

Treatment of Internal Carotid Artery Originated Stroke by Interventional Cardiologists

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Extra cranial large vessel originated stroke is poorly responsive to IV rt-PA and generally associated with early and late poor prognosis. We present 2 cases of ischemic stroke secondary to acute and sub acute left Internal carotid artery (LICA) occlusion treated by urgent catheter based technique.

Case No 1: A 48 years old male was admitted with dense right hemiparesis after left sided carotid endarterectomy. NIH stroke scale at admission was 16 and brain CT was normal. Ten hours after IV rt-PA following clinical deterioration the patient underwent cervical angiography. A total blockage of LICA was detected. Using 6F right guiding catheter and a .014" wire we crossed the lesion, aspirated thrombotic material and implanted a 7X40 mm self expandable stent. After procedure the extra cranial TIMI grade flow improved dramatically. The Anterior Cerebral Artery (CA) was clearly seen but the first segment of Middle CA was still occluded due to distal embolization. Unfortunately the patient died one week after LICA stenting due to left cortical and brainstem dysfunction.

Case No 2: A 52 years old male was hospitalized due to transient left eye blindness. Cervical vessel angiography was undertaken due to repeated clinical episodes under aggressive antiplatelet therapy. A subtotal thrombotic occlusion of LICA was detected. Using 6F Multipurpose guiding catheter we crossed the lesion with .014" wire, dilated a critical narrowing by 2x20 mm coronary balloon and stented the lesion under distal protection device. Post procedure left sided extra and intracranial circulation improved. Dual antiplatelet therapy was recommended for one month. No blindness episodes were reported after 6 month of follow up. Conclusions: In community hospital carotid artery originated stroke can and should be handled by invasive cardiologists familiar with both coronary and carotid therapeutic techniques. Upgrading towards intracranial therapeutic procedures is urgently needed.