

Use of filtered sunlight in neonatal jaundice (*Pediatrics*. 2014; May 26:pii: peds. 2013-3500)

Queries related to efficacy, safety and method of sunlight therapy for physiological jaundice are common from parents of such neonates. Till now, we offer variable answers, but without any such evidence. This study from Nigeria examined the safety and efficacy of filtered-sunlight phototherapy (FS-PT) in 227 term/late preterm neonates (34 day old). Sunlight was filtered with commercial windowtinting films that remove most ultraviolet and significant levels of infrared light, and transmit effective levels of therapeutic blue light. FS-PT was efficacious in 92% of evaluable treatment days. There were only minor temperature-related adverse events.

In India, we have abundant sunlight, and in absence of availability of phototherapy in remote areas, this treatment mode may be worth exploring.



Levofloxacin - No evidence of cartilage toxicity (*Pediatrics*. 2014; doi: 10.1542/peds.2013-3636)

There is a lot of controversy about use of fluoroquinolones in pediatric practice. This 5-year follow-up study - from efficacy trials of levofloxacin, in comparison to comparators, in acute otitis media and community acquired pneumonia – examined the musculoskeletal adverse events in children treated with levofloxacin. Out of all children initially reporting any musculoskeletal adverse event, 124 children treated with levofloxacin, and 83 children treated with comparator agents were followed-up for five years after treatment. The number that were 'possibly related' to drug therapy was equal for both arms - 1 of 1340 for levofloxacin and 1 of 893 for comparator, and no case was assessed as "likely related" to study drug. The authors concluded that risks of cartilage injury with levofloxacin appear to be uncommon, and are clinically undetectable during 5 years.



Vitamin D supplementation of breastfed infants (Pediatr Res. 2014; doi: 10.1038/pr.2014.76)

Most agencies recommend vitamin D supplementation in breastfed infants but we know little about the optimum dose. This study compared daily 200 IU, 400 IU, 600 IU or 800 IU of vitamin D given from one month of age till 9 months in exclusively breastfed infants. The four doses of vitamin D produced different plasma levels of 25(OH)D, with higher doses leading to less chances of insufficiency. There was no effect on illness or growth. Authors recommended the dose of 400 IU/d and stressed on the need to start supplementation at birth as a significant proportion

of children were deficient at one month of age, when the supplements were started.

The most appropriate dose in Indian settings – where a significant proportion of neonates are likely to be born with low birth weight – needs to be determined.



Paracetamol in treatment of patent ductus arteriosus in preterm infants (*J Perinatol. 2014;May 22:doi: 10.1038/jp.2014.96*)

The role of ibuprofen in the treatment of patent ductus arteriosus (PDA) is well known. There are some cases where ibuprofen does not work and surgical ligation is required. In this recent study, paracetamol 15 mg/Kg 6 hourly for up to 7 days was found to be effective. Ductus closed in five out of seven infants where ibuprofen failed or could not be given. Although there is a possibility that PDA might have closed spontaneously, paracetamol seems to contribute to its closure in preterm infants.



Waist-to-height ratio plus BMI identifies obese at highest cardiovascular disease risk (*Medscape. Jun 02, 2014.*)

Usually we measure body mass index (BMI) of the child and classify the obesity. We also consider all obese people to be at high risk of developing cardiovascular diseases and metabolic disorders like diabetes in future. A study from Ireland suggests that combining 2 ways of assessing a person's size – BMI and waist-to-height ratio – may be a better way of identifying which overweight and obese individuals are at highest risk for cardiovascular disease and diabetes than either measurement alone. This could help focus resources on the early identification of those who should be prioritized for pharmacological and lifestyle interventions.



Safety of Sildenafil in infants (*Pediatr Crit Care Med.* 2014;15:362-368)

Recently USFDA warned against the use of sildenafil in pediatric patients for the treatment of pulmonary hypertension. In response to this, this review examined the current guidelines, dosage and safety information for use of sildenafil in pediatric population. After going through about 50 published studies, authors found that there is currently no evidence of serious adverse event in infants exposed to sildenafil, and it remains a valuable option for the treatment of pulmonary hypertension in young infants.

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