



Renal Medicine

Programme & Abstracts





Symposium organising committee

Dr Shona Methven (Chair) Dr Jane Goddard Dr Anna Jackson

Dr Thalakunte Muniraju Dr Rajan Patel Dr Paul Phelan

Dr Elaine Spalding Dr Shalabh Srivastava Dr Kate Stevens

The Federation of the Royal Colleges of Physicians of the UK runs a Continuing Professional Development (CPD) Scheme for all post-training physicians. Please note it is your responsibility only to claim credits for the hours you attend.

CPD ID Code: 138842 CPD Credits: 6



CPD certificates and feedback

The CPD sign-in register is now online and is combined with the symposium feedback form.

- Please note that in order for us to issue CPD certificates, we require participants to complete our
 online feedback survey and you should have received an email containing a link to your individual
 feedback form. If you have not received this please contact: h.elliott@rcpe.ac.uk
- There is an option to save your feedback as you complete it during the day and finish your responses later. This is done through the 'Finish later' button which is at the bottom of every page of the survey.
- Please note that the 'Finish later' feature supplies you with an updated individual link which contains your previous answers. These are not accessible to our administration team so please ensure that you store this link as otherwise you will have to begin your survey again.
- The sign-in and feedback form will be open for 28 days after the event, closing at midnight on Friday 27 May 2022. Electronic certificates will be issued shortly after that date via email. It will not be possible to issue certificates to delegates who do not complete the form by this date as it is your confirmation that you attended so please make sure you do. Please note that it is not possible to download a certificate directly from the online feedback survey platform.

Asking questions and interactive sessions

- You can submit questions to the speakers during the talks using 'Slido.com' we will be using interactive software, 'Slido', so that everyone can ask the speakers questions and participate in any polls and case discussions.
- Additionally, if you are attending the building there are microphones for you to use in the auditorium.
- On your mobile, tablet or computer, go to slido.com.
- Enter the event code: **#rcpeRenal22**
- This code will be used throughout the day for all presentation.
- When delegates send questions to speakers, your device will display the delegate questions.
- You can 'like' any delegate questions submitted, questions will rearrange based on how many 'likes' they have, highlighting to the Chair popular questions.
- Any questions not answered on the day will be responded to retrospectively and posted on https://events.rcpe.ac.uk/events/symposia.

Social media

The College encourages online discussion and the use of social media. Please feel free to participate – the Twitter hashtag for this event is **#rcpeRenal22**

You don't have to join Twitter to participate, anyone can access the tweets from the event, just type the event hashtag into the search bar of your browser and all tweets with the hashtag will be displayed. The College has its own Twitter account @RCPEdin and this is usually highly active during symposia and a useful summary of key messages from the day.

A Heritage Exhibition and other useful and interesting information is on the live event pages

Symposium programme

Renal Medicine

RCPE Symposium held on Friday 29 April, 2022

09.00 Registration and Coffee

09.25 Welcome by Professor Sunil Bhandari, Vice President, Royal College of Physicians of Edinburgh

Session 1 A modern approach to kidney care

Chair: Dr Shona Methyen, Consultant Nephrologist, Aberdeen Royal Infirmary

09.30 Assessment of chronic kidney disease (CKD)

Dr Navdeep Tangri, Associate Professor of Nephrology, University of Manitoba

* kidney failure risk equation * risk stratification * application in UK

10.00 Glomerulonephritis: tips and tricks for the non-nephrologist

Professor Liz Lightstone, Professor of Renal Medicine & Consultant Nephrologist, Imperial College,

London

@kidnevdoc101

* lupus nephritis * diagnosis and management of membranous nephropathy * when you can avoid a biopsy

10.30 Anaemia of kidney disease

Professor Sunil Bhandari, Vice President, Royal College of Physicians of Edinburgh & Consultant

Nephrologist

* optimal use of intravenous iron * hypoxia-inducible factor stabilisers * future developments

11.00 Break

Session 2 Pills and pandemics - what's changed?

