MEDIBEATS
The Medical Bulletin

In Neurology

What Are the Latest Recommendations for Atherosclerotic Stroke Management?

- The American Academy of Neurology (AAN) has issued a new practice advisory on preventing recurrent stroke in patients with sICAS.- symptomatic intracranial atherosclerotic arterial stenosis (sICAS) management
- Highlights
- Clinicians should use diagnostic modalities to diagnose sICAS and distinguish it from other intracranial vasculopathies if the results would likely change management or provide important prognostic information.
- There is no diagnostic gold standard; MRA, CTA, transcranial Doppler, and catheter cerebral angiography have varying sensitivity and specificity.
- Evidence over the past 2 decades supports 2 general approaches for sICAS treatment: aggressive medical management with dual antiplatelet therapy plus intensive control of vascular risk factors and medical therapy plus endovascular procedures.
- Clinicians should recommend aspirin 325 mg/d for long-term prevention of stroke and death.
- To further reduce stroke risk in patients with severe (70%-99%) sICAS and low risk for hemorrhagic transformation, clinicians should recommend adding clopidogrel 75 mg/d or cilostazol 200 mg/d as an alternative or in Asian patients to aspirin for ≤ 90 days.
- Clinicians should recommend high-intensity statin treatment to achieve LDL-C < 70 mg/dL, long-term BP < 140/90 mm Hg in clinically stable patients, and at least moderate physical activity for patients who can safely exercise.
- Clinicians must recommend treatment of other modifiable vascular risk factors, including smoking cessation and healthy diet.
- Evidence is insufficient regarding effectiveness of warfarin or LMWH vs aspirin in reducing recurrent risk for stroke or death.
- Warfarin vs aspirin likely increases risk for major hemorrhage.
- There was no consensus regarding use of BAIPC.
- Clinicians should not recommend PTAS for stroke prevention in patients with moderate (50%-69%) sICAS or as initial therapy for stroke prevention in patients with severe sICAS, as 3 RCTs showed a higher rate of periprocedural cerebrovascular events and death and no benefit of stroke prevention vs medical therapy.

- If these are under consideration, clinicians should counsel patients about PTAS risks and alternative treatments.
- Outside clinical trials, clinicians should not routinely recommend angioplasty alone (without intracranial stent placement) or indirect bypass (an emerging investigational surgery) for stroke prevention.
- Given safety issues related to angioplasty plus stenting, balloon angioplasty alone may be a possible alternative for endovascular therapy, but no RCTs have compared angioplasty alone with medical therapy for stroke prevention in patients with sICAS.
- Clinicians should not recommend direct bypass for stroke prevention, as one RCT showed no reduction in recurrent stroke and death vs medical therapy alone and increased risk for recurrent stroke or death for patients with severe MCA stenosis.
- Surgical revascularization for posterior circulation vertebral artery disease is considered investigational.

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