

Hypertension & Kidney Research News



Renal Department, St George Hospital

<https://stgrenal.org.au/>

HyperKid Issue 1 July 2017

On the pulse 21 Jun 2017

St George Hospital raising awareness of preeclampsia



The Obstetric Medicine Research Group at St George Hospital (pictured) recently held a free event at St George Leagues Club to raise awareness of preeclampsia during pregnancy.

The event was widely attended by health professionals and community members and was organised in collaboration with the St George & Sutherland Medical Research Foundation (SSMRF) and the Heart Foundation.

Associate Professor **Greg Davis**, Senior Specialist Obstetrician, St George Hospital said there are increasing numbers of women diagnosed with conditions such as

preeclampsia and gestational diabetes during pregnancy.

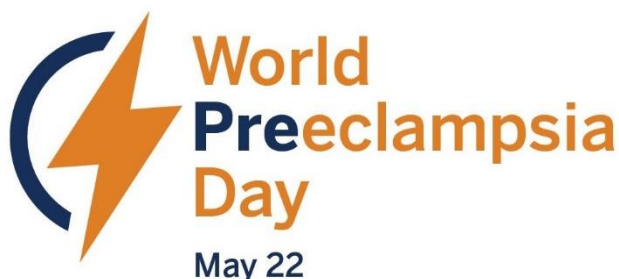
"Not only do these conditions need to be managed for the health of mother and baby during pregnancy, they also provide a unique window into a woman's potential health risks for heart disease and diabetes in the future," Greg said.

The World Health Organisation estimates that preeclampsia and related hypertension in pregnancy affects about 10 million women per year worldwide, leading to the deaths of 76,000 mothers and about half a million babies.

In Australia, 30,000 women each year will develop high blood pressure in pregnancy and 10,000 of these will have preeclampsia.

Kerry Doyle, NSW Chief Executive, Heart Foundation, said the diagnosis of preeclampsia in pregnancy provides a golden opportunity to identify a group of at-risk young women early in their lives, and to start preventive measures such as control of weight, blood pressure, cholesterol and diabetes, to reduce their long-term risk of heart disease.

http://seslnweb/CE_Newsletter/2017/6/21/default.asp



Recently completed studies:

SPIRIT – Survey of Patients with Resistant Hypertension

To estimate the prevalence and incidence of true resistant treatment hypertension in adults. Data was collected from our Ambulatory blood pressure data base and CKD renal outpatient clinic.

Study status: closed. Recruited 30 patients.

PI: A/Prof Badve

Contact: Saiyini 9113 2484

Sponsor: The George Institute for Global Health

Studies in progress:

Hypertension

1. Simplicity- HTN- Renal Denervation in patients with uncontrolled hypertension

Single-blinded, randomized, controlled study of the safety and effectiveness of renal denervation in subjects with uncontrolled hypertension. Bilateral renal denervation will be performed using the Symplicity Catheter - a percutaneous system that delivers radiofrequency (RF) energy through the luminal surface of the renal artery.

Status: Recruitment closed. Follow up continues.

PI: A/Prof Mangos

Contact: Jenny 9113 2621

Sponsor: Medtronics

2. P4: Postpartum physiology, psychology and paediatric assessment

Investigating the physical and mental health of women and the health and development of their babies at 6 months, 2 years and 5 years postpartum in women who were normotensive in pregnancy, or had either gestational hypertension or preeclampsia. Also includes a subsequent pregnancy assessment and follow-up.

Status: in progress

PI: A/Prof Davis / Prof Brown

Contact: Lynne 9113 2117

CKD

3. CKD-FIX: A randomised controlled trial of slowing of kidney disease progression from the inhibition of Xanthine oxidase

Aim is to find out whether treatment with allopurinol, safely and effectively slows CKD progression.

Status: Closed for recruitment- FU continues.

PI: A/Prof Badve

Contact: Paula 9113 1439

Sponsor: Australian Kidney Trials Network

4. Can we predict renal failure for our population?

Retrospective data analysis of patients who have commenced dialysis to validate Tangri and other available formulae to our population.

Status: in progress
PI: A/Prof Katz and A/Prof Kelly
Contact: Kylie/Saiyini 91132484

5. Uric Acid and Renal outcomes.

Systematic review of observational study, association of uric acid with clinical outcomes in CKD will be studied.

Dr Nasir Shah (BPT)
Supervisor: A/Prof Badve



Research Fellow

6. Benefits and harms of Vitamin D therapy in CKD.

In this systematic review of randomised controlled trials, benefits and harms of vitamin D therapy in people with CKD will be studied.

Dr Wing Chi GiGi Yeung
Supervisor: A/Prof Badve and A/Prof Mangos

7. Bone disease in pre-dialysis CKD.

Despite the high fracture rate and symptomatic burden of bone mineral disease, there is very little information on bone disease in pre-dialysis patients. This prospective study will evaluate characteristics and determinants of bone disease in pre-dialysis patients by using dual energy X-ray absorptiometry, high resolution MRI and markers of bone turnover.

