P116: CARDIAC OUTPUT IS INCREASED IN YOUNG PEOPLE WITH ELEVATED BP

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Results: Black men and women had higher blood pressure (p < 0.001), higher IL-6 (p < 0.016), shorter telomeres (p < 0.001) but similar NOx levels when compared to their white counterparts. GxP activity was higher and L-citrulline lower in black compared to white groups (p < 0.002). Independent positive associations of telomere length with NOx (adj R²=0.21;β=0.249;p=0.03) and GxP activity (adj R²=0.21;β=0.229;p=0.03) were indicated in white men and TNF-α (adj R²=0.33;β=0.274;p=0.01) in white women. These associations were absent in the black groups.

Conclusion: Telomere length of black men and women was shorter but not associated with NOx and age or markers of oxidative stress and inflammation, as observed in the white groups. Therefore it seems that the less favorable cardiovascular and inflammatory profiles of blacks were unrelated to shorter telomere lengths. Lower L-citrulline levels indicate decreased NO synthesis that may affect the association between telomere length and NOx.

References

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Abstracts