Annotated Bibliography

Nolan Altman, Richard S. Boyer, James A. Brunberg, Allen D. Elster, Ajax E. George, David B. Hackney, Robert B. Lufkin, Jeffrey S. Ross, Joel D. Swartz, Jane L. Weissman, and Samuel M. Wolpert

Seizure Disorders

Casazza M, Broggi G, Franzini A, et al. **Supratentorial cavernous angiomas and epileptic seizures: preoperative course and postoperative outcome.** *Neurosurgery* 1996; 39:26–34

The high correlation between cerebral hemisphere cavernous angiomas and seizures is confirmed in this study of 47 patients. Surgical resection was associated with initial seizure resolution without or with medication in 89%, though there was some subsequent relapse. Surgical indications and the uncertain rationale for lesionectomy versus more extensive regional resection is discussed, both by the authors and in the published comments of the manuscript reviewers.□J.A.B.

Ross DA, Brunberg JA, Drury I, Henry TR. **Intracerebral depth electrode monitoring in partial epilepsy: the morbidity and efficacy of placement using magnetic resonance imaging guided stereotactic surgery.** *Neurosurgery* 1996;39:327–334

An MR guidance technique for stereotactic placement of intracerebral depth electrodes and for subsequent confirmation of their position in patients with refractory partial epilepsy is presented. Indications for depth electrode placement and efficacy of the procedure for location of seizure origin are briefly discussed.□J.A.B.

Swartz BE, Rich JR, Dwan PS, et al. **The safety and efficacy of chronically implanted subdural electrodes: a prospective study.** *Surg Neurol* 1996;46:87–93

This 5-year prospective study looks at 55 patients undergoing 58 implant procedures. The most common adverse effects were fever, cerebrospinal fluid leakage, headache, and nausea. There were no infections. They had no permanent sequellae. The authors conclude that subdural electrodes are safe, easy, and efficacious tools for evaluating seizure foci before resective surgery.□J.S.R.

Pediatric Neuroradiology and Congenital Malformations

Teo C, Rahman S, Boop FA, Cherny B. **Complications of endoscopic neurosurgery.** *Childs Nerv Syst* 1996;12:248–253

The use of endoscopic neurosurgery in a wide variety of neurosurgical conditions has greatly expanded in the past several years. These authors report their experience over a 2-year period with 173 neuroendoscopic procedures. The complication rate was 7%, the majority of which related to intracranial hemorrhage. The complication rate decreased with increased experience of the surgeon.□R.S.B.

Kazumata K, Kuroda S, Houkin K, et al. **Moyamoya disease with precocious puberty and pustular psoriasis.** *Childs Nerv Syst* 1996;12:339–342

An 8-year-old girl with precocious puberty was found to have the vasculopathy of moyamoya disease. She also had pustular psoriasis. The significance of these rare associations is uncertain.□R.S.B.

Battistella PA, Perilongo G, Carollo C. **Neurofibromatosis type 1 and type I Chiari malformation: an unusual association.** *Childs Nerv Syst* 1996;12:336–338

The unusual association of neurofibromatosis 1 with Chiari I malformation is presented and documented with reasonably good MR images.□R.S.B.

Ersahin Y, Mutluer S, Mirzai H, Palali I. **Pediatric depressed skull fractures: analysis of 530 cases.** *Childs Nerv Syst* 1996;12:323–331

The authors review 20 years of experience consisting of 530 patients with depressed skull fractures. Sixty-six percent had compound fractures, which had a worse prognosis and greater risk of brain lacerations. The more deeply depressed the bone fragment, the higher the risk of dural tear and cortical laceration and the worse the prognosis. The authors recommend a conservative approach for patients with depressed skull fracture in whom the bone depression is not deeper than 1 cm.□R.S.B.

Tortori-Donati P, Fondelli MP, Rossi A, Carini S. **Cystic malformations of the posterior cranial fossa originating from a defect of the posterior membranous area.** *Childs Nerv Syst* 1996;12:303–308

Cystic malformations of the posterior cranial fossa are divided into anomalies of the anterior membranous area and of the posterior membranous area. The lateral group is further divided into two anomalies: the mega cisterna magna and the persisting Blake's pouch. Illustrative MR images are of good technical quality.□R.S.B.

Chong BW, Babcook CJ, Salamat MS, Nemzek W, Kroeker D, Ellis WG. **A magnetic resonance template for normal neuronal migration in the fetus.** *Neurosurgery* 1996;39:110–116

MR findings from 28 normal human fetal specimens of gestational age 9 to 24 weeks are presented and used as a point of reference for discussion of normal and abnormal neuronal migration.□J.A.B.

