Cerebral sinovenous thrombosis in children

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Cerebral sinovenous thrombosis (CSVT) is an uncommon, but extremely dangerous condition which may have lethal consequences if not recognized on time. The incidence is estimated at 0,6/100 000/year. Clinical presentation is often nonspecific and age-related, including depressed mental status, headache, vomiting, cranial nerve palsy and neonatal seizures. Diagnosis is primarily radiologic with MRV being the gold standard. Most common specific treatment is systematic anticoagulation. A 13-year-old boy presented with diplopia, bilateral 6th cranial nerve palsy and neck pain. He had an episode of acute gastroenteritis recently. Contrast-enhanced MRV revealed an intraluminal filling defects of sagittal, transversal and sigmoid sinus with partial interruption of flow, which was deemed to be an extensive thrombosis. Right mastoid showed inflammatory content, suggesting the potential etiology of the thrombosis. Ophthalmologic assessment documented papilledema. Enoxaparine was initiated and titrated to a therapeutic range. Due to inflammatory finding of the right mastoid, he was given ceftriaxone IV. Control MRV revealed partial recanalization of the sinuses after 28 days of hospitalization. After discharge, he will continue with oral anticoagulant therapy with minimum of 6 months. Mastoiditis is common cause of CSVT in pediatric population. Clinician should keep that in mind when thinking about differential diagnosis for child with sudden neurological deficit and history of acute otitis. Role of thrombolytic therapy is yet to be established. Around 90% of children with well-timed therapy have complete or partial recanalization. There is no clear correlation between recanalization and long-term prognosis.