
 **Use of Paracetamol in infancy increases risk of Asthma at 6-7 years** (*Lancet 2008; 372: 1011, 1039*).

Phase three of the International Study of Asthma and Allergies in Childhood (ISAAC) investigated the association between paracetamol consumption and asthma, in 6–7 year-old children ($n = 205487$) at 73 centers in 31 countries. Caregivers completed written questionnaires regarding symptoms of asthma, rhinoconjunctivitis, and eczema in the children; as well as exposure to several risk factors, including paracetamol use for fever in the child's first year of life, and the frequency of paracetamol use in the previous 12 months. Multivariate analyses revealed that use of paracetamol for fever in the first year of life was linked to increased risk for asthma symptoms at ages 6 to 7 years. Significantly, the risk for asthma symptoms increased in a dose-dependent fashion with current use of paracetamol. In the first year of life as well as at ages 6 to 7 years, paracetamol use was also associated with an increased risk for symptoms of rhinoconjunctivitis and eczema.


COMMENTS Accompanying editorial goes on to say that a population-based randomised trial of adequate power and duration to examine childhood asthma incidence, with paracetamol compared with an active control such as ibuprofen and placebo, is warranted. Evidence is insufficient to advise parents and health-care workers of the risk-benefit of taking paracetamol in childhood.

 **Procalcitonin levels can identify severe bacterial infection in a febrile infant** (*Pediatrics 2008; 122: 701*)

Procalcitonin has been shown to be an accurate discriminator between viral and bacterial infections for older children and adults, however this is the first prospective study to evaluate the performance of a high-sensitivity procalcitonin assay for 234 febrile infants <3 months of age. Infants were classified as having definite, possible, or no severe bacterial infection (SBIs). Compared with mean

procalcitonin levels in infants with no SBI, mean procalcitonin levels for definite SBIs, and definite plus possible SBIs were significantly higher. A cutoff value of 0.12 ng/mL had a sensitivity of 95.2%, specificity of 25.5%, negative predictive value of 96.1%, and negative likelihood ratio of 0.19 for identifying definite and possible SBIs. This cutoff value accurately identified all cases of bacteremia. According to the authors, procalcitonin measurements performed especially well in detecting the most serious occult infections.

COMMENTS While a rapid, easily doable gold standard test for detecting serious infections in febrile infants is still some distance away, procalcitonin may help in managing this challenging till that time.

 **Room fan reduces risk of SIDS** (*Arch Pediatr Adolesc Med 2008; 162: 963*).

Using a room fan was associated with a 72% reduction in the risk of SIDS in a case-control study. By keeping room air circulating, fan use may prevent rebreathing by keeping exhaled carbon dioxide from pooling around the infant's nose and mouth. Previous studies have suggested that, in sleep environments with limited dispersion of exhaled gases, rebreathing is a possible mechanism for SIDS. The study was conducted in 11 California counties in 1997-2000, involved 185 SIDS cases and 312 matched controls. The beneficial effect was most pronounced among infants who slept in warmer temperatures, in the prone position, or in a bed with someone other than their parents.

COMMENTS While SIDS is a relatively underdiagnosed condition in our country, this study makes one wonder if our ubiquitous room fans may not have some role in this regard! It is also worth remembering that there is no substitute for the most effective means known to reduce the risk of SIDS – always placing infants for sleep on their backs.

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