

# Changes in regional cerebral blood flow are associated with endothelial dysfunction markers in cocaine-dependent patients under recent abstinence

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© 2015 American Society of Addiction Medicine. Objectives: Cocaine is a known risk factor for several vascular ischemic events. The underlying mechanisms leading to the complications are not fully understood, although thrombus formation and accelerated atherosclerosis are prominent findings. Evidence of endothelial dysfunction (ED), a key phenomenon in the pathogenesis of atherogenesis, has been demonstrated in cocaine-dependent individuals. Abnormal regional cerebral blood flow (rCBF) is a common finding among chronic cocaine users. The aim of this study was to evaluate whether brain perfusion changes were associated with ED markers in cocaine-dependent individuals. Methods: Circulating endothelial cells (CECs), soluble intercellular cell adhesion molecule, and the chemokine regulated on activation normal T cells expressed and secreted were measured in 27 DSM-IV (Diagnostic and Statistical Manual of Mental Disorders-Fourth Edition) cocaine-dependents patients. Regional cerebral blood