IVth ventricular neurocysticercal cyst

A rare cause of acute hydrocephalus

Figure MRI brain with IVth ventricular and left parietal neurocysticerci

Axial T1 (A) and axial T2 (B) MRI show a small cystic lesion with eccentric scolex (arrow) without perilesional edema in the left cingulate gyrus. Supratentorial ventricle is dilated without any periventricular ooze. Axial fluid-attenuated inversion recovery (C), axial T2 (D), and postcontrast sagittal T1 (E) MRI show ballooned IVth ventricle with intraventricular cystic lesion (arrows), which is better appreciated on thin-cut high-resolution T2 image (D) (arrows); however, scolex was not identifiable in the intraventricular cyst. Axial T2 (F) MRI shows a normal outlet foramina of the IVth ventricle.

An 11-year-old boy presented with acute-onset projectile vomiting, bifrontal headache, and altered sensorium. Contrast-enhanced MRI brain was suggestive of intraparenchymal and intraventricular neurocysticercosis, with an intraparenchymal ring-enhancing lesion with central scolex in the left cingulate gyrus and a large cyst enlarging the IVth ventricle, with obstructive hydrocephalus (figure).¹ Intraventricular cysticerci with acute hydrocephalus are rare.¹ In contrast to intraparenchymal cysts, intraventricular cysts are large and typically lack an identifiable scolex.² Confirmation of cysticerci is based upon identification of scolex in the intraparenchymal lesion or use of high-resolution T2 MRI sequences, which are superior in identifying scolex in intraventricular cysts.³

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