PO-17: ROLE OF NITRIC OXIDE IN β2-ADRENERGIC MEDIATED VASODILATION IN POSTMENOPAUSAL WOMEN

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(BPV) and baroreceptor sensitivity (BRS) can provide insight into aspects of autonomic function, particularly following an aerobic exercise bout.  

**Purpose:** To examine BPV and BRS in normotensive obese individuals in response to aerobic exercise.  

**Methods:** Normal-weight (*n* = 8; 25 yr; 23.0 kg/m²) and obese individuals (*n* = 9; 27 yr; 32.2 kg/m²) performed a 60-min leg cycling exercise at 60% of VO₂peak. Beat-by-beat blood pressure was recorded at baseline, immediately post-exercise and 30 min into passive recovery using finger plethysmography. R-R intervals were obtained at 1,000 Hz with a digital acquisition system. Power spectral analysis was conducted using WinCPRS software for estimates of BPV (very low and low frequency [VLF, LF]), and systolic and diastolic deviation (SDev, DDev). BRS was estimated using the sequence technique. Natural log-transformed was performed on LF BPV (LnLF) to account for non-normal distribution.

**Results:** HR increased from baseline similarly in both groups (p < 0.05). The control group decreased SBP at immediately post-exercise compared to baseline measurements (p < 0.05), but not the obese group. A main effect of time and group (p < 0.05) existed for BRS. No group differences were found on DBP, LF, LnLF, VLF, SDev and DDev.  

**Conclusion:** The results showed no difference in the BPV indices between the obese and control groups. The different response in SBP suggests that control group may have better BRS; however, this is not supported by the lower values in BRS. A limitation of this study may be the small number of participants.

**PO-19**  
**ASSOCIATIONS OF WALKING WITH SARCOPENIC OBESITY AND CARDIOVASCULAR DISEASE RISK FACTORS IN OLDER ADULTS**  
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**Objectives:** To investigate the associations of walking (steps/day) with sarcopenic obesity (SO) and cardiovascular disease (CVD) risk factors in older adults.  

**Methods:** This cross-sectional study included 297 older adults aged ≥65 years (mean age 72, ranged 65-95). Walking was assessed using an accelerometer (Omron HJ-321) and categorized into thirds (tertiles) based on the average daily steps. SO was defined based on physical function (gait speed), muscle strength (handgrip strength), and muscle mass (appendicular lean mass [ALM] index) according to the Foundation for the National Institutes of Health Sarcopenia Project diagnostic criteria, and % body fat (obesity as ≥25% in men and ≥30% in women) using Dual Energy X-Ray absorptiometry.  

**Results:** Each 10,000 steps/day increase was associated with improved SO variables and CVD risk factors, specifically with 0.008 faster gait speed (m/s), 0.006 higher muscle mass index (ALM/BMI), 0.59 lower % body fat (%), and 0.68 lower fasting glucose (mg/dl) (all p < 0.05) in the linear regression after adjusting for age, sex, smoking status, and alcohol intake. Compared to low walking group, odds ratios (ORs) (95% CIs) in moderate and high walking groups were 0.19 (0.02-1.54) and 0.22 (0.03-2.01) for slow walking, 0.42 (0.14-1.30) and 0.34 (0.09-1.29) for weak handgrip strength, 0.45 (0.23-0.87) and 0.44 (0.22-0.88) for low muscle mass, 0.58 (0.13-2.57) and 0.46 (0.11-2.06) for high % body fat, and 0.62 (0.17-2.28) and 0.21 (0.02-1.78) for SO, respectively, in the multivariable logistic regressions. Compared to individuals without SO, ORs (95% CIs) in individuals with SO were 2.04 (0.58-7.18) for hypertension, 1.27 (0.39-4.22) for diabetes mellitus, and 0.21 (0.02-1.78) for SO, respectively, in the multivariable logistic regressions. However, these associations appeared to be weaker after further adjustment for walking (steps/day).

**Conclusion:** This study suggests that walking in older adults is associated with lower risks of SO and CVD risk factors.

**PO-20**  
**A HYDROGEN SULFIDE PRODRUG AUGMENTS ANGIogenesis IN A SWINE MODEL OF CRITICAL LIMB ISCHEMIA VIA A NITRIC OXIDE DEPENDENT MECHANISM**  
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**Introduction:** Despite advances in revascularization, treatments for critical limb ischemia (CLI) have been largely unsuccessful. Hydrogen sulfide (H₂S)