

EVIDENCE – BASED MEDICINE – CERBRAL VENOUS THROMBOSIS

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Cerebral venous/sinus thrombosis (CVT) is an uncommon disease which accounts for 0.5-1% of all strokes. Despite advances in the recognition of CVT, diagnosis is frequently overlooked or delayed as a result of the wide spectrum of clinical symptoms. Moreover, there is an absence of a uniform diagnostic and treatment approach. However, in past two years several guidelines about management of CVT have been published.

Diagnostic approach: In the initial clinical assessment, it is recommended to perform screening for potential prothrombotic conditions that may predispose a person to CVT. A normal D-dimer level may help to identify patients with a low probability of CVT. A venographic study (CTV or MRV) should be performed in suspected CVT if the plain CT or MRI is negative. Gradient echo T2 susceptibility-weighted images combined with MR can be useful to confirm CVT diagnosis. A follow-up CTV or MRV at 3 to 6 months after diagnosis is reasonable to assess for recanalization of the occluded vein/sinuses.

Therapeutic approach: Initial anticoagulation with unfractionated heparin or low-molecular weight heparin in full anticoagulant doses is reasonable, followed by vitamin K antagonists, regardless of the presence of intracerebral hem-

orrhage. Endovascular intervention may be considered if deterioration occurs despite intensive anticoagulation treatment. For patients with CVT, steroid medications are not recommended, even in the presence of parenchymal brain lesions on CT/MRI, unless needed for another underlying disease.

In patients with provoked CVT vitamin K antagonists may be continued for 3 to 6 months, in patients with unprovoked CVT, vitamin K antagonists may be continued for 6 to 12 months and for patients with recurrent CVT or first CVT with severe thrombophilia, indefinite anticoagulation may be considered, with a target INR of 2-3.

Patients with CVT and a suspected bacterial infection should receive appropriate antibiotics. In patients with CVT and increased intracranial pressure, monitoring for progressive visual loss is recommended, and when this is observed, increased intracranial pressure should be treated urgently. It is reasonable to initiate treatment with acetazolamide in such patients. In patients with CVT and a single seizure with parenchymal lesions, early initiation of antiepileptic drugs for a defined duration is recommended to prevent further seizures. In the absence of seizures, the routine use of antiepileptic drugs in patients with CVT is not recommended.