Chair: Dr Kate Stevens, Consultant Nephrologist, Queen Elizabeth University Hospital, Glasgow

11.30 The sodium-glucose cotransporter-2 (SGLT2) inhibitor revolution – relevant to everyone

Panel discussion

- Dr Natalie Mordi, (Nephrology) Division of Cardiovascular & Diabetes Medicine University of

Dundee

- Dr Gemma Currie, (Diabetes) Consultant of Diabetes and Endocrinology, Glasgow Royal Infirmary

- Professor John McMurray, (Cardiology) Professor of Medical Cardiology, Deputy Director & Honorary Consultant Cardiologist at the Queen Elizabeth University Hospital, Glasgow

* when to use them * how to use them * pearls and pitfalls

12.15 DR ELLA PRINGLE LECTURE

Professor Sunil Bhandari, Vice President, Royal College of Physicians of Edinburgh

The Covid 19 pandemic – lessons from the kidney community

Dr Michelle Willicombe, Senior Clinical Lecturer and Honorary Consultant Nephrologist, Imperial

College, London @mkwillicombe

13.00 Lunch

Symposium programme

Renal Medicine

RCPE Symposium held on Friday 29 April, 2022

Session 3 Update on genetics of kidney disease

Chair: Dr Paul Phelan, Consultant Nephrologist, The Royal Infirmary of Edinburgh

13.45 Cystic kidney disease

Professor John Sayer, Deputy Dean of Clinical Medicine, University of Newcastle upon Tyne * cystic kidney diseases are much more than polycystic kidney disease type 1 and type 2 * new therapies

* new understanding

14.15 Hereditary haematuria

Professor Rachel Lennon, Professor of Nephrology and Honorary Consultant Paediatric Nephrologist, Manchester @RLWczyk

* causes (Alports & beyond) * how next generation sequencing (NGS) has expanded Alport Syndrome (AS) understanding * outcomes of AS in females

14.45 What causes unexplained kidney failure?

Professor Daniel Gale, St Peter's Chair of Nephrology, University College London and Honorary Consultant Nephrologist, Royal Free Hospital, London

* what are the causes (paediatrics/adults) * utility of NGS in CKD of unknown aetiology * how may knowing the diagnosis change management

15.15 Break

Session 4 Interventional nephrology

Chair: Dr Shalabh Srivastava, Consultant Interventional Nephrologist, South Tyneside & Sunderland NHS

Foundation Trust

15.40 Point of care ultrasound (POCUS) in nephrology

Dr Renee Dversdal, Associate Professor of Medicine at Oregon Health & Science University, Portland, USA & Chief Medical Officer at Vave Health

@VaveHealth @DRsonosRD

* application of POCUS in nephrology * training * establishing a service

16.10 Watch out interventional radiologist – here comes the nephrologist

Dr Rauri Clark, Consultant Interventional Nephrologist & Clinical lead for Nephrology at South Tyneside and Sunderland NHS Foundation Trust

@getrenal

* what is interventional nephrology * benefits * training

16.40 Discussion

16.55 Close

Symposia abstracts

Session 1 - A modern approach to kidney care

Assessment of chronic kidney disease (CKD)

Dr Navdeep Tangri, Associate Professor of Nephrology, University of Manitoba, Canada

Chronic kidney disease (CKD) is harmful and preventable, but has a variable course of progression. In clinical practice, patients are typically treated according to their level of kidney function (eGFR) and risk stratification, and treatment based on disease progression rarely occurs. This presentation will review advances in risk prediction for CKD in the last five years, with a particular focus on the kidney-failure risk equation (KFRE) and its application to the UK primary care setting. It will also describe a framework for the management of CKD where all key treatment decisions, including referral to nephrology, dialysis-access initiation, transplant referral and introduction of intensive diseasemodifying therapy can occur based on risk thresholds rather than eGFR thresholds.

