Childhood cerebral sinovenous thrombosis: retrospective evaluation of 25 patients

**Objective:** To investigate the demographic and clinical characteristics, laboratory and radiological imaging findings, treatment and prognosis of children with cerebral sinovenous thrombosis (CSVT).

**Methods:** A total of 25 patients, 12 girls and 13 boys, aged 0-18 years, followed up with the diagnosis of CSVT between January 2002 and July 2017 in Atatürk University Medical Faculty Research and Application Hospital Pediatric Clinic were included in the study. Approval was obtained from Atatürk University Faculty of Medicine Ethics Committee. The diagnoses of all patients were confirmed by magnetic resonance imaging (MRI) and MR venography (MRV). All patients underwent prothrombotic evaluation. Data were analyzed with SPSS windows 21.

**Results:** 2 of 25 patients were newborn and 23 of them were non-neonatal. The most common clinical finding in presentation was headache (60%). Other clinical findings were vomiting (40%), neurological deficit (36%), decreased level of consciousness (20%), and seizures (12%). The predisposing factor was mastoiditis in nine patients (36%). Predisposing prothrombotic risk factors were MTHFR gene mutation (40%), presence of anticardiolipin antibodies (16%), protein C deficiency (8%) and increased factor VIII. Thrombosis was in the superficial system in 24 patients and in the deep cerebral sinovenous system in 3 patients. Transverse sinuses were most commonly affected (88%).

**Conclusions:** CSVT in children is rare but serious. In the presence of signs of increased intracranial pressure and focal neurological deficits, clinicians should keep this disorder in mind. Early diagnosis and treatment can reduce morbidity and mortality.