hospital with patients frequently requesting this approach.

Poster 49

POSTER ONLY

Title:

A novel virtual cataract clinic protocol with anterior segment imaging: a complimentary solution to meet increasing demand for NHS cataract services

Date & Time: 03/11/23

Lead Author: Yijun Cai

Co-Authors:

Saab Bhermi, Moorfields Eye Hospital

Introduction: Cataract surgery is the most common ophthalmic procedure performed in the UK. Constraints in clinic space make it difficult to meet the increasing demand for face-to-face (F2F) cataract clinic appointments. We introduced a virtual cataract pathway to reduce patient visits and increase patient throughput whilst maintaining high clinical standards.

Method: Patients attended a diagnostic clinic where all necessary assessments/investigations were performed by technicians and made available for digital remote review. Patients then attend a virtual clinic with a clinician where the digital data was reviewed and a full cataract consultation conducted before attending for surgery.

Results: 209 patients underwent diagnostic tests which led to 107 telephone consultations (51.2%), 75 video consultations (35.9%) and 27 DNAs (12.9%). Of those who attended a clinician consultation, 15 (7.18%) required referral to a cataract F2F clinic and 40 (19.1%) had non-cataract pathology necessitating referral to another subspecialty. 152 eyes were listed for surgery, 95 operations were performed with no safety incidents or cancellations and the remainder await surgery. 96.3% of patients surveyed were very satisfied with the pathway and only 0.7% preferred F2F consultations.

Discussion: Our virtual pathway revealed no safety issues, increased patient throughput by 50% compared to standard F2F clinics and had overwhelming positive feedback from patients. The pathway could be improved further with stricter adherence to the inclusion/exclusion criteria to filter suitable patients into the virtual pathway. This virtual model can be used to address the increasing demand for F2F clinic capacity in an efficient and flexible manner.

Poster 50

POSTER ONLY

Title:

Process modelling of NHS Tayside cataract waiting lists in response to the COVID-19 pandemic

Date & Time: 03/11/23

Lead Author: Joanna Ashby

Co-Authors:

Obaid Kousha, Ninewells Hospital, Dundee, UK

Joanna Ashby, University of Glasgow, UK

John Ellis, Ninewells Hospital, Dundee, UK

Introduction: Immediate Sequential Bilateral Cataract Surgery (ISBCS) is safe and effective, yet <1% of NHS patients under ISBCS and <1500 operations were performed in 2021/2022. Mathematical models fitted to data obtained from NHS Tayside could help to explore solutions to improve service effectiveness as well as assess demographic and post-pandemic backlog demands, specifically regarding equitable impact considering Delayed Sequential Bilateral Cataract Surgery (DSBCS).

Method: Aims include modelling the process pathway for cataract surgery at Ninewells Hospital, NHS Tayside, Dundee, UK. In a fixed model with a 26-week waiting list that assumes two high-volume lists per week, 1300 patients are presented on the list for bilateral operations, with non-eligible patients excluded. The current and future states of the waiting list were captured. Desmos software was used.

Results: A ratio of 4:6 is derived, where 4 cases represent 4 unilateral cataract surgery, and 6 cases represent 3 ISBCS. By week 52 at the "Inflection Point", more patients would have had at least one cataract operation performed, with model output (A) ISBCS at 1873 cases, and (B) DSBCS at 1250 cases, respectively. Predictive models show the equitable benefits for ISBCS are demonstrated, and an opportunity to accelerate time taken to reach this point by increasing ISBCS volume.

Discussion: Aggregated local surgical volume data can only be applied at a regional and local level, and predictions maybe extended subject to an increasing waiting list. ISBCS could address post-pandemic backlogs. A systems-oriented approach could plan patient flow, informing clinicians, managers and commissioners and a local and national level.

