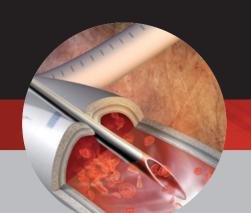




DELEGATE HANDBOOK

24TH & 25TH September 2015 The Midland Hotel, Manchester, M60 2DS



GORE® ACUSEAL Vascular Graft: A multidisciplinary team approach

FACULTY:

Ms Jennifer Hanko

Consultant nephrologist Belfast City Hospital

Mr Tim Brown

Vascular surgeon Belfast City Hospital

We are dedicated to long-term partnerships with healthcare professionals. Our commitment to this continues with the Gore MEDICAL MASTERY Series.

goremedical.com

Products listed may not be available in all markets. GORE®, ACUSEAL, MEDICAL MASTERY and designs are trademarks of W. L. Gore & Associates. © 2015 W. L. Gore & Associates GmbH AU3069-EU1 JUNE 2015

Friday, September 25, 2015

Midland Hotel Manchester Alexandra Suite

Program

- 13.15 Early Experiences with early cannulation grafts:
 The Nephrology view

 Ms Jennifer Hanko
 Consultant nephrologist, Belfast City Hospital
- 13.23 Implantation and outcomes with early cannulation grafts: The surgeon view Mr Tim Brown
 Transplant surgeon, Belfast City Hospital
- 13.31 Cannulation and care of GORE® ACUSEAL Vascular Graft: The nurse view
- 13.39 O&A session



VASBI 2015 WELCOME

Dear Delegates,

VASBI is the only UK society which represents the multidisciplinary team in the field of vascular access for dialysis. Why do we need a society for something so specific?

The scale of the problem is large and even with the best outcomes AV fistulas have a high failure rate, both primarily and in the medium to long term. Patients with renal failure are living longer and subsequently require more vascular access over a longer period. This has led to increasing complexity requiring innovation and creativity in finding solutions. Whilst technology moves on it has little robust data to support it and one role of VASBI is to collect this and facilitate collaborative studies. The exciting launch this year of the UK VA graft registry, a world 1st innovation will allow rapid accrual of meaningful data which provides unbiased multi centre evaluation of devices. In addition individual feedback of outcomes compared to peers is possible providing a metric for revalidation of VA specialists.

As a society VASBI has grown and become an established entity. Involvement in the ERBP guidelines, representation at the Vascular society, EVC and VAS meetings and at the Polish and French Vascular society meetings have occurred in the last year.

The main role of VASBI is to promote good practice in vascular access and to allow the multidisciplinary team to meet, build networks and disseminate knowledge for patient benefit.

Whilst exciting technologies are important it is increasingly obvious that the organisation and service delivery of VA is key to good long term outcomes. Pre-emptive identification and fistula formation is essential to maximise the number of patients dialysing on an AVF. Due to the linked financial penalties these targets have become political tools and whilst VASBI strive for best practice we should also question the clinical outcomes that this produces. Target and guideline based practice whilst aiming for a common benefit may not always be in an individual's best interest.

These topics and more will be discussed at VASBI2015 and I hope you all find interest, controversy and a common goal: to improve the lives of patients requiring vascular access.

Nick Inston, President of VASBI Sarah Lawman, Incoming President of VASBI



PRESIDENT OF VASBI

Mr Nick Inston PhD FRCS is a renal transplant and vascular access surgeon at the Queen Elizabeth Hospital Birmingham. He is current president of the Vascular Access Society of Britain and Ireland (VASBI) and a member of the European Best practice guidelines group for vascular access. He has lectured on vascular access at international meetings and has interests in both clinical and basic science research.



INCOMING PRESIDENT OF VASBI

Dr Sarah Lawman Consultant Nephrologist Brighton & Sussex University Hospitals

PROGRAMME - DAY ONE

ALL SESSIONS ARE IN THE ALEXANDRA SUITE EXCEPT WORKSHOPS: PLEASE PRE-BOOK AT REGISTRATION

11.30-13.00 Workshops, First Floor: 1 - USS, Fairclough Suite (every 15mins); 2 - Fistula Disfunction Diagnosis & Management, Lancaster Suite (every 45mins); 3 - Home Dialysis, Royce Suite (every 15mins); 4 - Needling Competency, Rolls Suite (every 15mins)

TIME	SESSION & TOPIC CHAIR*/SPEAKER		
08:30-09:15	Registration (Alexandra Suite)		
09:15-09:30	Welcome	Mr Nick Inston & Dr Sarah Lawman	
09:30-10:30	Scientific Session I Please see page 9 for Titles and Presenters	Mr Max Troxler* & Dr Sarah Lawman*	
10:30-11:00	Coffee, Exhibition & Posters		
11:00-12:30	Plenary I: Central Venous Stenosis 1) The Science of Stenosis 2) Imaging Central Stenosis 3) Preventing Central Stenosis 4) Treating Central stenosis	Mr Paul Gibbs* & Dr Rob Jones* Dr Mike Walsh Dr Nick Chalmers Dr Johann Nicholas Dr Pete Littler	
12:30-13:30	Lunch & Exhibition		
13:30:15:00	Plenary II – Tailoring Access 1) Home HD 2) "Crash Landers" 3) Non HD Vascular Access 4) Elderly 5) Needle Phobia 6) Infected Access 7) "Failed" Access	Mr Nick Inston* & Dr Mike Walsh* Dr Jennifer Hanko Dr Emma Aitkin Mr Arun Pherwani Mr Max Troxler Ms Sarah Powers Dr Matthias Widmer Mr Eric Chemla	
15:00-15:30	Coffee & Exhibition		
15:00-16:00	Mega MDT	Dr Jennifer Hanko & Dr Rob Jones	
16:00-16:30	Graft Registry	Mr James Gilbert	
16.30-17.00	Debate: Learning on Patients is preferable to Models	Mr James Gilbert* & Mr Nick Inston* Mr Eric Chemla V Dr Matthias Widmer	
17:00-18:00	Adjudicated Poster Session with a glass of wine		
19:00	Pre-Dinner Drinks		
20:15	VASBI Dinner		

PROGRAMME - DAY TWO

ALL SESSIONS ARE IN THE ALEXANDRA SUITE EXCEPT WORKSHOPS: PLEASE PRE-BOOK AT REGISTRATION

11.30-13.00 Workshops, First Floor: 1 - USS, Fairclough Suite (every 15mins); 2 - Fistula Disfunction Diagnosis & Management, Lancaster Suite (every 45mins); 3 - Home Dialysis, Royce Suite (every 15mins); 4 - Needling Competency, Rolls Suite (every 15mins)