From Miami (Fla) Children's Hospital (N.A.), Primary Children's Medical Center, Salt Lake City, Utah (R.S.B.), University Hospital, Ann Arbor, Mich (J.A.B.), Bowman Gray School of Medicine, Winston-Salem, NC (A.D.E.), New York (NY) University Medical Center (A.E.G.), Hospital of the University of Pennsylvania, Philadelphia (D.B.H.), University of California at Los Angeles School of Medicine (R.B.L.), the Cleveland (Ohio) Clinic Foundation (J.S.R.), the Germantown Hospital and Medical Center, Philadelphia, Pa (J.D.S.), the University of Pittsburgh (Pa) School of Medicine (J.L.W.), and New England Medical Center Hospital, Boston, Mass (S.M.W.).

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Oi S, Yamada H, Sato O, Matsumoto S. **Experimental models of congenital hydrocephalus and comparable clinical problems in the fetal and neonatal periods.** *Childs Nerv Syst* 1996;12:292–302

The authors describe three rat models of hydrocephalus, corresponding to the Dandy-Walker syndrome, congenital aqueductal stenosis, and congenital communicating hydrocephalus. The findings suggest that the morphology of the cerebrospinal fluid pathway may change during the fetal and neonatal periods with progression of hydrocephalus. Further, the progression of fetal hydrocephalus may effect various stages of neuronal maturation. Comparison between the developmental periods of neuronal maturation in the human is made with similar periods in the experimental rat models.□R.S.B.

Perez-Diaz CJ, Villarejo F, Pascual AM. **Trigeminal neurinomas in infants: report of two cases.** *Childs Nerv Syst* 1996;12:283–287

The unusual appearance of trigeminal neuroma in two infant girls is reported. Both presented with a bulging cranial vault at birth. One child had a family history of von Recklinghausen disease.□R.S.B.

Stroke

Brant-Zawadzki M, Atkinson D, Detrick M, Bradley WG, Scidmore G. **Fluid-attenuated inversion recovery (FLAIR) for assessment of cerebral infarction.** *Stroke* 1996;27: 1187–1191

The authors retrospectively reviewed 50 MR studies ordered for suspected cerebrovascular disease. They compared FLAIR with T2-weighted spin-echo sequences. FLAIR was superior in 10 patients, showing acute cortical infarcts missed with the rapid-acquisition relaxation enhancement spin-echo technique in 5 patients. FLAIR offers advantages for detecting acute infarcts, more particularly cortical lesions. Six figures.□J.S.R.

Srinivasan J, Newell DW, Sturzenegger M, Mayberg MR, Winn HR. **Transcranial doppler in the evaluation of internal carotid artery dissection.** *Stroke* 1996;27:1226–1230

Seventeen patients with carotid dissections diagnosed with carotid angiography were studied with transcranial Doppler. Emboli were detected in the middle cerebral artery distal to the dissection in 59%. Patients with emboli presented with stroke much more frequently than those without. Transcranial Doppler can therefore be used as an adjunctive tool to treat patients with suspected dissection and could prove useful to evaluate treatment relating to emboli.□J.S.R.

Mizoi K, Kayama T, Yoshimoto T, Nagamine Y. **Indirect revascularization for moyamoya disease: is there a beneficial effect of adult patients?** *Surg Neurol* 1996;45:541–549

The authors retrospectively evaluated results of 23 patients who underwent combined direct and indirect bypass surgery for moyamoya disease. Advancing age apparently affects development of indirect bypass filling, particularly in those patients older than 40 years, none of whom had good collateral formation through the indirect bypass. The authors consider direct bypass to be the main surgical treatment option for this older group.□J.S.R.

Touho H, Karasawa J, Tenjin H, Ueda S. **Omental transplantation using a superficial temporal artery previously used for encephaloduroarteriosynangiosis.** *Surg Neurol* 1996;45:550–559

In five patients, an intracranial omental transplantation was performed using a branch of the superficial temporal artery that had been previously used for encephaloduroarteriosynangiosis (EDAS). These children continued to have transient ischemic attacks, urinary incontinence, and/or progressive mental decline after EDAS. The omental transplantation markedly improved the neurologic condition in all five patients. Eight figures, including four angiography and two single-photon emission CT.□J.S.R.