Poster 51

POSTER ONLY

Title:

The impact of temperature on Ophthalmic Viscoelastic Devices (OVDs) and clinical implications - a pilot study

Date & Time: 03/11/23

Lead Author: Dr Caoimhe Henry

Co-Authors:

Dr Fiona Sillars: University of Strathclyde

Dr M^agnica S. N. Oliveira: University of Strathclyde

Dr David Lockington: Tennent Institute of Ophthalmology

Introduction: Ophthalmic surgeons use cohesive or dispersive Ophthalmic Viscoelastic Devices (OVDs) according to their expected rheological behaviours. We have observed that OVDs behave differently if taken directly from refrigerator storage for immediate intraocular use. We wished to evaluate the rheological and thermal properties of commonly used OVDs and the clinical implications.

Method: The viscous and elastic responses of three OVDs (Eyefill-SC, Eyefill-C, Eyefill-HD; Bausch & Lomb) were measured under shear using a rotational rheometer at clinically relevant temperatures (5 degrees Celsius (C), 25 C, 37 C). Thermal properties were evaluated using differential scanning calorimetry and laser flash analysis to determine heat capacity, thermal diffusivity, and conductivity.

Results: As shear rate ' $\dot{\gamma}$ ' increased, viscosity decreased (for Eyefill-C at 25 C, from 151.5Pa to 0.265Pa, as $\dot{\gamma}$ increased from 0.01s⁻¹ to 1000s⁻¹). Estimated zero-shear rate viscosity (η_0) was higher for each of the OVDs at lower temperatures (for Eyefill-C 400.5Pa at 5°C vs. 91.7Pa at 37°C). Frequency sweep tests showed Eyefill-C's viscous behaviour dominated over elastic character for low frequencies. At the crossover point (when $G' = G'' = 57$ Pa) frequencies were shown to increase as temperature increased (0.56rad/s at 5 C, 1.37rad/s at 25 C, 1.58rad/s at 37 C). Thermal property analysis revealed Eyefill-HD had the highest thermal conductivity (0.38W m⁻¹ K⁻¹; p <0.008).

Discussion: This pilot study confirms our clinical experience that OVD properties are affected by low temperatures, with increased viscosity at low shear rates. To avoid harm from excessive force, surgeons should ensure all OVDs are at room temperature prior to intraocular use for intended rheological behaviours.

Poster 52

POSTER ONLY

Title:

Audit of patient outcomes following listing for bilateral same day cataract surgery

Date & Time: 03/11/23

Lead Author: Lois Crabtree

Co-Authors:

Munazzah Chou: Epsom and St Helier Hospital

Paul Ursell: Epsom and St Helier Hospital

Introduction: The aim of this audit was to determine the proportion of patients listed for bilateral same-day cataract surgery (BSDS) who only have unilateral surgery and why, and patient experience of BSDS.

Method: Retrospective data from electronic records were collected from 53 patients listed for BSDS between August and November 2022. At follow up, patients were asked about their experience of BSDS.

Results: Of the 33 patients included in this audit 73% underwent BSDS. For the patients who only underwent unilateral surgery 78% was due to surgeon choice, commonly because of intra-operative reasons, with some being due to factors such as patient being a primary carer. For the 22% of patients who changed their mind on the day of surgery, one was due to pain from first eye surgery and another due to post-operative concerns.

92% of patients who underwent BSDS were happy they made that decision, the remainder of patients highlighted issues with post-operative blurred vision, one patient was a full time carer. For the patients who had unilateral surgery 78% were happy with this decision. Most patients had no concern prior to cataract surgery, if concerns were mentioned the risk of blindness was the most common.

Discussion: BSDS is an effective option for some patients and leads to high levels of patient satisfaction. However there is a need for thorough pre-operative discussion when listing patients. We created an information leaflet to provide patients with further details about BSDS, including suitability in order to attempt to reduce on the day cancellations.

