VASCULAR DISORDERS

INDOMETHACIN FOR PREVENTION OF IV HEMORRHAGE

Results of a multicenter randomized trial of low-dose indomethacin (0.1 mg/kg IV) in prevention of intraventricular hemorrhage (IVH) in very low birth weight infants are reported from Yale New Haven Hospital, CT; Brown University, Providence, RI; and Maine Medical Center, Portland, ME. The incidence and severity of IVH were significantly lowered. Of 431 neonates enrolled, 25 (12%) treated and 40 (18%) controls developed IVH. Grade 4 IVH occurred in only 1 indomethacin-treated neonate and in 10 placebo-treated controls. (Ment LR et al. Low-dose indomethacin and prevention of intraventricular hemorrhage: a multicenter randomized trial. <u>Pediatrics April 1994;92</u>:543-550). (Reprints: Dr Laura R Ment, Dept of Pediatrics, Yale University School of Medicine, 333 Cedar St, New Haven, CT 06510).

COMMENT. Volpe JJ, Harvard Medical School, and Reynolds EOR and Meek J, University College, London, are concerned about the cerebral vasoconstrictor effects of indomethacin and the dangers of periventricular ischemic injury. (Commentaries. <u>Pediatrics</u> April 1994;<u>93</u>:673-677, 677-678). These authorities are reluctant to endorse wholesale treatment of low birth weight newborns with indomethacin.

NEUROCARDIOGENIC (VASOVAGAL) SYNCOPE

A retrospective analysis of 54 consecutive patients with recurrent syncope, examined with or without tilt table testing, is reported from the Children's Heart Center, Egleston Children's Hospital, Emory University, Atlanta, GA. The group of 27 patients without tilt table tests received a greater number of neurology consultations, EEGs, and CTs, but a positive diagnosis (Wolff-Parkinson-White syndrome, 1; conversion reaction, 2; hyperventilation, 1; migraine, 1) was made in only 5 (18%). In contrast, a diagnosis was made early in all of 27 patients tested by tilt table; 25 had neurocardiogenic syncope and 2 had conversion reaction. (Strieper MJ et al. Evaluation of recurrent pediatric syncope: Role of tilt table testing. <u>Pediatrics</u> April 1994;<u>33</u>:660-662). (Reprints: Dr Margaret J Strieper, 98-1955 Hapaki St, Aiea, HI 96701).

COMMENT. The extensive workup currently employed, including EEG, CT, MRI, ECG, echocardiogram, blood chemistries, and thyroid function, etc, is not routinely indicated in syncopal pediatric patients with a history consistent with neurocardiogenic syncope. Tilt table testing performed early in the evaluation increases the frequency of a definitive diagnosis, and avoids the inconvenience and expense of further extensive investigations.

Neurocardiogenic syncope, the most common explanation for recurrent syncope in children, is characterized by a prodrome of nausea, pallor, diaphoresis, and blurred vision followed by syncope. Head-up tilt table testing reproduces the effects of gravity during ECG and blood pressure monitoring and uncovers autonomic dysfunction in patients with susceptibility to syncopal episodes.