P6.1: EVALUATION OF ARTERIAL STIFFNESS INDICES AND CENTRAL HEMODYNAMICS IN HEALTHY NORMOTENSIVE VOLUNTEERS AND IN TREATED OR UNTREATED HYPERTENSIVE PATIENTS IN AMBULATORY CONDITIONS

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TREATMENT OF AORTOILIAC OCCLUSIVE DISEASE

P6.2 represents an effective tool for an evaluation of vascular damage in hyper-
pressured patients. The proportion of patients with TASC C & D lesions was 50% of patients were treated for TASC C & D lesions. Overall the technical
achieved in 89.9%. Primary patency at 12, 24, and 36 months was 88.8%, 68.5, and 68.5, respectively. A complication rate of 11% was reported, of
which most are minor. No detailed analysis could be performed because in-
tricular systolic BP, 75.6 vs. 72.3 mmHg for diastolic BP, 9.8 vs. 9.2 m/sec for PWV, -9.7 vs. -40.7 for peripheral AI and 24.7 vs. 11.0 for aortic AI, whereas reflected wave transit time (RWTT) was significantly lower in patients with high BP (126.6 vs. 139.0 ms). After adjusting for age, gender, body mass index and 24-hour BP levels, a statistically significant difference was still observed for 24-hour RWTT (127.5 ms hypertensives vs. 134.5 ms normoten-
sives, p=0.0001) and 24-hour peripheral AI (14.1 vs. -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 B-Link device represents an effective tool for an evaluation of vascular damage in hyper-
tensive patients in dynamic condition.

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

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Introduction: Severe stenosis or occlusion of the aortoiliac bifurcation is typi-
cally treated with open surgery. Patenty 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 technique (KS) 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 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%. A total of 142 patients were treated for TASC C & D lesions. Overall the technical success rate was 98.2%. A total of 142 patients were treated for TASC C & D lesions. Overall the technical success rate was 98.2%

P6.3 MODERATE INTENSITY EXERCISE AORTIC RESERVOIR PRESSURE INDEPENDENTLY PREDICTS LEFT-VENTRICULAR MASS INDEX: ONE-YEAR PROSPECTIVE STUDY IN PATIENTS WITH TREATED HYPERTENSION

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Background. Moderate intensity exercise blood pressure (BP) is associated with adverse cardiovascular outcomes. The mechanisms of this association are unknown but may be due to central haemodynamic factors. This study sought to determine the relation between moderate-exercise central haemodynamics (including aortic reservoir characteristics) and end organ disease assessed by left ventricular mass index (LVM). Methods. Resting and moderate cycle exercise (60-70% heart rate maximum) haemodynamics were recorded in 119 patients with treated hypertension (mean age 65±7 years, 47% male) at baseline and one-year. Brachial BP was measured by auscultation and central haemodynamics (aortic reservoir pres-
sure, augmentation index, systolic BP, pulse pressure) via radial tonometry. LVM mass was recorded using real-time 3-dimensional echocardiography. Results. Baseline to one-year change in LVM was not related to change in any resting brachial or central haemodynamic variable, or exercise brachial BP (P>0.05 all). However, change in exercise aortic reservoir pressure (inte-
gral) was significantly associated with change in LVM (r=-0.24, p=0.006). This relationship was maintained on multiple regression analysis adjusting for age, sex, body-mass index, aortic stiffness and 24-hour ambulatory sys-
tolic BP (r=-0.001, 95% CI=0.000-0.001, p=0.035). Conclusions. Moderate exercise aortic reservoir pressure independently predicts changes in LV mass over time. Technology to measure 24-hour ambulatory central haemodynamics (including aortic reservoir characteristics) is now available and should provide additional prognostic information beyond peripheral BP measures.

P6.4 THE DIFFERENTIAL EFFECTS OF RESISTANCE TRAINING AND ENDURANCE TRAINING ON AUGMENTATION INDEX: A PILOT STUDY

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Background: Current literature suggests that increased exercise is associ-
ated with decreased cardiovascular risk and improvements in vascular health. However, there is some conflict as to which modality of exercise has the most beneficial effect on vascular health and cardiovascular risk [1-3]. Therefore, the aim of our study was to investigate the influence of two different training modalities on augmentation index (AIx). This was car-
rried out in a group of young, healthy male athletes who were either resistance (RT) or endurance trained (ET).

Methods: 17 male athletes (9 RT + 8 ET) aged 18-25 years were assessed for
height, weight, BMI, mean arterial pressure (MAP) and AIx. AIx, which has been shown to be the most sensitive marker of systemic vascular stiffness in young individuals, was determined using the Mobil-o-Graph device (IEM).

Results: No significant differences in height, weight or MAP (p>0.05) were observed between the RT and ET groups. However, both BMI and HR were found to be significantly higher in the RT compared to the ET group (P<0.05). Interestingly, the RT group also had significantly higher AIx at heart rate 75 compared to the ET group (14.4±9.6 vs. 0.3±12.3 %, P<0.05).

Conclusion: These results demonstrate that AIx was significantly higher in the RT compared to the ET group. Therefore, different modalities of exercise may elicit differential effects on vascular health. However, as this is a pilot study, larger and longitudinal studies are needed to support these findings.

P6.5 ANTI-INFECTIVE PERIODONTAL THERAPY IS ASSOCIATED WITH IMPROVEMENT OF ARTERIAL STIFFNESS AND PULSE WAVE REFLECTION

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Aim: This parallel-group double blind prospective placebo-controlled clinical trial evaluated the impact of anti-infective periodontal therapy on the expression of surrogate parameters of cardiovascular health including arte-
rial stiffness, pulse wave reflection, and blood pressure.