Dr Wing Chi GiGi Yeung
Supervisor: A/Prof Badve and A/Prof Mangos

Dialysis

8. PDOPPS: Peritoneal dialysis outcomes and practice patterns study

Identify modifiable practices associated in PD technique and patient survival.

Status: in progress
PI: A/Prof Badve
Contact: Claire/Emma 9113 3775
Sponsor: Australian Kidney Trials Network

9. REDUCCTION: Reducing the burden of dialysis catheter complications: A National approach

To define the clinical and economic burden of dialysis catheter exposure and bacteraemia across Australia and New Zealand.

To reduce dialysis catheter related bacteraemia through implementation of an evidence based and systematic intervention package.

Status: in progress

PI: A/Prof Badve

Contact: Yanella/Chris 9113 3818

Sponsor: The George Institute

10. CoDeBiSMESH: Comparative dynamic echocardiography, bioimpedance spectrometry and mean systemic filling pressure in HD patients.

To establish usual values of mean systemic filling pressure (Pms) measured by measured by rapid vascular occlusion in isolated limb in patients with chronic renal failure presenting for routine elective haemodialysis session.

To assess dynamic changes in Pms (arm) in response to a defined removal of fluid volume from circulation during haemodialysis.

To find dynamic relationships between classical echocardiographic measurements, bioimpedance spectroscopy measurements and invasive measurements of Pms (arm) in patients HD patients

Status: in progress

PI: A/Prof Yastrebov/A/Prof Katz

Contact: Yanella/Chris 9113 3818



Renal Supportive Care

11. Quality of death	Quality of death in hospital with RSC vs no support	Urban	In progress (20)	Kat Urban
12. Gabapentin	Efficacy and side effects of gabapentin - uraemic pruritus	Brennan/Brown	In progress	Liz
13. Understanding and decision making	Understanding and decision making during ESKD	Li	In progress	Kelly Li
14. Prognostic tool	Design a prognostic tool for patients on non-dialysis pathway and then validate	Shina	In progress	Shampa Shina
15. Surprise question	Predictive value of surprise question	Li	In progress	Anna
16. QOL	Annual survey of QOL	Brown/Brennan	In progress	Liz
17. Health literacy	Health literacy of patients and self-identified surrogate decision maker	Brown/Brennan	In progress	Jess/Hannah
18. iPOS	Symptom score assessment after attendance at RSC clinic	Li/Brennan	In progress	Kelly Li

Future studies:

ASCEND – D and ASCEND- ND (dialysis and non-dialysis population)

Phase 3 Randomised, open label (sponsor blind), active controlled, parallel group, multicentre, event driven study in dialysis subjects with anaemia associated with chronic kidney disease to evaluate the safety, efficacy of daprodustat compared recombinant human erythropoietin, following switch from erythropoietin-stimulating agents.

Status: commencement August
 PI: A/Prof Badve
 Contact: Paula/Saiyini 91132484
 Sponsor: GSK

CARSK: Canadian-Australasian Randomised Trial of Screening Kidney Transplant Recipients for Coronary Artery Disease.

Regular cardiac screening vs no regular screening of patients on transplant waiting list.

Status: commencement September
 PI: A/Prof Badve
 Contact: Tania 91134205
 Sponsor: The University of Sydney/NHMRC

Randomised controlled trial to determine the feasibility, efficacy and safety of prescribed water intake to prevent kidney failure due to Autosomal Dominant Polycystic Kidney Disease.

Status: waiting for ethics approval
PI: A/Prof Badve
Contact: Saiyini 91132484

Effect of non-dialysis

Measurement of sarcopenia and frailty of non-dialysis patients.

Status: Recruitment to commence soon
PI: Prof Brown
Contact: Jess 9113 1533

Haemoglobin and Fatigue Score

Hb management and use of ESA in RSC patients

Status: Retrospective data collection (ethics to be approved)
PI: Prof Brown
Contact: Kelly 9113 1590

Recent Publications:

