

 **Late Preterm Infant Care – New Guidelines** (<http://www.nationalperinatal.org/lptguidelines.php>)

Late preterm infants (LPI) have been referred to as ‘little imposters’ because in most cases they look and seem normal, at least at first. However, these babies have increased problems with breathing, feeding, temperature instability, and jaundice. LPIs account for up to 20% of all neonatal intensive care unit admissions. Compared with full-term infants, LPIs have increased morbidity and mortality, higher healthcare costs, and greater probability of readmission before 2 weeks of age. National Perinatal Association (NPA) of USA has come out with a new evidence-based, multidisciplinary guideline highlighting care of late preterm infants (LPIs) beginning with the in-hospital setting immediately after birth and continuing through the transition to home and beyond. The guidelines state that qualified healthcare provider should be assigned to the care of LPIs during the immediate postpartum recovery period. LPIs should be monitored closely during the first 24 hours after delivery; and should be prepared for any untoward incident. Late preterms need to be followed up for stability, screening, safety, and family support; and this must continue indefinitely. Ongoing follow-up care should be culturally and developmentally appropriate, with parents actively involved in making informed decisions.

 **Dosage of intravenous omeprazole for the prophylaxis of gastrointestinal bleeding in critically ill children** (*J Pediatr* DOI: 10.1016/j.jpeds.2012.10.009)

A prospective randomized clinical trial in critically ill children at risk of gastrointestinal bleeding was undertaken to determine the effect of 2 intravenous omeprazole regimens (0.5 or 1 mg/kg every 12 hours) on the gastric pH and incidence of gastrointestinal hemorrhage. The efficacy criteria were a gastric pH >4 and the absence of clinically significant gastrointestinal bleeding. It is interesting that neither of the 2 omeprazole regimens achieved adequate alkalization of the gastric pH during the first 24 hours. Between 24 and 48 hours, the 1 mg/kg dose maintained the gastric pH greater than 4 for a greater percentage of the time.

 **Familial hypercholesterolemia in children and adolescents – Early statin therapy** (*Current Opinion in Lipidology*: 2012, 23:6, 525–31)

Both general cardiovascular risk and specific familial hypercholesterolemia guidelines for children and adolescents have recently been released. Universal lipid screening of children has been recommended, in addition to targeted screening. Although lifestyle therapy remains of key importance, increasing evidence of safety and efficacy support the use of statin therapy. Early therapy has been associated with improvements in noninvasive measures of early atherosclerosis in children, which

likely can be extrapolated to improved freedom from cardiovascular disease events over the lifespan, as has been observed in adults. The new guidelines provide general and specific recommendations as to how family history and additional risk factors and risk conditions should be incorporated in decisions regarding initiation of statin therapy at LDL-cholesterol cut points. This study also provides an update and highlights the controversies regarding recent advances and recommendations regarding screening, diagnosis and treatment of children and adolescents with familial hypercholesterolemia.

 **Procalcitonin has better diagnostic value than C-reactive protein in well-appearing young febrile infants** (*Pediatrics*. 2012;130:815-22)

Procalcitonin (PCT) has already been introduced in many European protocols for the management of febrile children. Its value among young, well-appearing infants, however, is not completely defined. Objective of this retrospective study was to assess its performance in diagnosing serious bacterial infections and specifically invasive bacterial infections (IBIs) in well-appearing infants aged <3 months with fever without source (FWS). Among well-appearing young infants with FWS, PCT performed better than CRP in identifying patients with IBIs and seems to be the best marker for ruling out IBIs. Among patients with normal urine dipstick results and fever of recent onset, PCT remains the most accurate blood test.

 **Sleep duration and adiposity during adolescence** (*Pediatrics*. 2012;130:e1146-54)

The association between sleep and obesity has been described in different age groups. However, there are not sufficient data to clarify the inconsistent results reported in adolescents. The objective of this study was to study the associations between sleep duration and adiposity at 13 and at 17 years of age, with both cross-sectional and longitudinal approaches. Sleep duration was estimated by self-reported bedtimes and wake-up times. Age- and gender-specific BMI Z scores were calculated based on CDC and Prevention references. Body fat percentage (BF%) was assessed by bioelectrical impedance. In the cross-sectional analysis, at 13 years, sleep duration was inversely associated with BMI Z score only in boys; at 17 years, a positive association was found among girls but was only significant for BF%. In the longitudinal approach, sleep duration at age 13 was inversely associated with BMI Z score and BF% at 17 years only in boys. These significant associations disappeared after adjustment for adiposity at 13 years. These results were corroborated by those from cross-lagged analysis. This study showed an effect of sleep duration in adiposity at younger ages of adolescence and suggested gender differences in this association.

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