

 **Pediatric cataract surgery – heartening outcomes from India and Nepal** (*J Pediatr Ophthalmol Strabismus* 2013; Apr: 1-8).

Preoperative, intraoperative, and postoperative data of 390 children who underwent bilateral cataract surgery between 2007 and 2009 were analyzed. Forty-two (10.8%) children came from Nepal and 348 (89.2%) from India (mainly Bihar State). Intraocular lens (IOL) implantation with posterior capsule opening and anterior vitrectomy were achieved in 386 (99.0%) children. Median age at surgery was 7 years and 69.2% were male. At first presentation, 243 (62.3%) of the children were blind (<3/60 in the better eye). After more than 1 year, 53.5% had a normal visual status (range: 6/6 to 6/18), 5.6% of children were still blind, and mean refractive error spherical equivalent was $+1.0 \pm 2.4$ diopters. Mean long-term astigmatic error was 1.0 ± 0.9 diopters after 1 year. Glaucoma was rare. Even in a setting with limited resources, successful, cost-effective, high-volume surgery for pediatric cataract is possible. Despite late presentation and limited follow-up, more than half achieved good outcomes after more than 1 year. Only 5.6% remained blind due to amblyopia or eye anomalies. Bilateral surgery during one hospital stay, IOL implantation with undercorrection according to age, aggressive surgery to prevent secondary cataract, intensive anti-inflammatory therapy, and provision of durable, high-quality spectacles to take home all proved beneficial because many children cannot attend regular follow-up.


 **PCV 13 versus PCV 7 – Is it really better in clinical settings?** (*Clin Infect Dis.* 2013 Jun 26. Epub ahead of print).

This randomized double-blind trial compared the impact of PCV13 versus PCV7 on nasopharyngeal (NP) colonization and immunogenicity. