

Endothelial Health and Vaginal Vasocongestion

This study investigates the possible link between female sexual function and cardiovascular disease. This is an important topic to examine as heart disease is the leading cause of death of women in the US (AHA, 2010). A link between sexual dysfunction and cardiovascular disease has already been identified in men (Montorsi, Montorsi, & Schulman, 2004), but this study is one of the first to examine this relationship in women. Data for this study is currently being collected. If a link between sexual dysfunction and cardiovascular disease is found, this connection could be used to predict a heart attack in women. Two physiological measures are being used for this study. First, sexual function is assessed using vaginal photoplethysmography, which measures vaginal pulse amplitude (VPA) or the change in blood flow to the capillary walls in the vagina during sexual arousal. Second, cardiovascular health is assessed using several measures including a cardiac ultrasound, flow-mediated dilation, which measures the ability of the brachial and popliteal arteries to respond to an acute increase in volumetric flow, and the Valsalva maneuver, a forced expiratory effort which changes blood pressure momentarily. We expect to find that women with poor endothelial health will show a longer time to achieve their maximum VPA response as compared to women with greater endothelial health. These results would add credibility to the theory that there is a link between sexual function and cardiovascular disease in women.