Poster 53

POSTER ONLY

Title:

Steroid response in Descemet Membrane Endothelial Keratoplasty (DMEK): A 7-year longitudinal study of 993 non-glaucomatous eyes

Date & Time: 03/11/23

Lead Author: Yan Ning Neo

Co-Authors:

Marketa Cilkova: Moorfields Eye Hospital NHS Foundation Trust

Yijun Cai: Kingston Hospital NHS Foundation Trust

Alfonso Vasquez-Perez: Moorfields Eye Hospital NHS Foundation Trust

Introduction: To identify the incidence and risk factors for steroid response (SR) in low-risk patients who underwent routine DMEK or phaco-DMEK surgery.

Method: Retrospective review of 1032 eyes which underwent DMEK surgery or combined phacoemulsification/DMEK surgery (phaco-DMEK) between 01/2014 and 12/2020 was performed and 993 eyes were included. Eyes with pre-existing ocular hypertension, glaucoma or post-operative pupillary block were excluded. Incidence and time to SR onset were determined. Association between onset of SR and agents for graft tamponade (air vs SF6), topical steroids agents and need for re-bubbling were analyzed. Treatment outcomes of SR were reported.

Results: Overall incidence of SR was 10.8% (107/993) across 7-years, of which 6.8% (67/993) for DMEK alone and 4.0% (40/993) for phaco-DMEK but the difference was not significant ($p>0.05$). Majority developed within 4-6 months (30.8%), and median time to onset was 4.5 months post-operatively. 95% were still on topical dexamethasone at onset. Re-bubbling increased the risk (OR 1.85, 95% CI 0.07-1.65). There was no statistical difference between air vs SF6 tamponade and risk of SR ($p>0.05$). Majority (85.0%) responded well to topical intraocular pressure treatment and change of topical steroid formulation without developing glaucoma.

Discussion: Incidence of SR is higher than expected even for low-risk DMEK patients with no pre-existing history of raised intraocular pressure but the majority of these cases responded well to topical treatment. Lower potency steroid formulation should be considered at around 6 months post-operatively in low-risk DMEK grafts. Patients who require DMEK re-bubbling should be monitored more closely for SR.

Poster 54

POSTER ONLY

Title:

A Comparative Audit of Pre- vs Post-Dilatation Biometry Readings in Cataract Surgery Patients

Date & Time: 03/11/23

Lead Author: Megan Caitlin Quinn

Co-Authors:

Dr Megan Quinn: NHS Forth Valley

Dr Douglas Lyall: NHS Lanarkshire

Introduction: Cataract surgery cases in the UK are to increase by 50% between 2015 and 2035. Current practice is to complete biometry measurements pre-dilatation. For patients attending the eye department for co-pathology, and are already dilated, this results in additional return hospital appointments to have biometry performed. This leads to inefficiencies and delays. The aim of this audit is to determine whether pupillary dilatation significantly alters biometry measurements in cataract surgery patients.

Method: Prospective observational study. Data was collected on 196 phakic patients who attended an NHS Lanarkshire cataract pre-assessment clinic between November 2022 and June 2023. Biometry using the Zeiss IOLMaster was performed prior to, and after pupillary dilatation. Data was collected on axial length (AL), anterior chamber depth (ACD), lens thickness (LT), white-to-white distance (WTW) and keratometry (K) values. Data was collected for SRK-T, Hoffer-Q and Haigis formulas. Data from right and left.

Results: 196 participants were included in the study. There was no statistical change in AL, LT, WTW or K values in either eye post dilatation. There was a change in mean ACD in the right eye of 0.18mm ($p=0.001$). Change in recommended IOL power was greater than 0.5D in less than 3% of cases.

Discussion: Pupillary dilatation alters ACD when measured as part of biometry prior to cataract surgery. The final lens power recommended for use in cataract surgery to achieve the smallest myopic spherio-equivalent was not affected in the majority of cases.