TIME	SESSION & TOPIC	CHAIR*/SPEAKER
08:00-09:30	Vascular Access Nurses Meeting (Lancaster Suite)	
08:30-09:30	Renewal of VASBI Membership	
09:30-10:30	Scientific Session 2 Please see page 9 for Titles and Presenters	Dr Johann Nicholas & Mr Paul Gibbs
10:30-11:00	Coffee, Exhibition & Posters	
11:00-11:30	Presidential Lecture My experiences in vascular access – what we have learned and what we need to learn	Mr Nick Inston* Dr Jan Trodoir
11:30-13:00	 VASBI Workshops 1: USS (Fairclough Suite) 2: Fistula Disfunction, Diagnosis & Management (Lancaster Suite) 3: Home Dialysis (Royce Suite) 4: Needling Competence (Rolls Suite) 	
13:00-14:00	Lunch & Exhibition	
13:15-13:45	WL Gore Symposium Please see page 2 for programme	
14:00-15:15	Plenary III: Guidelines in vascular access – is there any point? 1: European Best Practice Guidelines 2: Renal Association Guidelines 3: Patients View 4: Surgeons View 5: Dialysis Access Nurse view	Dr Jennifer Hanko & Mr James Gilbert Mr Nick Inston Dr Mick Kumwenda Dr Shona Matthew Mr Paul Gibbs Ms Kristine Paule
15:15-15:30	Prize-giving and close of meeting	

CPD UNDER APPLICATION

FACULTY BIOS



CV DR JHM TORDOIR

Jan HM Tordoir, MD, PhD, is associate Professor of Surgery at the department of Surgery of the University Hospital Maastricht and head of the Noninvasive Vascular Lab. In addition to vascular surgery, his specific interest is vascular access in dialysis patients. Dr Tordoir has published more than 150 papers including reviews and book chapters on vascular surgery and dialysis vascular access. He is a member of the Dutch Working group on Vascular Access and member of the European Vascular Access Society. He serves as a member or reviewer of the editorial board of several journals. In concordance with a multidisciplinary expert group of nephrologists, surgeons and interventional radiologists, he was involved in the creation of European guidelines for Vascular Access. Recently, dr Tordoir works on a netwerk of centers of excellence to improve vascular access care for hemodialysis patients. Dr. Tordoir has received several grants from the Dutch Kidney Foundation and Dutch Heart Association.



MATTHIAS KURT WIDMER, MD, FEBVS, MME (UNIBE)

Consultant Vascular Surgeon Dept. of Cardiovascular Surgery, University Hospital Bern, 3010 Bern Switzerland matthias.widmer@insel.ch

President of the Vascular Access Society 2015-2017 Member of the Swiss and the European Society of Vascular Surgery Editor of the book: "Patient safety in dialysis access", Karger 2015



DR MICHAEL WALSH

Dr Michael Walsh was appointed to faculty at the University of Limerick in 2005 where he cofounded the Centre for Applied Biomedical Engineering Research. His lab focuses on how arterial disease tissue responds to and affects treatments. Correlating mechanical properties of arterial plaques to their biological content and developing methods to numerically model drug diffusion through biological tissues is key to improving treatment methods for atherosclerosis. Elucidating the role of hemodynamics in intimal hyperplasia formation is another crucial step towards the understanding of how surgical treatments lead to disease formation and also how treatments can be improved. To date he has secured €3.2million in grant funding (21 awards) as a PI from sources including national, industrial and the EU and a further €0.8million in funding as a co-PI (4 awards) from national and industrial sources. He has mentored 7 post-doctoral researchers and graduated 15 PhD students and 17 MSc students. He has published 55 peer-reviewed journal papers (h-index = 16 (Scopus)) and 8 book chapters. He has 2 granted patents, 3 in review, a current commercialisation fund grant and a spin-out company in Q4, 2014. His current team includes 7 PhD students and 2 post-doctoral researchers.

MR. ERIC CHEMLA

Consultant Vascular Surgeon. Reader in Vascular Surgery St George's Vascular Institute, St. George's University NHS Foundation Trust

FACULTY BIOS



ARUN D PHERWANI

Mr Arun Pherwani is Consultant Vascular Surgeon at the University Hospitals of North Midlands NHS Trust, Stoke-on-Trent, United Kingdom from May 2003. He trained in Belfast, and Newcastle-upon-Tyne in Vascular Surgery and Surgery of Renal Failure & Transplantation. He is the Clinical Lead for the Staffordshire and South Cheshire Vascular Network, Director of the Staffs & South Cheshire AAA Screening Programme, and the West Midlands representative on the National Clinical Reference Group (CRG) for Vascular Surgery.

He is Fellow of The Royal College of Surgeons of England, Fellow of The Royal College of Surgeons in Ireland, Member of the Vascular Society of Great Britain & Ireland (VS) and Member of the Vascular Access Society of Great Britain and Ireland (VASGBI). His research at the Queens University in Belfast was on thrombophilia and the genetic predisposition to thrombosis as a cause of graft loss in renal transplantation.

His current research interests are around reducing the mortality from AAA surgery with peri-operative pharmacological protection and AAA screening, outcomes of AV fistulae and complex fistulae & more recently autologous and allogenic stem cell therapy in critical limb ischaemia. He has also been an investigator in national trials. He has published several papers and has lectured nationally and internationally and is recognised for providing training in Vascular Access. He enjoys providing surgical vascular access for hemodialysis for particularly disadvantaged patients from under-privileged areas in Seychelles and the Indian subcontinent and in training surgeons locally.



DR MICK KUMWENDA MSC FRCP (LONDON) FRCPE

Graduated in Manchester and completed training in nephrology and transplantation in Manchester, Liverpool and North Wales. Currently Consultant Nephrologist and Clinical Director (GIM and Emergency Medicine).

Council member British Renal Society and chair of REMEC and Society of DGH Nephrologists. Author of the Renal Association Vascular Access Guidelines and leading guideline implementation group. Research Interests: Exercise in CKD and diabetic kidney disease.



