Background: Cerebral venous sinus thromboses (CVST) occur in children with a variety of etiologies. However, no standard treatment paradigm is established.

Objective: To identify the treatments, their outcomes, and role of anticoagulation in pediatric patients with CVST.

Design: A systematic review using PubMed, Embase, Scopus, Cochrane Library and Cochrane Central Register of Controlled Trials (no language or date-limits applied).

Inclusion criteria: Age <18 y, diagnosis of CVST, intervention of anticoagulation, antiplatelet or other conservative, medical, surgical, or endovascular treatment, with an emphasis on the impact/outcomes of treatment.

Key Message: Anticoagulation is commonly applied and found to be safe and effective in Pediatric CSVT.

Results:
- 51 studies were included. No RCTs were identified.
- Studies on LMWH (n=12), UFH (n=9), LMWH and UFH (n=9), combination of LMWH, UFH, and warfarin (n=6).
- Treatment in children depends on etiology.
- Decision on case-to-case basis.
- Infectious CVST: broad-spectrum antibiotics, surgery, anticoagulation.
- Neoplastic and traumatic CVST: anticoagulation.
- Metabolic CVST: correction of metabolic derangements, anticoagulation.
- Autoimmune, congenital, and thrombotic CVST: anticoagulation, treatment of underlying disorder.
- Most common anticoagulants used: LMWH > UFH.
- Endovascular interventions (venous thrombectomy, IV thrombolytic) uncommon and variable success.
- LMWH is effective and safe and feasible (UFH= unfractionated heparin, LMWH= low molecular weight heparin).

Conclusion:
- Conservative, medical, thrombolytic, endovascular, and surgical treatments all have a role in the treatment of pediatric CVSTs.
- Anticoagulation is commonly applied, is safe and effective.
- Risks and benefits of anticoagulation to be considered on an individual basis.

Key Message: Anticoagulation is commonly applied and found to be safe and effective in Pediatric CSVT.