Artery Buckling: Mechanisms and Possible Applications

Hai-Chao Han

Jan 23, 2013

Arteries are often become tortuous associated with aging, hypertension and degenerative diseases. Tortuosity has been suggested as an indicator of hypertension and tumor malignancy. Our recent studies showed that mechanical buckling could be a possible mechanism for the initiation and development of artery tortuosity. Artery buckling also has important implications for arterial stenting and aneurysm rupture. The applications to collateral development and tissue regeneration will also be discussed.