P6.2: SYSTEMATIC REVIEW OF RESULTS OF KISSING STENTS IN THE TREATMENT OF AORTOILIAC OCCLUSIVE DISEASE

E. Groot-Jebbink, J.-W. Lardenoije, S. Holewijn, M. Reijnen


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Results: As expected, eGFR fell from 85±18ml/min at baseline to 59±12ml/min, 12 months post donation (P<0.001). Clinic BP was 123±15/79±9mmHg at baseline and 126±14/75±9mmHg, 12 months post donation (P=0.09 and P=0.001 for systolic and diastolic BP, respectively). There was no change in aPWW from baseline, 12 months following donation (7.3±1.53m/s versus 7.3±1.58m/s, P=0.8).

Conclusion: These data demonstrate that it is feasible to recruit patients undergoing living-donor nephrectomy and to examine the effects on aortic stiffness up to 12 months following donation. Moreover, the results provide important data on which to base larger studies aimed at investigating long-term effects of kidney donation on aortic stiffness and cardiovascular health.

P6.1 EVALUATION OF ARTERIAL STIFFNESS INDICES AND CENTRAL HEMODYNAMICS IN HEALTHY NORMOTENSIVE VOLUNTEERS AND IN TREATED OR UNTREATED HYPERTENSIVE PATIENTS IN AMBULATORY CONDITIONS
S. Omboni a, I. Posokhov b, A. Rogoza c
aItalian Institute of Telemedicine, Varese, Italy
bHemodynamic Laboratory Ltd, Nizhny Novgorod, Russia
cCardiology Research Center, Moscow, Russia

Central blood pressure (BP) and various vascular indices estimated non-invasively over a 24-hour period were compared between normotensive volunteers and hypertensive patients by an innovative technology of pulse wave analysis, integrated in a BPLab ambulatory blood pressure monitoring (ABPM) system. Digitalized waveforms obtained during each brachial oscillometric BP measurement were stored in the device memory and then post-processed using software with Vasotens technology running on a personal computer. Averages for the whole 24-hour period and for the awake and asleep subperiods were computed. A total of 142 normotensive healthy subjects and 661 hypertensive patients were analyzed. 24-hour central BP, aortic pulse wave velocity (PWV) and augmentation indices (AI) were significantly higher in the hypertensive than in the healthy subject group (119.3 ± 105.6 mmHg for systolic BP, 75.6 ± 72.3 mmHg for diastolic BP, 9.8 ± 9.2 m/sec for PWV, -9.7 vs. -40.7 for peripheral AI and 24.7 ± 11.0 mmHg vs. 119.3 vs. 105.6 mmHg for aortic AI), whereas reflected wave transit time (RWTT) was significantly lower in patients with high BP (126.6 ± 139.0 ms). After adjusting for age, gender, body mass index and PWV, aortic AI was significantly lower between group difference was still observed for 24-hour RWTT (127.5 ms hypertensives vs. 134.5 ms normotensives, p=0.0001) and 24-hour peripheral AI (14.1 ± 20.0, p=0.005). All estimates of vascular health displayed a typical circadian rhythm. Thus the estimation of arterial stiffness and central hemodynamics by the BPLab device represents an effective tool for an evaluation of vascular damage in hyper- tense patients in dynamic condition.

P6.2 SYSTEMATIC REVIEW OF RESULTS OF KISSING STENTS IN THE TREATMENT OF AORTOILIAC OCCLUSIVE DISEASE
E. Groot-Jebbink a,b,j, J.-W. Lardenoije a, S. Holewijn a, M. Reijnjen a
aRijnstate Hospital, Arnhem, The Netherlands
bUniversity of Twente, Enschede, The Netherlands

Introduction: Severe stenosis or occlusion of the aortoiliac bifurcation is typically treated with open surgery. Patency results of aorto-bifemoral bypass are up to 90% at 5 years. However, the number and severity of complications seem to have reached a plateau level. A less invasive surgical approach (KSS) is available nowadays. The goal of this review was to give an overview of the current results and status of the kissing stent technique.

Method: The Scopus® search engine was used to retrieve articles concerning KS, this retrieved 78 abstracts, 60 were rejected and 4 more were rejected after full text screening. One article was included after cross referencing.

Results: 810 patients (72.8% Rutherford classification of 1/2/3) were included. The most prevalent risk factor was hypertension (37.5-96%) and 50% of patients were treated for TASC C & D lesions. Overall the technical success rate was 98.2%. Procedural protocols greatly differed on applying stent-grafts and pre- or post dilatation. Clinical improvement at 30 days was achieved in 89.9%. Primary patency at 12, 24, and 36 months was 88.8%, 78.9 and 68.5, respectively. A complication rate of 11% was reported, of which most are minor. No detailed analysis could be performed because individual patient data are lacking.

Conclusion: KSS treatment of aortoiliac disease is related with only minor complications and acceptable midterm patency results, this can however not surpass the results seen with open surgery.