## **Do common childhood infections affect asthma risk in adults? Results from a longitudinal study over 37 years!** (*Chest; March 2012*)

Few studies have examined common childhood infections and adult asthma. This study examined associations between childhood infectious diseases, childhood pneumonia and current, persisting and incident asthma to middle age. It analyzed data from the Tasmanian Longitudinal Health Study (TAHS). A history of pneumonia was ascertained from their parents when the TAHS participants were 7 years old. Measles, rubella, mumps, chickenpox, diphtheria and pertussis were identified from school medical records. Greater infectious diseases load was negatively associated with persisting asthma at all ages. Individually, chicken-pox (aOR 0.58; 0.38-0.88) was negatively associated with asthma persisting to age 32 years and rubella was negatively associated with asthma persisting to ages 32 (aOR 0.61; 0.31-0.96) and 44 years (aOR 0.53; 0.35-0.82). Pertussis was associated with pre-adolescent incident asthma (adjusted Hazard Ratio [aHR] 1.80; 95% CI 1.10-2.96) while measles was associated with adolescent incident asthma (aHR 1.66; 1.06-2.56). Childhood pneumonia was associated with current asthma at ages 7 (aOR 3.12; 2.61-3.75) and 13 years (aOR 1.32; 1.00-1.75), an association stronger in those without than those with eczema. Overall, childhood infectious diseases protected against asthma persisting in later life but pertussis and measles were associated with new-onset asthma after childhood. Measles and pertussis immunization might lead to a reduction in incident asthma in later life.

## **Does maternal depression predict developmental outcome in 18 month old infants?** (Early Human Development; Feb 2012)

The aim of this study was to examine the associations between maternal depression in the first 6 months postpartum, home environment and cognitive, language and motor development in infants at 18 months of age. This article reports results from the control group (n=312 full term; n=48 preterm) of the prospective Docosahexaenoic acid (DHA) to Optimise Maternal Infant Outcome (DOMInO) randomized controlled trial. Mothers in South Australia completed the Edinburgh Postnatal Depression Scale (EPDS) at 6 weeks and 6 months postpartum. Infant development was assessed when children were 18 months old with the Bayley Scales of Infant and Toddler Development Version III and mothers completed the home screening questionnaire at this assessment. There were no significant associations between maternal depression in the first 6 months postpartum and cognitive, language or motor development after controlling for infant prematurity, breastfeeding status and socioeconomic level. Home environment remained a significant predictor of development after controlling for potential confounding variables.

## Can clinical findings be used to rule out streptococcal pharyngitis? A systematic review (J Pediatr; March 2012)

Two authors independently searched MEDLINE and EMBASE including articles containing data on the accuracy of symptoms or signs of streptococcal pharyngitis, individually or combined into prediction rules, in children 3-18 years of age. Thirty-eight articles with data on individual symptoms and signs and 15 articles with data on prediction rules met all inclusion criteria. In children with sore throat, the presence of a scarlatiniform rash (likelihood ratio [LR], 3.91; 95% CI, 2.00-7.62), palatal petechiae (LR, 2.69; CI, 1.92-3.77), pharyngeal exudates (LR, 1.85; CI, 1.58-2.16), vomiting (LR, 1.79; CI, 1.58-2.16), and tender cervical nodes (LR, 1.72; CI, 1.54-1.93) were moderately useful in identifying those with streptococcal pharyngitis. Nevertheless, no individual symptoms or signs were effective in ruling in or ruling out streptococcal pharyngitis. Symptoms and signs, either individually or combined into prediction rules, cannot be used to definitively diagnose or rule out streptococcal pharyngitis.

Can malodorous urine predict a UTI? (Pediatrics, Published online April 2, 2012).

The authors conducted a prospective consecutive cohort study in the emergency department of a pediatric hospital from July 31, 2009 to April 30, 2011. All children aged between 1 and 36 months for whom a urine culture was prescribed for suspected UTI (ie, unexplained fever, irritability, or vomiting) were assessed for eligibility. A standardized questionnaire was administered to the parents. The primary outcome measure was a UTI. Three hundred ninety-six children were initially enrolled, but 65 were excluded a posteriori due to non-availability of appropriate urine culture result. The median age of enrolled children was 12 months (range, 1-36). Criteria for UTI were fulfilled in 51 (15%). Malodorous urine was reported by parents in 57% of children with UTI and in 32% of children without UTI. On logistic regression, malodorous urine was associated with UTI (odds ratio 2.83, 95% confidence interval: 1.54-5.20). This association remained statistically significant when adjusted for gender and the presence of vesicoureteral reflux.Parental reporting of malodorous urine increases the probability of UTI among young children being evaluated for suspected UTI. However, this association is not strong enough to definitely rule in or out a diagnosis of UTI.

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