

Hyperdense Cerebral Sinus Vein Thrombosis on Computed Tomography

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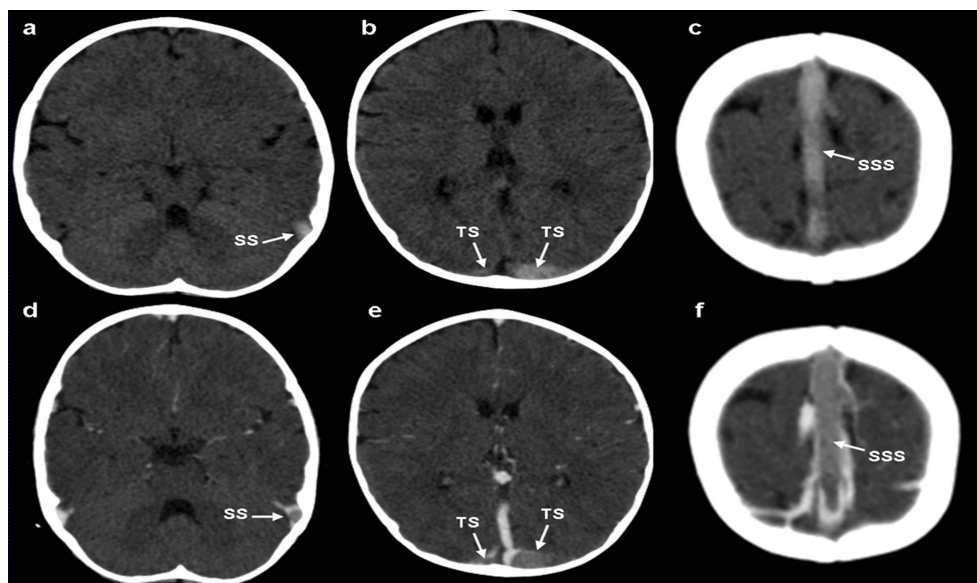


Figure 1. Unenhanced axial computed tomography (CT) (a-c) shows the hyperdense appearance of the left sigmoid sinus (SS), left and right transverse sinus (TS), and the superior sagittal sinus (SSS), representing acute thrombus (“cord sign”). Enhanced axial CT images (d-f) obtained at the same levels showing the filling defects within the cerebral veins corresponding to sinus vein thrombosis.

A two-year-old girl presented with poor appetite, vomiting and decreased level of consciousness. Brain unenhanced computed tomography (CT) on admission demonstrated no hemorrhages but a hyperdense appearance of the left sigmoid sinus, left and right transverse sinus, and the superior sagittal sinus, consistent with the “cord sign” and representing acute thrombus (Figure 1a-c). Brain CT venography (obtained after administration of contrast agent) showed filling defects within the same cerebral veins corresponding to extensive sinus vein thrombosis (SVT) (Figure 1d-f).

On unenhanced CT scan, thrombus appears hyperdense for the first 7-14 days.¹ Its prevalence is variable and generally accepted to be an accurate sign when present.² It is very important to diagnose this condition as early as possible

so that specific treatment can be started. The cord sign (hyperdense thrombosed veins on unenhanced CT) and the empty-delta sign (a filling defect in the superior sagittal sinus on enhanced CT) are considered pathognomonic for SVT.

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