Clippings

# Analgesia during neonatal central line placement

Inserting central lines in preterm neonates has become routine in NICUs now across the country. There is limited evidence of the analgesic effectiveness of opioid analgesia or topical anesthesia during central line placement in neonates. Randomized, doubleblind, controlled trial enrolling 132 ventilated neonates in 2 neonatal intensive care units. In this study of ventilated neonates undergoing central line placement, morphine and tetracaine plus morphine provided superior analgesia to tetracaine; however, morphine caused respiratory depression and tetracaine caused erythema. JAMA. 2006; 295: 793

*Comments:* This study tries to start filling a long existing void in the use of analgesia in neonatal practice. It should help stimulate further research & use of analgesia in NICUs.

### **SSRIs may cause PPHN in the fetus**

Persistent pulmonary hypertension of the newborn (PPHN) is associated with substantial infant mortality and morbidity. A case-control study was done to assess whether PPHN is associated with exposure to SSRIs (Selective Serotonin-Reuptake Inhibitors) during late pregnancy. Fourteen infants with PPHN had been exposed to an SSRI after the completion of the 20th week of gestation, as compared with six control infants. These data support an association between the maternal use of SSRIs in late pregnancy and PPHN in the offspring; further study of this association is warranted. N Engl J Med. 2006; 354: 636

*Comments:* SSRIs have been used more frequently in psychiatry nowadays, and this article puts a definite question mark about their

use in pregnancy.

# Pediatric OPD sedation, a case for chloral hydrate

The physiologic responses & adverse consequences to chloral hydrate sedation in the setting of a pediatric echocardiography laboratory have not been well documented; this was the purpose of the present study. The authors analyzed retrospectively 1095 patients who were sedated for echocardiography. Adverse events occurred in 10.8% of patients and included apnea, airway obstruction, hypoxia, hypercarbia, hypotension with poor perfusion, vomiting and prolonged sedation. The majority of adverse events were minor, and major events were uncommon. Infants who were younger than 6 months were found to be at higher risk for serious adverse events. Pediatrics 2006; 117: Published online February 15, 2006.

*Comments:* Pediatric OPD sedation is one of the most frequently used procedure in pediatric practice where objective data is sorely lacking; hopefully this study will help formulate guidelines for OPD pediatric sedation.

### **TV viewing and kids**

Does children's television use interfere with time spent in more developmentally appropriate activities? Data came from the first wave of the Child Development Supplement, a (US) nationally representative sample of children aged 0 to 12 in 1997 (N = 1712). Results indicated that time spent watching television both with and without parents or siblings was negatively related to time spent with parents or siblings, respectively, in other activities. Television viewing also was negatively related to time spent doing homework for 7-12-year-olds and negatively related to creative play, especially among very young children (younger than 5 years). Pediatrics 117: e181-e191.

#### CLIPPINGS

**Comments:** Given the time that Indian kids spend watching TV, the results of this study are relevant for us too.

## □ Fetal risk factors for coronary artery disease

Epidemiologic studies have shown associations between impaired fetal growth and risk for coronary heart disease in adults. The underlying mechanisms are unknown. Can this be related to abnormalities in the neonatal cardiac structure? This study involved echocardiography on 216 9-year-old children who were measured previously at birth. On average, children who had weighed less at birth had a smaller total coronary artery diameter, aortic root diameter, and left ventricular outflow tract diameter after adjustment for gender, gestational age, current height and weight, and maternal height and prepregnant weight. Impaired fetal growth may have long-term effects on cardiac structure. This may help to explain why adults whose birth weight was low are at greater risk for coronary heart disease. Pediatrics 117: e257-e261.

*Comments:* Is this one of the reasons for the huge epidemic of coronary artery disease in developing countries like ours?

### □ More reason to promote exclusive breastfeeding!

Both the American & Indian Academy of Pediatrics recommend exclusive breastfeeding for an infant's first 6 months of life. When compared with exclusive breastfeeding for 4 months, greater protection against gastrointestinal infection, but not respiratory tract infection, has been demonstrated for the 6month duration. The objective of this study was to ascertain if full breastfeeding of 6 months compared with 4 to <6 months provides greater protection against respiratory tract infection. This nationally representative study (US) documents increased risk of respiratory tract infection including pneumonia and recurrent OM in children who were fully breastfed for 4 vs 6 months. These findings support current recommendations that infants receive only breast milk for the first 6 months of life. Pediatrics 117: 425-432.

*Comments:* Now we have even more solid reason to promote exclusive breastfeeding for 6 months, and it is our job, nay duty to let parents make this informed choice in the best interest of their kids!

#### **Autism and head size**

Autism is a complex neurodevelopmental disorder defined by social deficits, abnormalities in communication, and stereotyped, repetitive behaviors. While the neuroanatomical basis of this condition is not yet known, numerous lines of evidence suggest that abnormalities in brain volume may be characteristic of autism.

The authors analyzed data from an ongoing MRI study on 51 children with autism -- aged 18 to 35 months -- and a comparison group made up of 25 children without autism. Significant enlargement was detected in cerebral cortical volumes but not cerebellar volumes in individuals with autism.

In children with autism the head circumference appears normal at birth, with a significantly increased rate of HC growth appearing to begin around 12 months of age.

Given these findings the author conclude that autistic changes may start appearing as early second year of the postnatal life. Arch Gen Psychiatry. 2005; 62: 1366.

*Comments:* An interesting piece in the puzzle that is autism, however we still have some way to go for understand this disease.

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INDIAN PEDIATRICS

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