

# PEDIATRIC NEUROLOGY BRIEFS

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### ATTENTION DEFICIT DISORDERS

#### ETIOLOGIES OF ADHD

The various proposed etiologies of attention deficit hyperactivity disorder (ADHD) are reviewed from the Department of Neurology, New York University Medical Center, New York. These include:

- 1) *genetics*,
- 2) *pregnancy related risk factors*: smoking, maternal anemia, breech delivery, chorioamnionitis, small head circumference, prematurity, low birth weight, birth asphyxia, cocaine, and alcohol (fetal alcohol syndrome),
- 3) *childhood illness sequelae*: meningitis, encephalitis, Reyes syndrome, otitis media, anemia, cardiac disease, thyroid disease, epilepsy, autoimmune disorders, and metabolic disorders,
- 4) *head injury*, especially involving frontal lobes,
- 5) *toxins and drugs*: lead, theophylline, anticonvulsants.

(Nass R. Etiologies of attention deficit hyperactivity disorder: Facts and myths. *Int Pediatr* 1995;10:236-241). (Reprints: Dr Ruth Nass, NYU Medical Center, 440 East 34th Street, Room 311, New York, NY 10016).

COMMENT. The recognition of risk factors for ADHD can lead to early intervention and improved prognosis. *Diet and nutrition* enthusiasts would add the effects of food additives, food allergies and sucrose to the above list of potential etiological factors in ADHD. For a review of recent articles concerning pros and cons of dietary factors in ADHD and learning disorders, see [Progress in Pediatric Neurology I and II](#), 1991 and 1994, Chicago, PNB Publishers.

#### PEMOLINE IN ADHD

The effects of pemoline (Cylert) in 28 children with attention deficit disorder (ADD), 23 with and 5 without hyperactivity, were evaluated for dose-response, timing of response after ingestion, and duration of effect, in a double-blind, placebo-controlled, crossover study at the Child Development Clinic of the Department of Neurology, Hospital for Sick Children, Toronto, Canada. Using doses of 18.75, 37.5, 75, and 112.5 mg of pemoline, q.a.m., each

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The Editor is Pediatric Neurologist at Children's Memorial Hospital and Northwestern Univ Med School. PNB is a continuing education service designed to expedite and facilitate current scientific information for physicians and other health professionals.