DR NICK CHALMERSConsultant Interventional Radiologist
Manchester Royal Infirmary Manchester

FACULTY LISTS

VASBI 2015 FACULTY

Mr Nick Inston Consultant Renal Surgery, Queen Elizabeth Hosptal, Birmingham

Dr Sarah Lawman Consultant Nephrologist, Royal Sussex County Hospital, Brighton

Dr Peter Littler Consultant Interventional Radiologist, Freeman Hospital, Newcastle

Mr Max Troxler Consultant Vascular Surgeon, Leeds Vascular Institute, Leeds

Dr Rob Jones Consultant Interventional Radiologist, Queen Elizabeth Hosptal, Birmingham

Dr Jennifer Hanko Consultant Nephrologist, Belfast City Hospital, Belfast

Mr Paul Gibbs Consultant Vascular Surgeon, Queen Alexandra Hospital, Portsmouth

Mr James Gilbert Consultant Vascular Surgeon, Oxford University Hospitals, Oxford

Dr Johann Nicholas Consultant Nephrologist, Royal Wolverhampton Hospital, Wolverhampton

Dr Nicholas Chalmers Consultant Interventional Radiologist, Manchester Royal Infirmary, Manchester

Mr Eric Chemla Consultant Vascular Surgeon, St George's Hospital, London

Dr Mick Kumwenda Consultant Nephrologist, Ysbyty Glan Clywyd, Wales

Mr Arun Pherwani Consultant Vascular Surgeon, Royal Stoke University Hospitals

Dr Emma Aitkin Greater Glasgow & Clyde NHS Trust

Ms Sarah Powers Heart of England Foundation Trust, Birmingham

Ms Kristine Paule Royal Free London NHS Foundation Trust

Dr Shona Matthew Project Manager ReDVA, University of Dundee

Mr Joe Leslie Brighton & Sussex University Hospital

INTERNATIONAL FACULTY

Dr Mike Walsh Science & Engineering, University of Limerick, Eire

Professor Jan Tordoir Vascular Surgery, University Hospital Maastricht, The Netherlands

Dr Matthias Widmer Vascular Surgery, University Hospital, Bern, Switzerland

SCIENTIFIC SESSION 1 - THURSDAY 24TH SEPTEMBER 2015

Session	Title	Presenter
1	Ethnicity and socio-economic factors of haemodialysis starters in an urban teaching hospital.	Kathryn Lee
2	The fate of Arterio-Venous-Fistulas that are not in use within 6 months of creation.	Joanne Todd
3	A prospective cohort study investigating the intradialytic cardiovascular physiological changes occurring during haemodialysis.	Daniele Kerr
4	Interdisciplinary Cadaveric Workshop: Our experience of an innovative educational approach to improving patients outcomes in AVG care.	Leigh Bainbridge
5	Vascular Access Nurse.	Sarah Kattenhorn
6	5 years on from our RCT on Buttonhole cannulation – where are we now?	Alison Swain

SCIENTIFIC SESSION 2 - THURSDAY 25TH SEPTEMBER 2015

Session	Title	Presenter
7	Case Report: Embolisation of the radial artery as novel treatment for Ischaemic steal syndrome in a patient with a radial-axillary ePTFE dialysis graft.	R Brambilla
8	Curvature, tortuosity and shear stress: Establishing the physiological range of the brachial artery and cephalic vein.	Leonard Browne
9	Clinical Predictors of AVF FTM- A Tale of Three Cities.	Agnes Masengu
10	Pre-operative radial artery volume flow PREDICTS arteriovenous fistula outcomes.	Agnes Masengu
11	Drug eluting balloon angioplasty for arteriovenous haemodialysis access stenosis – a systematic review and meta-analysis.	Aurangzaib Khawaja
12	Aspirex Thrombectomy in Occluded Dialysis Access – a retrospective study.	Menka Chachlani

ABSTRACT 1

Title: Ethnicity and socio-economic factors of haemodialysis starters in an urban teaching hospital

Authors: K Lee, A Murley, A Wijwardane, S Powers, T Stephenson, J Baharani, T Wilmink

Institution: Dept of Renal Medicine and Vascular Surgery, Heart of England Foundation Trust, Birmingham, B95SS

Introduction: Non-caucasions in the USA are more likely to start haemodialysis (HD) on a central venous catheter (CVC). We studied the effect of ethnicity and socio-economic status on mode of starting HD in an NHS hospital. **Methods:** Review of dialysis-sessions database from 2003 till 2011. Follow up till June 2015. Ethnicity coded from hospital records. Deprivation index calculated from postcodes and 2011 census data. Co-morbidities calculated with the Charlson Index. Date of death acquired from hospital records.

Results: 500 incident dialysis patients were analysed, 342 (68%) Caucasian, 125 (25%) Asian and 33 (7%) Afro-Caribbean. Most (47%) were from the lowest socioeconomic class and only 9% from the highest socioeconomic class. Sixty-five percent of incident HD patients started on permanent access: 322 (64%) started dialysis on an arteriovenous fistula (AVF), 125 (25%) started on a tunnelled CVC, 51 (10%) on a non-tunnelled CVC and 2 (0.4%) on a graft. Mode of starting HD was not associated with ethnicity (P = 0.87) or socioeconomic class (P = 0.87). Eighty-three percent of CVC starters were converted to permanent access. Conversion was not associated with ethnicity (P = 0.90) or socioeconomic class (P = 0.90). Patients starting on permanent access had better survival (logrank test P = 0.0005). Asians and Afro-Caribbean's were younger at start of dialysis (P = 0.0001) and had better survival on dialysis (logrank test P = 0.0001). Mode of starting dialysis, ethnicity, comorbidity-index but not socioecomic class were independent predictors of survival on dialysis in a Cox proportional hazard model adjusting for age, sex, diabetes, cause of renal failure and year of starting dialysis.

Take-home message: Ethnicity and socio-economic status had no effect on mode of starting HD. Patients of ethnic minorities and lower socioeconomic class are not disadvantaged in our hospital.

ABSTRACT 2

Title: A prospective cohort study investigating the intradialytic cardiovascular physiological changes occurring during haemodialysis.

