Cerebral venous sinus thrombosis treatment

- Alice in wonderland syndrome "through the looking-glass" in a rare presentation of non-convulsive status epilepticus in cerebral venous sinus thrombosis and COVID-19
- Perioperative Brain Injury in Children with Aortic Arch Anomalies: A Retrospective Study of Risk Factors and Outcomes
- Primary Central Nervous System Lymphoma Complicated by Cerebral Venous Sinus Thrombosis: A Case Report
- Unilateral Abducens Nerve Palsy as the Lone Sign of Cerebral Venous Sinus Thrombosis: A Case Report and Literature Review
- Catastrophic Outcome Following Apparently Trivial Nondominant Transverse Sinus Injury During Resection of a Tentorial Meningioma: Case Report
- Dynamic Evolution of Catatonia in the Context of Cerebral Venous Sinus Thrombosis
- A Probable Association of Aseptic Meningoencephalitis, Complicated With Cerebral Salt Wasting Syndrome Following COVID-19 Vaccination: A Case Report
- Thrombosis with thrombocytopenia syndrome: A database review of clinical trial and post-marketing experience with Ad26.COV2.S

Hydration with IV fluids and IV anticoagulation are part of the initial treatment for cranial sinus thrombosis (CST). Prior to initiation of treatment, blood for hypercoagulopathy tests is drawn.

Severity of cerebral venous thrombosis (CVT) may require the transfer to intensive care unit (ICU).

Treatment is with anticoagulants and rarely thrombolysis (enzymatic destruction of the blood clot).

Batroxobin may promote venous sinus recanalization and attenuate CVT-induced stenosis. Further randomized study of this promising drug may be warranted to better delineate the amount of benefit.

Guidelines

Cerebral venous sinus thrombosis guidelines.
Indications for endovascular intervention

- Persistent ischemic symptoms despite anticoagulation therapy.
- Contraindication to anticoagulation and/or anti-platelet therapy including hemorrhagic infarct.
- Impending risk of stroke.

Endovascular treatment

Chemical Thrombolysis: A catheter may be advanced to the involved sinus or close to it, through the femoral vein. The advantage of local administration is that, a larger amount of tPA actually reaches the clot vs systemic administration through a peripheral vein. Usually, 2-5mg are administered through the thrombus and then an infusion started at a rate of 1 mg/hr, usually for 12 hours. If clot burden is still there on angiography, the infusion may be continued for longer, until the clot resolves.

For CST, the infusion may be prepared in a concentration of 1 mg/10 ml (0.1 mg/ml), for a rate of 10 ml/hr.

Mechanical Thrombolysis

see Mechanical Thrombolysis.

Data demonstrate that repression of the cGAS-STING pathway diminishes the neuroinflammatory burden of cerebral venous sinus thrombosis and highlight this approach as a potential therapeutic tactic in CVST-mediated pathologies.

Decompressive craniectomy for cerebral venous sinus thrombosis

References


2) Khan SH, Adeoye O, Abruzzo TA, Shutter LA, Ringer AJ. Intracranial dural sinus thrombosis: novel use