Intracranial angioplasty

Intracranial angioplasty and stenting (ICAS)

Emergent intracranial angioplasty with or without stenting is safe and feasible and yields a high rate of revascularization and favorable outcome in patients with hyperacute stroke and underlying intracranial artery stenosis (ICAS).

Patients with underlying ICAS have less severe infarctions at presentation and higher successful revascularization after multimodal endovascular therapy in the setting of hyperacute stroke compared with those with other stroke subtypes [1].

Intracranial angioplasty and stent placement has been increasingly evaluated as a new method for treatment of symptomatic intracranial stenosis in select patients. The Food and Drug Administration (FDA) has approved intracranial stent treatment of symptomatic atherosclerotic intracranial lesions.

The reduced risk of stroke following intracranial stent placement is offset by significantly higher procedure-associated net costs. Select procedures in patients with symptomatic stenosis of 70% or greater are more likely to be cost-effective [2].

1)
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2)
Khan A, Hassan A, Suri F, Qureshi A. Cost-effectiveness analysis of intracranial stent placement versus contemporary medical management in patients with symptomatic intracranial artery stenosis. J Vasc Interv Neurol. 2013 Dec;6(2):25-9. PubMed PMID: 24358413; PubMed Central PMCID: PMC3868243.