Poster 55

POSTER ONLY

Title:

Refractive and Visual Outcomes Following Cataract Surgery with Implantation of a Hydrophobic Trifocal Toric Intraocular Lens

Date & Time: 03/11/23

Lead Author: Lucia Pelosini MD FRCOphth CertLRS

Co-Authors:

Marcela Espinosa Lagana MD, Centre For Sight, East Grinstead, RH19 4RH

David Shahanazaryan, Centre For Sight, East Grinstead, RH19 4RH

Sheraz M Daya MD FRCOphth, Centre For Sight, East Grinstead, RH19 4RH

Introduction: A preliminary study to evaluate the refractive, visual outcomes and rotational stability of the Finevision HP trifocal toric intraocular lens (IOL).

Method: Retrospective study of 62 eyes implanted with trifocal toric IOL (Finevision HP, PhysiOL s.a., Liège, Belgium) with assessment of refractive error, monocular and binocular uncorrected distance visual acuity (UDVA), intermediate (UIVA) at 80 and 60 cm, and near (UNVA) at 40 cm, rotational stability by cornea and internal aberrometry (OPD 3, Nidek, Japan), astigmatism vector analysis using the double-angle tool, IOL orientation, intraoperative and postoperative complications.

Results: Analysis of 62 eyes (27 bilateral and 8 unilateral surgeries) 6 weeks postoperatively showed a mean postoperative spherical equivalent of 0.23D - 0.42 (range -0.38 to 1.00D), mean refractive cyl -0.19D - 0.21 (-0.75D to 0.00), 87% eyes -0.50D and 100% -1.00D. The centroid of refractive astigmatism decreased to -0.07D -0.28D 51degrees with no significant change in keratometric cylinder. 98% had monocular UDVA of =6/7.5; 100% had UIVA of =6/7.5 at 60cm and 80cm; 90% of eyes had monocular UNVA of 6/7.5 or better; 52% of eyes gained one or more lines of CDA and 41% of eyes were unchanged. Mean absolute rotation was 5.84-6.41SD degrees (range 0 to 21 degrees) with 61.3%, at 5 degrees. No adverse events were reported in our sample.

Discussion: This preliminary study shows that the Finevision HP hydrophobic trifocal toric IOL provides excellent refractive outcomes, good rotational stability, and good uncorrected visual acuity at distance, intermediate and near.

Poster 56

POSTER ONLY

Title:

Visual outcome following ISBCS with ClearView 2 Multifocal intraocular lens

Date & Time: 03/11/23

Lead Author: Prof Richard Newsom

Co-Authors:

Mrs Pauline Robison - Lead optometrist at Practice Plus Group, Portsmouth

Introduction: The use of ISBCS has become wide spread in the UK. The use of third generation algorithms to calculate IOL powers, have meant that even refractive lenses be used for this procedure. There is evidence that visual rehabilitation occurs faster with ISBCS. We wanted to review our practice with Clearview 2 intraocular lenses, leaving the dominant eye at -0.3D and non dominant at -0.5D power post ISBCS. Reviewing visual outcome for near and distance vision.

Method: All patients undergoing ISBCS with bilateral Clear view IOLs were included. 18 Male and 54 female patients were included, average age 74 yrs, from Aug 2020 to May 2023. All patients had no co-existing ocular pathology and biometry was performed with an IOL master 700 using an average of the Barratts and the Haggis formulae. Patient with corneal astigmatism >1.2 D were excluded and eyes had LRI if required, patients were given topical steroids for one month post surgery with NSAIDS for two weeks. Post operative and post operative distance vision was available on 108 eyes. Post operative binocular vision was available on 96 eyes. One patient with a post op RVO was excluded from the final visual results.

Results: Pre operative vision ranged from 6/120 to 6/5 with the median being 6/12.

Post operative results 100% of eyes achieved 6/12 or better, with 70.4% achieving 6/6. 97% of patient achieved binocular vision of N6 or better, 91% achieved binocular 6/6 N6 vision. Three eyes had mild corneal oedema post surgery one eye had a capsule dialysis, 4 patients required YAG laser. We found one patient with a relatively small pupil had blurred distance vision due to the near element being sited over the pupil, rotation of the lens would improve the distance vision. The lens gave no significant dysphotopsia and no lens needed to be exchanged in this series. A slightly larger capsularhexis was required (6mm) and capsular tension rings may be useful if there in any indication of zonule weakness.