Glomerulonephritis: tips and tricks for the non-nephrologist

Professor Liz Lightstone, Professor of Renal Medicine & Consultant Nephrologist, Imperial College, London @kidneydoc101

This talk will consider the various presentations of glomerulonephritis – when to consider the diagnosis, how to approach a differential diagnosis and what you need to do to rule in or rule out a diagnosis. Most importantly, it will cover when to refer urgently and what the SpR on the end of the phone will want to know!

I will approach what you need to consider when a patient with GN presents in another acute setting and include a brief overview of the impact of COVID-19 on diagnosis and management.

Session 2 - Pills and pandemics – what's changed?

The sodium-glucose cotransporter-2 (SGLT2) inhibitor revolution – relevant to everyone

Dr Gemma Currie, (Diabetes) Consultant of Diabetes and Endocrinology, Glasgow Royal Infirmary

The introduction of SGLT2 inhibitors in recent years has revolutionised management of diabetes, renal disease and heart failure.

These agents now feature prominently in most national and international diabetes guidelines as first- or second-line agents but despite this there can be reluctance to prescribe SGLT2 inhibitors in both primary and secondary care settings due to concerns about side effects and adverse events. This presentation will use cases from the diabetes clinic to illustrate points to consider in ensuring safe and appropriate prescribing with particular focus on risk and mitigation of DKA, frailty, foot disease, and genital mycotic infection.

Dr Natalie Mordi, (Nephrology) Division of Cardiovascular & Diabetes Medicine, University of Dundee

This presentation will highlight when to prescribe in CKD (reflecting on the UKKA SGLT2-inhibitor in CKD guidelines from October 2021) and referencing the recent randomised controlled trials. Potential mechanisms of the SGLT-2 inhibitors' renoprotective benefits will also be discussed.

Further reading

Heerspink HJL, Stefánsson BV, Correa-Rotter R et al. Dapagliflozin in patients with chronic kidney disease. *N Engl J Med* 2020; 383: 1436–46

Perkovic V, Jardine MJ, Neal B, et al. Canagliflozin and renal outcomes in type 2 diabetes and nephropathy. *N Engl J Med* 2019; 380: 2295–306

Session 3 - Update on genetics of kidney disease

Cystic kidney disease

Professor John Sayer, Deputy Dean of Clinical Medicine, University of Newcastle upon Tyne

Autosomal dominant polycystic kidney disease (ADPKD) characterised by progressive cyst formation/expansion, results in enlarged kidneys and often end-stage kidney disease. ADPKD is genetically heterogeneous; PKD1 and PKD2 are the common loci (~78% and ~15% of families) and GANAB, DNAJB11, and ALG9 are minor genes. Certain genes such as OFD1 and HNF1B phenocopy ADPKD. More recently additional genes have become associated with cystic kidney disease phenotypes. ADPKD is a ciliary-associated disease, a ciliopathy, and many syndromic ciliopathies have a PKD phenotype. Clinical recognition of the ADPKDspectrum and molecular genetic testing allow patients to obtain a precise diagnosis, which informs prognosis, management and treatment.

Hereditary haematuria

Professor Rachel Lennon, Professor of Nephrology and Honorary Consultant Paediatric Nephrologist, Manchester @RLWczyk

Microscopic haematuria is a frequent clinical finding occurring in at least 1% of the general population and the origin can be from the glomerulus to the urethra. Isolated microscopic glomerular haematuria was considered to be a benign finding but as understanding about the underlying pathophysiology and clinical outcomes have improved, the importance of detection and clinical follow up has been recognised. My

research is focussed on basic glomerular cell and matrix biology and we have established a range of experimental tools to investigate kidney development and disease. We have special interest in the glomerular basement membrane and one of its core components, type IV collagen, which is affected by pathogenic variants in the Alport genes COL4A3, COL4A4 and COL4A5. In this talk I will review the genetic causes of hereditary haematuria, and link the genes to their functional role in the glomerulus. I will also highlight the increasing association between genetic variants in type IV collagen and a broader spectrum of glomerular phenotypes including IgA nephropathy and diabetic kidney disease.

