NEONATAL BRAIN CYSTS

FRONTAL HORN CYSTS IN NORMAL NEONATES

Among 3545 term or near term healthy neonates who underwent cranial ultrasound over a 2-year 5-month period at Mackay Memorial Hospital, Taipei, Taiwan, 18 (0.5%) were diagnosed with frontal horn cysts (FHCs). Seven were bilateral and 11 unilateral. The perinatal history was uneventful. FHCs are elliptical, smooth, thin-walled cysts located adjacent to the tip of the anterior horns of the lateral ventricles. Six resolved within 1 month, and 6 between 2 and 11 months of age. Ultrasound was not repeated to document resolution in 4, and 2 were lost to follow-up. One infant with an atypical FHC had an enlarged left FHC with midline shift on follow-up, but was normal in development. FHCs should be checked by repeat cranial ultrasound at 1 or 2 and 6 months of age. Infants with atypical FHCs require follow-up with CT or MRI. (Chang C-L, Chiu N-C, Ho C-S, Li S-T. Frontal horn cysts in normal neonates. **Brain Dev** July 2006;28:426-430). (Respond: Dr Nan-Chang Chiu, e-mail: nec88@ms2.mmh.org.tw).

COMMENT. Frontal horn cysts in neonates are different from subependymal cysts, and most resolve spontaneously. The cause is unknown, but hypotheses include antepartum cerebral hemorrhage, infarction, ischemia, infection, and leukomalacia. Among 73 cases reported and cited by the authors, the incidence in premature and term infants is similar (0.48-0.91%), 38 were unilateral, 35 bilateral, 4 died, 2 were developmentally delayed, 5 had cerebral palsy, and 1 had seizures. The majority (84%) was normal on follow-up. The differential diagnoses include subependymal cyst, arachnoid cyst, porencephaly, and periventricular leukomalacia. This and four previous reports describe the frontal horn cyst in normal neonates as a separate entity with a benign course.

SPONTANEOUS INVOLUTION OF PINEAL CYST IN AN INFANT

A full-term newborn girl presenting at birth with macrocephaly and a large pineal region hemorrhagic cyst without neurologic deficit is reported from the University of Miami Miller School of Medicine, Florida. A CT scan showed the pineal region cyst without mass effect or hydrocephalus. No evidence of vasculopathy was detected. MR imaging at 5 weeks showed mild ventriculomegaly and slight decrease in size of the cyst. MR angiography showed normal vascular anatomy. At 4 months, the neurologic exam and head circumference were normal. MR images showed complete resolution of the cyst and stable, mild ventriculomegaly. At 8 months follow-up, the MR was unchanged and the neurologic exam and head circumference remained normal. (Nimmagadda A, Sandberg DI, Ragher J. Spontaneous involution of a large pineal region hemorrhagic cyst in an infant. **J Neurosurg (4 Suppl Pediatrics)** 2006;104:275-278). (Reprints: David I Sandberg MD, 3200 Southwest 60th Court, Suite 301, Miami, FL 33155).

COMMENT. Small benign glial cysts of the pineal region are reported in 25-41% of autopsy studies and in 1.5-4.3% of brain MRs (Fain JS et al. 1994). Close observation and serial imaging are advised in nonprogressive pineal region cysts in infants.