Discussion: This is a two year study on the results of the ClearView multifocal lens used in ISBCS. The lens performed well in most cases, there was one case of bilateral post operative corneal oedema. Surgical learning was that although we hoped for excellent vision on all cases around 1:10 will not have the expected result and will typically require reading glasses, consent for these is important.

Poster 57

POSTER ONLY

Title:

Herpetic uveitis: missed diagnosis leading to corneal perforation

Date & Time: 03/11/23

Lead Author: Arun Kirupakaran

Co-Authors:

Panagiotis Georgoudis, Panagiotis Georgoudis
Whipps Cross University Hospital

Introduction: Herpetic uveitis is an easy diagnosis to miss and this can lead to devastating consequences. The aim of this report is to create awareness of how this disease can present, appropriate clues to the diagnosis as well as how it should be managed.

Method: A 60 year old female presented with right eye painless blurred vision (6/24) and was found to have 2+ anterior chamber cells, keratitic precipitates and raised intraocular pressure (32). She was treated with a tapering course of steroid drops for idiopathic recurrent anterior uveitis. She represented 5 weeks later with sudden drop in vision (PL pinhole) and watering in her right eye. Examination demonstrated a round corneal infiltrate (5mm in diameter) with a central corneal perforation, shallow anterior chamber with iridocorneal touch. Corneal gluing was performed and a primary diagnosis of herpetic keratouveitis was made. Scrapes and PCR were sent and she was started on hourly moxifloxacin, oral Vitamin C and oral acyclovir 400mg 5xdaily.

Results: Scrapes and PCR did not come back with any growth. However, the patient's pain improved rapidly following the introduction of oral acyclovir and the the cornea perforation remained sealed. The patient was put on maintenance dose oral acyclovir and FML drops and has not had any further episodes of herpetic keratouveitis to date.

Discussion: Viral aetiology should be considered in all cases of painless recurrent uveitis associated with raised intraocular pressure. PCR remains the gold-standard for diagnosis however this is not always positive and clinical diagnosis remains key.

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*The study results are related to the haptic design.

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For healthcare professionals only. Please reference the Instructions for Use for a complete list of Indications and Important Safety Information and contact our specialists in case of any questions.