1. **Brennan, FP**, Stewart C, **Burgess H**, Davison SN, Moss AH, Murtagh FE, Germain M, Tranter S, Brown M. Time to improve informed consent for dialysis: An international perspective. Clin J Am Soc Nephrol DOI:10.2215/CJN.09740916
2. Chan S, Cho Y, Koh YH, Boudville NC, Clayton PA, McDonald SP, Pascoe EM, Francis RS, Mudge DW, Borlace M, **Badve SV**, Sud K, Hawley CM, Johnson DW. Association of Socio-Economic Position with Technique Failure and Mortality in Australian Non-Indigenous Peritoneal Dialysis Patients. Perit Dial Int. 2017 Jul-Aug;37(4):397-406. doi: 10.3747/pdi.2016.00209. Epub 2017 Feb 9. PubMed PMID: 28183859.
3. Davis G, Gibson K, Casley D, **Brown MA**. Angiotensin II/ Angiotensin (1-7) ratio and 24 hr. blood pressure throughout the menstrual cycle and in women using oral contraceptives J Hypertension . 2017; 35: 1178-1186.
4. Foo J, Davis GK, Kwok B, **Brown MA**. Frontal lobe meningioma mimicking pre-eclampsia: a case study. Obstetric Medicine. 2017. **online:** May 15, 2017 (in press)
5. Gummer J, Trengove R, Pascoe EM, **Badve SV**, Cass A, Clarke P, McDonald SP, Morrish AT, Pedagogos E, Perkovic V, Reidlinger D, Scaria A, Walker R, Vergara LA, Hawley CM, Johnson DW, Olynyk JK, Ferrari P; HERO Study Collaborative Group. Association between serum hepcidin-25 and primary resistance to erythropoiesis-stimulating agents in chronic kidney disease: a secondary analysis of the HERO trial. Nephrology (Carlton). 2017 Jul;22(7):548-554. doi:10.1111/nep.12815. PubMed PMID: 27171136.
6. Htay H, Cho Y, Pascoe EM, Darssan D, Hawley CM, Clayton PA, Borlace M, **Badve SV**, Sud K, Boudville NC, McDonald SP, Johnson DW. OUTCOMES OF CORYNEBACTERIUM PERITONITIS: A MULTICENTER REGISTRY ANALYSIS. Perit Dial Int. 2017 Jul 11. pii: pdi.2017.00028. doi: 10.3747/pdi.2017.00028. [Epub ahead of print] PubMed PMID: 28698253.

7. Htay H, Cho Y, Pascoe EM, Darssan D, Nadeau-Fredette AC, Hawley C, Clayton PA, Borlace M, **Badve SV**, Sud K, Boudville N, McDonald SP, Johnson DW. Multicenter Registry Analysis of Center Characteristics Associated with Technique Failure in Patients on Incident Peritoneal Dialysis. Clin J Am Soc Nephrol. 2017 Jul 7;12(7):1090-1099. doi: 10.2215/CJN.12321216. Epub 2017 Jun 21. PubMed PMID: 28637862.
8. Irish AB, Vieceilli AK, Hawley CM, Hooi LS, Pascoe EM, Paul-Brent PA, **Badve SV**, Mori TA, Cass A, Kerr PG, Voss D, Ong LM, Polkinghorne KR; Omega-3 Fatty Acids (Fish Oils) and Aspirin in Vascular Access Outcomes in Renal Disease (FAVOURED) Study Collaborative Group. Effect of Fish Oil Supplementation and Aspirin Use on Arteriovenous Fistula Failure in Patients Requiring Hemodialysis: A Randomized Clinical Trial. JAMA Intern Med. 2017 Feb 1;177(2):184-193. doi:10.1001/jamainternmed.2016.8029. PubMed PMID: 28055065.
9. Lo C, Jun M, **Badve SV**, Pilmore H, White SL, Hawley C, Cass A, Perkovic V, Zoungas S. Glucose-lowering agents for treating pre-existing and new-onset diabetes in kidney transplant recipients. Cochrane Database Syst Rev. 2017 Feb 27;2:CD009966. doi: 10.1002/14651858.CD009966.pub2. Review. PubMed PMID:28238223.
10. Meade, A., **Stevenson, J.**, and Notaras, S. (2017) Nutrition in renal supportive care: Is it time to bend the rules? Nephrology, 22: 341–342. 2017 May; doi: 10.1111/nep.12966.
11. **Stevenson, J.**, Meade, A., Randall, A.-M., Manley, K., Notaras, S., Heaney, S., Chan, M., Smyth, A., Josland, E., Brennan, F., and Brown, M. A. (2017) Nutrition in Renal Supportive Care: Patient-driven and flexible. Nephrology, doi: 10.1111/nep.13090.
12. Taching T, **Brennan F, Brown MA**. Impact of Dialysis on Symptom Burden and Functional State in the Elderly. Renal Society of Australasia Journal. 2017; 13:22-30
13. Tremonti C, **Beddoe J, Brown MA**. Reliability of Home Blood Pressure Monitoring Devices in Pregnancy. Pregnancy Hypertension: An International Journal of Women's Cardiovascular Health 2017; 8:9-14.
14. Wong G, Au E, **Badve SV**, Lim WH. Breast cancer and transplantation. Am J Transplant. 2017 May 19. doi: 10.1111/ajt.14368. [Epub ahead of print] PubMed PMID: 28544474.



RSA conference presenters: Claire Cuesta (CNC- PD) and Alison Smyth (CNC-RSC)

Up Coming Conferences

ANZSN

4th-6th September 2017

Darwin

ABSTRACT - 10 May 2017

Early bird registration- 5 July 2017

Dialysis Access Symposium

19th -20th October 2017

Japan

Registration closes- 30th Sep 20

SOMANZ/ADIPS

20th-22nd Oct 2017

Canberra

Abstract closes: 7th Aug

Early Bird Registration deadline: 4th Sep

Transplant Nurses Association

15th-17th Nov 2017

Melbourne

Abstract closes: 18 Aug

Registration opens: 5 June

Renal Genetics Symposium

7th and 8th Dec 2017

Melbourne

Abstract closes: 30th Sep

Registration open: 5th May

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