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In addition to traditional risk factors for peripheral vasculopathy, including altered lipid profiles and chronic inflammation, ongoing study has suggested that psychological health, and specifically personal depression, may represent a profound contributor to poor vascular outcomes. The present study interrogated relationships between established risk factors for peripheral vascular disease, indices of personal depression, and vascular/endothelial function in human subjects recruited through a vascular surgery clinic at WVU HSC. During clinic visits, patients completed a depression screener, received baseline evaluations of health, provided venous blood samples and had brachial artery hyperemia evaluated following alleviation of 2 and 5 minute occlusions via ultrasound imaging. Results indicated that reactive hyperemia correlated to a number of inflammatory markers. Additionally, depression severity was correlated both inflammation markers, as well as with impairments to reactive hyperemia. However, there was no evidence that self-reported depression was an exacerbating influence on RH independent from that for inflammation. These results suggest that depression may not represent a causative factor contributing to poor vascular outcome, but may reflect a pathology arising from establishment of vascular dysfunction.