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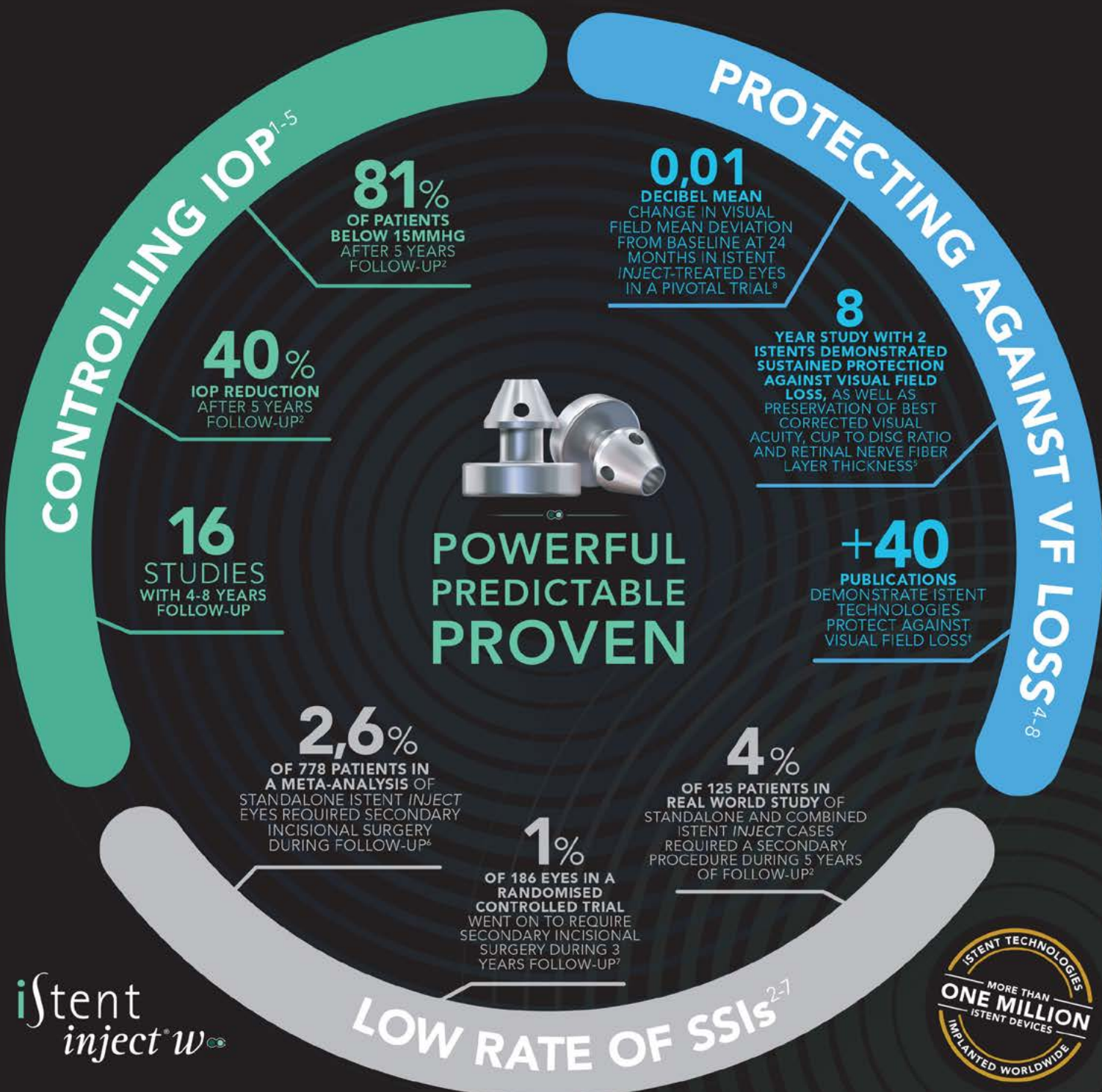
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INTERVENE EARLIER WITH ISTENT INJECT® W DELAYING GLAUCOMA DISEASE PROGRESSION¹⁻⁸



† Data on file.

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iStent inject® W IMPORTANT SAFETY INFORMATION

