Intracranial Atherosclerosis: Current Status



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Intracranial atherosclerosis is a common cause of ischemic stroke worldwide, especially among stroke patients of Asian, African or Hispanic ancestry. It remains uncertain whether genetic factors play an important role for the observed ethnic differences. Initial researches focused on the luminal stenosis using transcranial Doppler, CT angigram and MR angiogram. More recent effort emphasize on the vessel wall and fluid dynamics (including collaterals). Thus the pathophysiology of intracranial atherosclerosis has been better understood now. However, treatment of intracranial atherosclerosis remains a challenge. Antiplatelet agents remain the most important strategy for stroke prevention. For patients with TIA /minor stroke, dual antiplatelet therapy shows encouraging results (CLAIR and CHANCE studies). Together with statin and antihypertensive agents, these three approaches become the standard pharmacological treat of intracranial atherosclerosis. Despite the initial enthusiasm, stenting or angioplasty remain an investigational and treatment of last resort after the SYMMPRIS study.

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