

P204

## P204 -Impact of Hypertension and White Coat Hypertension on Renal Function and Blood Pressure Post Kidney Donation

Dr Aruni Ratnayake<sup>1</sup>, Dr Pauline Swift<sup>1</sup>, Dr Rebecca Suckling<sup>1</sup>, Dr Peter Andrews<sup>1</sup>, Dr Mysore Phanish<sup>1</sup>  
<sup>1</sup>*Epsom and St Helier University Hospitals NHS Trust, Carshalton, United Kingdom*

### Background:

The effects of nephrectomy on blood pressure (BP) and renal function in kidney donors with hypertension (HTN) and white coat HTN are unclear. This study is a pilot of a planned larger project aimed at investigating this within the UK kidney donor population.

### Methods:

Living donors with HTN and white coat HTN between January 2010 to December 2014 were identified. Those with HTN were classified as having ambulatory blood pressure monitor (ABPM) readings  $\geq 140/90$ mmHg or who were taking anti-hypertensive medications prior to donation. Patients with white-coat HTN had clinic BP readings  $\geq 140/90$ mmHg but normal ABPM readings. Matched normotensive donors were chosen as controls.

### Results:

N=30, 10 in each category. Table 1 shows demographics pre-donation.

There was no significant difference in percentage reduction of eGFR post-donation across all donor groups (Figure 1).

No donor had proteinuria pre-donation. Post-donation, donors with normal BP and white coat HTN did not develop proteinuria. However 20% donors in HTN group developed proteinuria.

All normotensive donors had normal BP readings post-donation. No donors in the white coat HTN group took anti-hypertensive medication pre-donation; post-donation, 40% required medication. All donors in HTN group took anti-hypertensive medications pre-donation; of these, 70% had raised BP post-donation requiring up-titration of medications.

### Conclusions:

There was no significant difference in change in renal function across all three donor groups. Our observations of higher incidence of proteinuria and up-titration of anti-hypertensive medications in donors with HTN, and significant proportion of donors with white coat HTN requiring anti-hypertensive medications post-donation merits further investigation. Our future work will investigate the impact of pre-donation HTN and white coat HTN on renal function and cardiovascular health in a large cohort of kidney donors.