INDICATION FOR USE: The iStent inject® W is intended to reduce intraocular pressure safely and effectively in patients diagnosed with primary open-angle glaucoma, pseudo-exfoliative glaucoma or pigmentary glaucoma. The iStent inject® W can deliver two (2) stents on a single pass, through a single incision. The implant is designed to stent open a passage through the trabecular meshwork to allow for an increase in the facility of outflow and a subsequent reduction in intraocular pressure. The device is safe and effective when implanted in combination with cataract surgery in those subjects who require intraocular pressure reduction and/or would benefit from glaucoma medication reduction. The device may also be implanted in patients who continue to have elevated intraocular pressure despite prior treatment with glaucoma medications and conventional glaucoma surgery. **CONTRAINDICATIONS:** The iStent inject® W System is contraindicated under the following circumstances or conditions: • In eyes with primary angle closure glaucoma, or secondary angle-closure glaucoma, including neovascular glaucoma, because the device would not be expected to work in such situations. • In patients with retrolental tumor, thyroid eye disease, Sturge-Weber Syndrome or any other type of condition that may cause elevated episcleral venous pressure. **WARNINGS/PRECAUTIONS:** • For prescription use only. • This device has not been studied in patients with uveitic glaucoma. • Do not use the device if the Tyvek® lid has been opened or the packaging appears damaged. In such cases, the sterility of the device may be compromised. • Due to the sharpness of certain injector components (i.e. the insertion sleeve and trocar), care should be exercised to grasp the injector body. Dispose of device in a sharps container. • iStent inject® W is MR-Conditional; see MRI Information below. • Physician training is required prior to use of the iStent inject® W System. • Do not re-use the stent(s) or injector, as this may result in infection and/or intraocular inflammation, as well as occurrence of potential postoperative adverse events as shown below under "Potential Complications." • There are no known compatibility issues with the iStent inject® W and other intraoperative devices. (e.g., viscoelastics) or glaucoma medications. • Unused product & packaging may be disposed of in accordance with facility procedures. Implanted medical devices and contaminated products must be disposed of as medical waste. • The surgeon should monitor the patient postoperatively for proper maintenance of intraocular pressure. If intraocular pressure is not adequately maintained after surgery, the surgeon should consider an appropriate treatment regimen to reduce intraocular pressure. • Patients should be informed that placement of the stents, without concomitant cataract surgery in phakic patients, can enhance the formation or progression of cataract. **ADVERSE EVENTS:** Please refer to Directions For Use for additional adverse event information. **CAUTION:** Please reference the Directions For Use labelling for a complete list of contraindications, warnings and adverse events.

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acute narrow angle glaucoma and/or insufficient pupil dilation can increase the risk of both iridocyclitis and floppy iris syndrome. Mydrane produces undetectable or very low systemic concentrations of active substances however risk cannot be excluded, therefore: Phenylephrine's sympathomimetic activity may affect patients in the event of hypertension, cardiac disorders, hyperthyroidism, atherosclerosis or prostate disorders; Lidocaine should be used with caution in patients with epilepsy, myasthenia gravis, cardiac conduction disturbances, congestive heart failure, bradycardia, severe shock, impaired respiratory function, impaired renal function (with creatinine clearance of <10ml/min). **Fertility:** No data available. **Pregnancy and Breastfeeding:** Do not use. **Interactions:** Systemic interactions are unlikely. **Driving and Using Machines:** Mydrane has a mydriatic effect and, therefore, moderate influence on the ability to drive and use machines. Do not drive and/or use machines while visual disturbances persist. **Undesirable Effects:** Uncommon: headache, keratitis, cystoid macular oedema, intraocular pressure increased, posterior capsule rupture, ocular hyperaemia, hypertension. **Overdose:** Risk of systemic effects is minimal. Systemic phenylephrine overdose symptoms include extreme tiredness, sweating, dizziness, slow heartbeat and coma. Onset is rapid and short lasting. Inject rapidly acting alpha-adrenergic blocking agent such as phentolamine (dose 2 to 5mg intravenously). Tropicamide ophthalmic overdose symptoms include headache, fast heartbeat, dry mouth and skin, unusual drowsiness and flushing. Pilocarpine or 0.25% w/v phystostigmine should be applied to treat sustained mydriasis. Systemic overdose of lidocaine may cause CNS effects (convulsions, unconsciousness, respiratory arrest) and cardiac reactions (hypotension, myocardial depression, bradycardia, cardiac arrest). Treatment consists of arresting the convulsions and ensuring adequate ventilation with oxygen. Local endothelial cell loss can be caused. **Storage:** No special storage conditions required. **Legal Category:** POM. **Basic NHS Price:** £119.95 for a box of 20 sterile ampoules & 20 sterile filter needles, or for a box of 20 kits containing 1 sterile ampoule and 1 sterile filter needle. **PL Number:** PL 20162/0022. **PL Holder:** LABORATOIRES THEA, 12 RUE LOUIS BLERIOT, 63017 CLERMONT-FERRAND CEDEX 2, France. **Date of Preparation:** 09/09/2021

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