Authors: Daniele Kerr, Emma Aitken, Richard Taylor, David Kingsmore

Institution: Department of Renal Surgery, The New South Glasgow Hospital, Glasgow

Introduction: To investigate the relationship between cardiovascular parameters in patients with end stage renal disease (ESRD) on haemodialysis (HD) through the use of bioimpedance techniques and 1-year all-cause mortality. **Methods:** Prospective cohort study. 50 patients with ESRD had cardiovascular parameters measured via bioimpedance techniques immediately pre- and post-HD. Values are presented as mean values \pm SD. P-values <0.05 were considered significant

Results: Mean pre-HD systemic vascular resistance index (SVRI) was different between congestive cardiac failure (CCF) patients (2076.3 \pm 279.2 dyn/sec/cm-5/m2) and non-CCF patients (1737.9 \pm 309.2 dyn/sec/cm-5/m2), p=0.04. The mean pre-HD SVRI for patients with a prior major adverse cardiac event (PMACE) (1937.6 \pm 244.4 dyn/sec/cm-5/m2) was different compared to non-PMACE patients (1716.3 \pm 322.1 dyn/sec/cm-5/m2), p=0.04. Post-HD CCF Δ SVRI (455.7 \pm 322.8 dyn/sec/cm-5/m2) was different compared to non-CCF patients (-259.7 \pm 481.6 dyn/sec/cm-5/m2), p=0.006. PMACE patients had a statistically significant decrease in SVRI (Δ SVRI = 32.9 \pm 441.7 dyn/sec/cm-5/m2) in response to HD versus non-PMACE patients who had an increase in their SVRI (Δ SVRI = -268.8 \pm 510.5 dyn/sec/cm-5/m2), p=0.048. 1-year all-cause mortality was 42% (n=21). 60% identified as having either intradialytic hypo- or hypertension were dead at 1-year compared to 24% who had intradialytic normotension, p=0.021.

Discussion: Patients with pre-existing cardiac disease have a different physiological pre-HD status and respond differently to the HD cardiovascular challenges. There was an association between single-session intradialytic hypertension, single-session intradialytic hypotension and 1-year all-cause mortality.

Take-home message: Intradialytic BP changes are risk factors predicting mortality within 1-year in HD patients. Further long-term studies are required to determine if intradialytic BP changes are predictors of cardiovascular mortality beyond 1-year.

ABSTRACT 3

Title: Interdisciplinary Cadaveric Workshop: Our experience of an innovative educational approach to improving patients outcomes in AVG care.

Authors: Leigh Bainbridge, Margaret Aitken and David Kingsmore

Institution: NHS Greater Glasgow and Clyde. Darlinda Charity for Renal Research

Introduction: Although recent research has found that early cannulation grafts have a valuable role to play in dialysis, with lower infection rates than TCVC, our early experience indicated that surgery and nursing care required substantially greater consideration. Educational literature consistently highlights the benefits of interdisciplinary learning to improve patient care. The aim of the study is to report the experience of a multi-disciplinary cadaveric course experience.

Methods: A two day multi-modal course of short sessions was delivered by various invited speakers from the multi-disciplinary team. Practical sessions using high fidelity cadaveric dissection allowed surgical technique to be developed and for cannulation experience of the implanted grafts. Patients with grafts also contributed in interactive sessions.

Results: Feedback from all specialties was positive in the context of overall patient planning and practical skill. **Discussion:** Cadaveric simulation with a multi-disciplinary approach to training and participation maximizes the learning potential for early cannulation grafts in their implantation, care and ongoing management. This course facilitated multidisciplinary training that would have otherwise been difficult to facilitate.

Take-home message: Worldwide, co-education of nephrologists, interventional radiologists, surgeons and Haemodialysis nurses remains difficult to facilitate but team based education opportunities provide an excellent framework to allow this, subsequently providing a higher quality of service.

ABSTRACT 4

Title: The fate of Arterio-Venous-Fistulas that are not in use within 6 months of creation

Authors: J Todd, M Savage, L A Williams, A Balakrishnan, R Chandrasekar, **Institution:** Wirral University Hospital Trust. Arrowe Park Rd, Wirral CH49 5PE

Introduction: It is accepted practice to create an Arterio-Venous-Fistula (AVF) in advance of the anticipated date of haemodialysis, However deterioration of renal function is not progressive or predictable. Unfortunately such AVFs do thrombose, even before they are ever used.

There are no evidence-based guidelines for surveillance of predialysis AVFs that may be at risk of thrombosis. Early identification and appropriate intervention of AVFs not used at 6 months following creation, could preserve fistula patency, providing access when required.

Methods: A retrospective cohort study of AVFs fashioned from January 2007 to February 2015, not in use for haemodialysis at 6 months. The AVFs underwent 6-monthly doppler surveillance whilst not in use.

Results: 92 patients were included in the study. Of these, 52 fistulas were in use at 24 weeks or more following formation (57%), 40 were still not in use at time of study (43%). Of the fistulas used at 24 weeks or more, the average wait to commence first dialysis was 47 weeks (range 25-192 weeks).

45 patients required no intervention following surveillance prior to starting dialysis (49%). 47 patients required intervention (51%); 37 angioplasty, 3 transposition, 4 revision, 1 patch, 4 ligation of collaterals. Two fistulas predictably failed and alternative access was sought

Discussion: Over half of our patients required intervention to keep their AVF patient, indicating a significant amount of AVFs develop stenosis, that may lead to thrombosis before use.

Take-home message: A significant number of predialysis-AVFs develop stenosis. A surveillance program is beneficial to identify treatable lesions therefore preserving fistula patency.

ABSTRACT 5

Title: Vascular Access Nurse

Authors: Sarah kattenhorn, Julius Dagunan, Claire Whitehill, Sophie Coles, Paul Gibbs

Institution: Wessex Kidney Centre, Queen Alexandra Hospital, Portsmouth

Safe development of button hole with PTFE Introduction Wessex Kidney Centre has a growing home haemodialysis (HHD) programme with the largest NXstage practice in Europe.

Patients with PTFE grafts were excluded as we perceived increased needling frequency would reduce graft life. Patient pressure and equity of access to our HHD programme lead us to explore using a button hole technique for PTFE grafts. This was precipitated when a HHD patient clotted his venous fistula, requiring a PTFE adductor loop. At the patient's request, we developed a protocol to develop button holes in PTFE grafts. The patient was appropriately consented prior to the trial.

Method: After successfully initiating HD using a "rope/ladder" technique, two optimum areas were identified for button holing. A Duplex scan was obtained before the first button hole was attempted. The Duplex scan was performed weekly to monitor the track's development and identify early problems that might occur.

Transonic fistula flow measurement was performed weekly.

Results: The tracks formed quickly and blunt needles were used within 2 weeks. Shortly after, the patient began to self-needle and has now been self cannulating problem free since January 2015. All transonic measurements have remained stable.

Discussion: As a result of this success, we have identified and commenced button holing two more patients with PTFE grafts. One upper limb graft and another patient with a leg loop. These patients started in April 2015. To date there have been no problems identified.

Take Home Message: We conclude it is safe to develop button holes with PTFE grafts.

ABSTRACT 6

Title: 5 years on from our RCT on Buttonhole cannulation – where are we now?

Authors: Alison Swain, Renal Vascular Access Nurse, Dr. Emma Vaux, FRCP DPhilConsultant Nephrologist and Vascular Access Lead.

