Universal pneumococcal vaccination

This report summarizes the progress made in introducing pneumococcal conjugate vaccine (PCV) that includes seven pneumococcal serotypes, worldwide. The World Health Organization (WHO) and UNICEF have recognized the safety and effectiveness of PCV and recommend these vaccines to be included in national immunization programs. As of August 2008, 26 countries offered PCV7 to all children as part of national immunization programs or had PCV7 in widespread use (i.e., with estimated national coverage >50%); however, none of these countries is a low-income or lower-middle income country.

COMMENT As pneumonia is a major cause of under five mortality it will be prudent to introduce pneumococcal vaccine in our national immunization schedule. However vaccine cost may be a major prohibitive factor.

Differentiating fractures due to child abuse
(BMJ 2008; 337:a1518)

Skeletal fractures are diagnosed in up to one-third of children investigated for physical abuse. The fractures are often occult and they occur in infants and toddlers who cannot give a causal explanation. This study systematically reviewed published studies to identify the characteristics that distinguish between fractures resulting from abuse and those from other reasons. Fractures resulting from abuse were most common in infants and toddlers (0-3 yr), multiple, and commonly involved ribs; supracondylar humeral fractures were less likely to be inflicted. However, studies were insufficient to allow calculation of a probability of abuse for all types of fractures.

COMMENT No fracture, on its own, can distinguish an abusive from a non-abusive cause. Age of the child and the site and type of fracture can help determine the likelihood of abuse.

Prenatal acetaminophen exposure and respiratory symptoms in first year of life

This study examined the relationship between in utero exposure to acetaminophen and incidence of respiratory symptoms in the first year of life. A total of 345 women were recruited in the first trimester of pregnancy and followed up with their children through the first year of life. Use of acetaminophen in middle to late pregnancy was significantly related to wheezing (odds ratio, 1.8; 95% confidence interval, 1.1-3.0) and to wheezing that disturbed sleep (odds ratio, 2.1; 95% confidence interval, 1.1-3.8) in the first year of life after control for potential confounders.

COMMENT Additional follow-up studies are required to determine whether maternal use of acetaminophen actually leads to increased incidence of asthma at 3 to 5 years.

Home heating reduces symptoms of asthma
(BMJ 2008; 337: 1411)

This randomized controlled trial from New Zealand conducted on 409 children aged 6-12 years assessed whether non-polluting, effective home heating has a positive effect on the health of children with doctor diagnosed asthma. The study group received a non-polluting home heater before winter. Improvements in lung function (peak expiratory flow rate and forced expiratory volume in one second, FEV₁) were not significant. Compared with children in the control group, however, children in the intervention group had fewer days off school, fewer visits to a doctor for asthma, less sleep disturbed by wheezing, and less dry cough at night.

COMMENT The time tested method of staying in warm indoors during winter may prove to be helpful for children with asthma.

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