What causes unexplained kidney failure?

Professor Daniel Gale, St Peter's Chair of Nephrology, University College London and Honorary Consultant Nephrologist, Royal Free Hospital, London

Kidney failure affects more than 65,000 people in the UK who need burdensome, expensive and hazardous treatments (dialysis or kidney transplantation) to stay alive. Registry data indicate that in at least 15% of cases the cause of kidney failure is not known, and in an unknown proportion of additional cases the recorded diagnosis (such as hypertension) does not accurately or completely explain the patient's disease.

Advances in technology now allow widespread application of genomic testing to individuals and cohorts of patients. Genetic research has broadened understanding of the genes that can cause or contribute to kidney failure, and data from large-scale studies in the USA and UK suggest that 10–35% of previously unexplained kidney failure has a monogenic cause, with clinical parameters such as age at kidney failure and the presence of a family history being strongly associated with an identifiable genetic diagnosis. Identification of an underlying monogenic disease in a patient

is valuable because it explains the cause of their illness; informs risk of recurrence following transplantation (and may indicate specific therapy in this context); can facilitate selection of living related kidney donors; and may allow reproductive decisions or interventions.

In addition to this progress in diagnosing monogenic diseases, emerging data has identified important non-Mendelian genetic contributors to kidney failure and called into question assumptions about kidney-failure risk associated with some other variants. But despite these advances, the underlying diagnosis for the majority of patients with unexplained kidney failure remains out of reach.

Point of care ultrasound (POCUS) in nephrology

Dr Renee Dversdal, Associate Professor of Medicine at Oregon Health & Science University, Portland USA & Chief Medical Officer at Vave Health @vaveHealth @DRsonosRD

This presentation will define Point of Care Ultrasound (POCUS) and describe several clinical use cases, contrasting POCUS with consultative ultrasound. Dr Dversdal will then discuss foundational elements of training, and briefly cover steps and resources for building an ultrasound program. Due to the brief nature of the presentation, additional resources and learning materials will be key. The following is suggested additional reading:

Koratala A, Bhattacharya D, Kazory A. Point of care renal ultrasonography for the busy nephrologist: A pictorial review. *World J Nephrol* 2019; 8: 44–58

Koratala A, Segal MS, Kazory A. Integrating Point-of-Care Ultrasonography Into Nephrology Fellowship Training: A Model Curriculum. *Am J Kidney Dis* 2019; 74: 1–5

Dversdal RK, Northcutt NM, Ferre RM. Building and Maintaining an Ultrasound Program: It Takes a Village. *Adv Chronic Kidney Dis* 2021; 28: 236–43



Upcoming Events 2022

Most events within our Education programme are being delivered as hybrid, with the option to attend the College in-person or to watch the event online from home. Each event page will highlight the mode of delivery. All events and CPD/Feedback surveys are open for 28 days after the event so that you catch-up from any time zone.



Education Portal

Material from these events is available to Fellows, Members and Associates on the College's Education Portal, along with accredited specialty modules.



The Royal College of Physicians of Edinburgh's education programme continues with:

May		
MON 9	RCPE Iceland: The problems and pitfalls of modern medical prescribing - lessons for the on-call medic	IMU
FRI 20	Respiratory Medicine	Sym
TUE 24	A run-through of Rheumatology	EMU
тни 26	COP26 Legacy Series: Building our COP26 legacy with eyes on COP27	EMU
June		

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WED 8	RCPE West Midlands: Updates in Clinical Medicine	^{UK} MU
TUE 21	Predicaments in Palliative Medicine	EMU
THU 23	RCPE USA: Updates in Clinical Medicine	IMU

July		
THU 14	RCPE India: Updates in Clinical Medicine	IMU
TUE 26	Top Tips for New Doctors	EMU
WED 27	RCPE Bangladesh: Updates in Clinical Medicine	IMU

To book, or for more information on our events, visit: **events.rcpe.ac.uk**