Institution: Royal Berkshire NHS Foundation Trust

Introduction: 5 years on from our RCT, we have reviewed our experience with buttonhole cannulation for autologous fistulae.

Methods: 75% of our AVF are cannulated using buttonhole. There were no bacteraemias in 2010 or 2011. In 2012 we had 3 AVF related bacteraemias, 1/3 using buttonhole. In 2013 we had 5, 1/5 using BH. In 2014 we experienced a cluster of 8 bacteraemias, 7/8 using buttonhole, also resulting in severe complications. Root cause analysis was undertaken.

Results: 6/7 buttonhole patients had MSSA bacteraemias (2/7 developed infective endocarditis) and 1/7 enterococcus faecalis (and presumed IE). Common themes identified were 6/7 were colonized with MSSA/MRSA, decolonisation practice was suboptimal and our strict hygiene regime was not adhered to. We amended practice and developed new exclusion criteria for BH cannulation. Of 201 prevalent patients with autologous fistulae, 51 had one or more exclusion criteria , 47/51were using buttonhole. 24/51patients have since changed back to sharp needling. The remainder either elected to accept the potential higher risk or had fistulae not amenable to sharp needling.

Discussion: We believe the key to a successful buttonhole programme is to employ an individualised approach, utilising our selection criteria. 6 months on, having implemented changes to our standard operating procedures and strict adherence to basic hygiene, we have had no further bacteraemias.

Take-home message: Buttonhole technique has been shown to have benefits but should be used with caution in some patients. Our newly established exclusion criteria are helping to ensure we minimize the risks of infection.

ABSTRACT 7

Title: Case Report: Embolisation of the radial artery as novel treatment for Ischaemic steal syndrome in a patient with a radial-axillary ePTFE dialysis graft

Authors: R Brambilla, I Mohamed, H Mistry, D Huang, D Valenti.

Institution: King's College Hospital

Ischaemic Steal Syndrome (ISS) is a severe complication that can occur in patients with an autologous arteriovenous fistula or graft as vascular access for dialysis.

We describe the case of a 68-year-old lady with renal failure secondary to nephrolithiasis who presented with rest pain and ischaemic lesions on the fingertips of her right hand one year following insertion of a radial – axillary ePTFE graft in a patient known to have a high bifurcation of the brachial artery.

Clinical examination revealed a painful right hand with reversible ischaemic changes to the thumb and index finger. The graft had a good bruit and a radial pulse was present.

Duplex scans revealed a functioning graft with 1100ml/min flow with retrograde flow in the radial artery. Pulsatile antegrade flow was seen in the ulnar artery.

Her case was discussed at length in renal and vascular multidisciplinary meetings.

Her symptoms were treated successfully by embolization of the radial artery distal to the arterial anastomosis. The Patient was immediately pain free and the skin lesions are now healing. Her dialysis graft continues to function well.

Take-home message: Distal embolization of the radial artery can be an effective treatment in selected patients with ischemic steal syndrome associated with vascular access.

ABSTRACT 8

Title: Curvature, tortuosity and shear stress: Establishing the physiological range of the brachial artery and cephalic vein

Authors: L.D. Browne¹, S.P.Broderick¹, S.Morley¹, E.Kokkalis², N. Aristokleous ², J.G. Houston ² and Michael T.Walsh¹ **Institution:** CABER, Department of Mechanical, Aeronautical and Biomedical Engineering, and Materials and Surface Science Institute, University of Limerick, Ireland.

Introduction: Vascular remodeling occurs in response to a deviation from a physiological range. Although a growing body of evidence exists suggesting arteriovenous fistulae (AVF's) remodel to normalize hemodynamic forces to a physiological range. Little to no data exists describing the physiological state of the brachial artery or cephalic vein which are often considered for AVF creation.

Methods: A non-contrast magnetic resonance imaging (MRI) sequence and computational fluid dynamics (CFD) were combined in 3 young adult volunteers. Subjects were scanned in supine and prone positions to assess the influence of position on geometric and hemodynamic parameters for the brachial artery. Venous data was obtained in the supine position only. CFD modelling was undertaken on these reconstructions; shear stress metrics, bulk flow descriptors and measures of curvature and tortuosity were extracted.

Results: Two brachial arteries exhibited antegrade flow resulting in time averaged wall shear stress (TAWSS) of 1.5 and 2.3 Pa versus 0.42 Pa for a retrograde case. Prone values were 1.1, 0.85 and 0.24 Pa respectively. The retrograde case had higher oscillatory forces and negative temporal gradients. Venous flow was antegrade in all cases resulting in TAWSS of 0.12, 0.71 and 0.31 Pa. Negative temporal gradients were recorded and oscillating forces were negligible.

Discussion: One key findings of this study is that retrograde flow in the vein is un-physiological. Therefore, geometrical variations following AVF creation resulting in regions of flow reversal in the vein may be detrimental, whether the level of TAWSS in those regions is unfavorable will depend on the vessels preconditioned physiological range.

ABSTRACT 9

Title: Clinical predictors of AVF FTM - A tale of three cities

Authors: Agnes Masengu, Alexander P. Maxwell, Jacek Jastrzebski, Nadia Zalunardo N, Jennifer B. Hanko.

Institution: Regional Nephrology Unit, Belfast City Hospital, 51 Lisburn Road, Belfast BT9 7AB.

Background: Arteriovenous fistula (AVF) failure to mature (FTM) rates contribute to excessive dependence on dialysis catheters for hemodialysis. Vascular access planning is guided largely by age, co-morbidities and clinical examination. We investigated the clinical predictors of AVF FTM in a Canadian and European cohort of patients and subsequently applied the Lok et al1 clinical risk prediction model for AVF FTM (derived in 2005 from a population in Toronto).

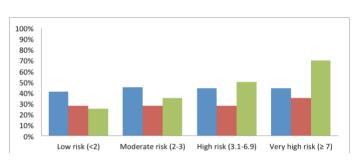
Methods: A retrospective cohort study was designed that included all patients undergoing AVF creation between January 2005-December 2011 in Vancouver General Hospital (VGH) and January 2009 and December 2014 in Belfast City Hospital (BCH) who had a functional AVF outcome.

