Mechanism of carotid stroke

Extra cranial internal carotid stenosis is a significant cause of stroke. However most patients with carotid stenosis remain asymptomatic even with high grade stenosis. Ultrasound studies of plaque morphology have been used to identify vulnerable plaque prone to rupture and embolization. Heterogeneous plaques with lucent areas are associated with a higher incidence of stroke and TIA. These lucencies correlate with thrombus and lipid on pathology. Sequential studies indicate that plaque growth is associated with stroke events. Further studies with black blood MRI document regression and solidification of plaque with statin medication. Ultrasound imaging of carotid plaque morphology provides a useful tool for identifying patients with a symptomatic carotid stenosis who may benefit most from interventional procedures to prevent stroke.

Biography

Jesse Weinberger has completed his MD at the age of 23 years from The Johns Hopkins University School of Medicine, Neurology Residency at The Mount Sinai Hospital and Postdoctoral studies at the University of Pennsylvania School of Medicine. He is a Professor of Neurology and Director of the Neurovascular Laboratory at the Icahn School of Medicine at Mount Sinai. He has published more than 130 papers in reputed journals and has been serving as an editorial board member of repute.

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