Results: 368 at VGH and 525 patients in BCH were included in the FTM analysis. 262 (71%) of patients in VGH and 309 (59%) patients in BCH achieved functional AVF patency. On logistic regression, female and lower arms AVF were associated with AVF FTM in both cohorts. In the VGH cohort, diabetes was also associated with FTM. The Lok et al model did not predict FTM outcomes based on the associated risk stratification in the VGH and BCH populations.

and Vancouver cohort versus the predicted outcomes for this cohort using the Lok et al risk model (Toronto cohort). **Discussion:** The Lok et al FTM risk prediction model was not found to be discriminative in the VGH and BCH populations. Clinical risk factors for AVF FTM vary

Figure 1: Observed clinical FTM outcomes in the Belfast.

was not found to be discriminative in the VGH and BCH populations. Clinical risk factors for AVF FTM vary between populations; we would recommend that units investigate their own clinical predictors of FTM to maximize AVF functional patency and ultimately survival in dialysis patients.



Take Home Message: Clinical predictors of AVF FTM may not be sufficient on their own to improve vascular access functional patency rates. The role of ultrasound assessment in addition to clinical factors requires further exploration. **Reference**: 1.Lok CE, Allon M, Moist L, et al. Risk equation determining unsuccessful cannulation events and failure to maturation in arteriovenous fistulas (REDUCE FTM I). J Am Soc Nephrol 2006;17(11):3204-3212

ABSTRACT 10

Title: Pre-Operative Radial Artery Volume Flow Predicts Arteriovenous Fistula Outcomes

Authors: Agnes Masengu, Alexander P. Maxwell, Jennifer B. Hanko.

Institution: Regional Nephrology Unit, Belfast City Hospital, 51 Lisburn Road, Belfast BT9 7AB.

Introduction: Guidelines recommend the creation of a wrist radiocephalic arteriovenous fistula (RAVF) as initial hemodialysis vascular access. This study explored the potential of pre-operative ultrasound vessel measurements to predict AVF failure to mature (FTM) in a cohort of patients with end-stage renal disease (ESRD) in Northern Ireland.

Methods: A retrospective analysis was performed of all patients who had pre-operative ultrasound mapping of upper limb blood vessels carried out from August 2011 to December 2014 and whose AVF reached a functional outcome by March 2015.

Results: One hundred and fifty-two patients (97% Caucasian) had ultrasound mapping and an AVF functional outcome recorded. Eighty (53.7%) had an upper arm AVF created and 69 (46.3%) had a RAVF formed. Logistic regression analysis of the RAVF cohort revealed that female gender (odds ratio 4.67, confidence interval Cl 1.13- 19.30, P = .033), minimum vein diameter (MVD) (odds ratio .40, confidence interval .17-.97, P = .043) and a radial artery volume flow <50 mL/min (odds ratio 5.5, confidence interval 1.64 – 17.92, P = .006) were associated with FTM. Patients with a MVD <2.7 mm were three times more likely to have FTM than those with a MVD >2.7 mm (P = .023 OR 3.21, Cl 1.15-8.94).

Discussion: In this cohort a radial artery flow rate < 50 mL/min was associated with almost a six-fold increased risk of FTM in RAVFs. Ultrasound adds objective assessment to clinical prediction of FTM.

Take Home Message: Pre-operative blood vessel assessment by ultrasound is a useful tool that increases the proportion of AVFs made, and helps in the subsequent prediction of AVF outcomes.

ABSTRACT 11

Title: Drug eluting balloon angioplasty for arteriovenous haemodialysis access stenosis – a systematic review and meta-analysis.

Authors: Aurang Z. Khawaja¹, Deirdre B. Cassidy², Julien Al Shakarchi¹, Damian G. McGrogan¹, Nicholas G. Inston¹, Robert G. Jones³

Institutions: ¹Department of Renal Transplant Surgery & Vascular Access, New Queen Elizabeth Hospital, Birmingham, B15 2GW, UK. ²Division of Diabetes and Cardiovascular Medicine, University of Dundee, DD19SY, UK. ³Department of Radiology, New Queen Elizabeth Hospital, Birmingham, B15 2GW, UK

Introduction: Native or prosthetic arteriovenous fistulas are preferred for permanent haemodialysis access. These are marked with circuit steno-occlusive disease. Standard angioplasty balloons are an established intervention however, restenosis rates are high &practice guidelines recommend a wide 6month primary-patency (PP) of 50%. Neointimal hyperplasia is one of the main causes of access stenosis. Drug eluting angioplasty balloons (DeBs) have been proposed as an alternative for reducing restenosis. We carried out a systematic review &meta-analyzed the evidence from RCTs &cohort studies their reported efficacy &safety in dialysis access intervention.

Methods: PRISMA-P,MOOSE &PRISMA statements were followed for protocol development &reporting of results. An electronic database(Medline,EMBASE,CENTRAL &Clinicaltrials.gov)search was carried out.Data from included studies comparing DeBs to non-DeBs was pooled using a random-effects meta-analysis model.

Results: Six studies reported on 254 interventions in 162 participants (mean 27±10 SD). Pooled mean & median duration of follow-up was 12 &13 months (range 6-24). Participant mean age was 64±5 years &61% were male. Procedural success rates were 100% across the studies. Device failure (wasting of DeB) was reported in two studies (55% &92.8%). Target lesions (TLs) ranged between 2mm-5.9mm &51 were denovo stenosis. At 6months TL-PP for DeBs & non-DeBs was between 70% &97% &0% to 26%. TL treated with DeBs were associated with a higher PP at 6months (RCTs:odds-ratio [OR] 0.25, 95% CI 0.08-0.77 & 12=19%, cohort studies: OR 0.10, 95% CI 0.03-0.31 &12=20%). No procedure related complications were reported.

Conclusions: Current literature suggest DeBs as being safe &may convey some benefit in terms of improved rate of restenosis when compared to non-DeBs in prosthetic &autologous HD access stenosis. However, this body of evidence is small &interpretation of results is recommended with an appropriate degree of caution

ABSTRACT 12

Title: Aspirex Thrombectomy In Occluded Dialysis Access – A Retrospective Study

Authors: Miss Menka Chachlani, Dr Joao Rosa, Dr J Dyer, Dr J Nicholas

Institutions: New Cross Hospital, Wolverhampton

Purpose: A large proportion patients having haemodialysis (HD) treatment rely on either an arterio-venous fistula (AVF) or a polytetrafluoethylene graft (PTFE) for access. Thrombosis poses a big burden for these type of accesses and for patients and health providers. Percutaneous mechanical thrombectomy (PMT) has established itself as the most effective management option, with several different PMT devices emerging. This study is the first to present the outcomes of the Straub Aspirex device in this context.

Material and Methods: This is a retrospective study, using data from the Renal Unit and Radiology Department database. It included all the patients that underwent PMT using the Aspirex device between 2010 and 2014. Primary patency was defined as ability to successfully dialyse trough the treated access. Access survival was assessed using the Kaplan-Meier method and multi-variate analysis preformed using the Cox proportional hazards model. Significance was considered if p < 0.05.

Results: A total of 27 accesses were treated using the device with similar proportion of both AVFs and PTFE grafts. Immediate technical success was achieved in 81.5% of the patients, with primary patency cumulative survival rates of 52%, 43.29% and 33.77% at days 30, 90 and 480, respectively, without significant difference on all analysed covariates. No major complications occurred.

Conclusion: This study is the foundation for the use of this device in this field. The outcomes are comparable to other devices and it has proven to be safe. Further studies are necessary, with larger number of patients and adequate randomisation to fully evaluate this intervention.

POSTER LIST

- 1. A retrospective review of patients starting haemodialysis via catheter then via AVF (arteriovenous)
 Price, A, Ismail D, Wilmink T, Baharani J Heart of England Foundation Trust
- 2. Long-term outcome of arteriovenous fistula using PTFE grafts: A single centre experience
 Alan Hua, Ashar Wadoodi, Susana Fernandez-Diaz, Roberto Cacciola, Carmelo Puliatti, Cinzia Sammartino,
 Rajesh Sivaprakasam

Institution / Affiliations: Renal Transplant Unit, Royal London Hospital, London.

3. Salvage of arteriovenous fistula using interventional radiological techniques: Does age of the fistula matter?

Aksa Batul Ahmed & Deshveer Singh Babra, Ashar Wadoodi, Susana Fernandez-Diaz, Roberto Cacciola, Carmelo Puliatti, Cinzia Sammartino, Rajesh Sivaprakasam Institution / Affiliations: Renal Transplant and Access unit, Royal London Hospital, London

4. Chronic Haemodialysis patients who commence and end RRT via central venous catheters - a single centre experience

D Ismail, A Price, T Wilmink and J Baharani Institution / Affiliations: Birmingham Heartlands

5. Outcomes of non-needled and needled aneurysmal arteriovenous fistulae

IH Mohamed, R Brambilla, H Mistry, D Valenti Kings College Hospital London

- 6. Prevalence of High Bifurcation of Brachial Artery in patients with end stage renal failure IH Mohamed, L Gowling, R Brambilla, H Mistry, D Valenti Kings College Hospital London
- 8. The effect of position on arterial and venous geometry in the arm: a single case observational study Stephen P Broderick1, Stephen J Gandy3,4, Leonard D Browne1, Efstratios Kokkalis2, J Graeme Houston2,3, Michael T Walsh1
 - 1. Centre for Applied Biomedical Engineering Research (CABER), Department of Mechanical, Aeronautical and Biomedical Engineering (MABE), Material and Surface Science Institute (MSSI), University of Limerick, Limerick, Ireland. 2. Cardiovascular and Diabetes Medicine, Ninewells Hospital and Medical School, University of Dundee, UK. 3. Department of Clinical Radiology, Ninewells Hospital, National Health Service (NHS) Tayside, Dundee, UK. 4. Department of Medical Physics, Ninewells Hospital, National Health Service (NHS) Tayside, Dundee, UK.
- 9. Haemodynamic advantages of a spiral arteriovenous graft; a computational study
 E. Kokkalis1, S.P. Broderick2, L.D. Browne2, N. Aristokleous1, M.T. Walsh2, J.G. Houston1
 1Division of Cardiovascular and diabetes Medicine, Ninewells Hospital and Medical School, University of Dundee, UK. 2CABER, Department of Mechanical, Aeronautical and Biomedical Engineering, Materials and Surface Science Institute, University of Limerick, Ireland
- 10. The influence of arm position on the geometric features of the Brachial Artery and Basilic Vein Aristokleous(1), S. Matthew(1), S. Gandy(2), E.Kokkalis(1), L.D. Browne(3), S.P. Broderick(3), M.T. Walsh(3), and J. Graeme Houston(1) Institution / Affiliations: (1) Department of Cardiovascular and Diabetes Medicine, School of Medicine, University of Dundee, Dundee, UK. (2) Medical Physics, NHS Tayside, Ninewells Hospital and Medical School, Dundee, UK. (3) CABER, Department of Mechanical, Aeronautical and Biomedical Engineering, and Materials and Surface Science Institute, University of Limerick, IRL

POSTER LIST

14. Achieving and maintaining the renal association guidelines for incident and prevalent patients commencing haemodialysis

Access Nurse Tamasin Stevenson and Access Nurse Specialist Sarah Powers Heart Of England Foundation Trust

15. Use of a Safeguard® Pressure Assisted Dressing in Achieving Haemostasis Following Fistula Intervention

Daniel Conroy, Jennifer Hanko, Richard Lindsay Belfast City Hospital

17. Achieving and maintaining the renal association guidelines for incident and prevalent patients commencing haemodialysis

Access Nurse Tamasin Stevenson and Access Nurse Specialist Sarah Powers Institution / Affiliations: Heart of England Foundation Trust

21. Pre-operative Ultrasound Vessel Mapping: Charting a Path Towards Improved AVF Outcomes

Agnes Masengu, Alexander P. Maxwell, Jennifer B. Hanko Belfast City Hospital

22. Starting peritoneal dialysis at the age of ≥65 years- swimming against the tide?

Agnes Masengu, Colin Craig, Chris J. Hill, Jennifer B. Hanko, Alexander P. Maxwell Belfast City Hospital

25. Surgical Intervention to Salvage a Clotted Fistula - Is It Worthwhile?

W. Maclean, C. Ettles, P. Gibbs, K. Graetz Institution / Affiliations: Wessex Kidney Centre, Queen Alexandra Hospital, Portsmouth

27. Paclitaxel assisted balloon Angioplasty of Venous stenosis in haEmodialysis access (PAVE); A double-blind randomised controlled clinical trial to determine the efficacy of paclitaxel-assisted balloon angioplasty of venous stenoses in haemodialysis access

Narayan Karunanithy, Irene Rebollo Mesa, Anthony Dorling, Francis Calder, Konstantinos Katsanos, Vikki Semik, Emily Robinson, Neelanjan Das, Timothy Doulton, Colin Forman, Bhaskar Ganai, Anthony Goode, Praveen Jeevaratnam, Dimitrios Kirmizis, Sarah Lawman, Matthew Metcalfe, Kate Steiner, C Jason Wilkins and Michael G Robson

Institution / Affiliations: King's College London, Guy's and St Thomas' NHS Trust, Brighton and Sussex University Hospitals NHS Trust, East and North Hertfordshire NHS Trust, East Kent Hospitals NHS Trust, Kings' College Hospital NHS Trust, Royal Free London NHS Trust

28. Comparison of the primary patency and primary assisted patency of primary insertions of the medcomp split cath and palindrome dialysis catheters

Dr Shilpi Pal

Ninewells Hospital, Dundee

29. The Omniflow II bio-graft for haemodialysis in patients with previously infected synthetic arteriovenous grafts.

P Yates, J Alshakarchi, D McGrogan, N Inston University Hospitals of Birmingham NHS Trust

33. Improving the safety of patients with an arteriovenous fistula or graft: to reduce the risk of vascular access haemorrhage (VAH)

Lynn Davies, Elaine Saunders (Dialysis access nurse specialists) Mike Stephens, Adel Ilham (Consultant surgeons)

POSTER LIST

34 Improving the Thrombolysis Regime for Central Venous Catheters

Saunders E¹, Davies L¹, Thomas H², Donovan K³, Benzimra R⁴ and Bradley R²
¹Specialist Dialysis Access Nurse, ²Renal Pharmacist ³Consultant Nephrologist, ⁴Associate Specialist. University Hospital of Wales, Cardiff and Vale University Health Board

35. Intra- & inter-operator variability of inflow volume-flow measurements in the haemodialysis patient cohort with arteriovenous fistulae

Philip Hickman: North Bristol NHS Trust & University of Newcastle

36. A novel classification system for autogenous arteriovenous fistula aneurysms in renal access patients

Valenti D., Mistry H., Stephenson M

Institution / Affiliations: Dept of Vascular Surgery King's College London

37. If the mountain won't come to Mohammed..." Providing short specialist education sessions to Haemodialysis staff is key to optimizing graft care and ensuring positive patient experiences.

Leigh Bainbridge and Margaret Aitken

Institution / Affiliations: NHS Greater Glasgow and Clyde. Darlinda Charity for Renal Research

38. The Role of the Health Care Assistant within a busy Renal Access Team

Christopher Dunbar (Renal Access HCA), Sarah Powers (Renal Access Nurse Specialist) Heart of England Foundation Trust, Birmingham, UK

39. Achieving and maintaining the renal association guidelines for incident and prevalent patients commencing haemodialysis.

Access Nurse Tamasin Stevenson and Access Nurse Specialist Sarah Powers Heart Of England Foundation Trust

40. Should Abdominal X-rays be done routinely post blind implantation of single cuff peritoneal catheters? A single centre experience.

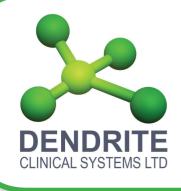
Kiranmai Bhatt, Roger Adkins, Teun Wilmink and Jyoti Baharani Heart of England Foundation Trust, Birmingham, UK

42. Is artery diameter or vein diameter the most important determinant of the gender bias in primary AVF failure?

Maria Corte-Real Houlihan, Sarah Powers, Tami Stephenson, Jyoti Baharani, Teun Wilmink Institution: Department of Vascular Surgery and Renal Medicine, Heart of England Foundation Trust, Birmingham.

43. Case Review Learning from a Catastrophic Infection related to Button Hole Needling in 27 year old home HD patient.

Allie Thornley (Matron Dialysis/PD, Oxford Kidney Unit), Nicki Angell-Barrick (Vascular Access Advanced Nurse Practioner)



Dendrite Clinical Systems Ltd

Contact: Dr Peter K.H. Walton

Tel: 01491 411 288

Email: peter.walton@e-dendrite.com

Web: www.e-dendrite.com

"Dendrite will be demonstrating the New National Vascular Access Web-Registry system – please visit the exhibition stand for a walk-through the database and to provide your details so that you can be registered to start using the Registry."

MEMBERSHIP FORM

REGISTRATION DETAILS

PLEASE COMPLETE FORM BELOW IN BLOCK CAPITALS

DESIGNATION: Pr	of/Dr/Mr/Mrs/Ms/Other:	
SURNAME:	FORENAME:	
CONTACT ADDRE	SS:	
	POSTCODE:	
TEL:		
EMAIL:		
BADGE NAME: _	HOSPITAL/COMPANY: SPECIALITY:	
	REGISTRATION FEES	
FULL REGISTRATION RATES (PLEASE TICK RATE): CONSULTANT* = £400 NURSE* = £250 TRAINEE* = £300 ADDITIONAL EXHIBITOR ATTENDEES = £400 (*Fees include membership renewal, 1 night accommodation (25th Sept 2014 Holiday Inn ONLY), 2 day attendance & Gala Dinner)		
☐ THURSDAY = £	DAY DELEGATE RATES (DAILY RATE: PER DAY ATTENDANCE ONLY): 150 FRIDAY = £150 BOTH DAYS = £300	
ADDITIONAL DINNER TICKET = £50 EACH. REQUIRE ADDITIONAL DINNER TICKETS.		
ACCOMMODATION: (*PLEASE NOTE THAT ACCOMMODATION IS INCLUDED IN THE FULL REGISTRATION FEE ONLY) *Holiday Inn Stratford Upon Avon: 25th September 2014 B&B only. Included in full registration Fee. For Additional nights please contact the VASBI conference office (Details below).		
PAYMENT – HOW TO PAY		
CHEQUE: ONLINE: BACS: INVOICE:	I enclose cheque for amount £ made payable to <u>Vascular Access Society of Britain & Ireland</u> . I will pay online at vasbi.org.uk I wish to pay Electronically / BACS. Please email bank details. Please invoice: Please contact the conference organiser if an invoice has to be raised to a third party.	

CONFIRMATION OF MEMBERSHIP AND OR REGISTRATION WILL BE FORWARDED ON RECEIPT OF COMPLETED FORM AND PAYMENT.
PLEASE SEND COMPLETED FORMS TO THE VASBI SECRETARIAT AT THE ADDRESS BELOW.

CANCELLATION TERMS: 15% ADMIN CHARGE FOR CANCELLATIONS UP UNTIL THE 1ST AUGUST 2014. NO REFUND AVAILABLE AFTER THIS DATE. NAMED SUBSTITUTIONS AVAILABLE, PLEASE CONTACT CONFERENCE OFFICE IN WRITING.



www.vasbi.org.uk CPD APPLIED

ALL ENQUIRIES:

Conference Office, VASBI Ltd , PO Box 2769, Bearsden, Glasgow, UK , G61 4WR T: +44 (0) 141 942 8104 F: +44 (0) 141 942 8278 E: ruth.moss@ntlworld.com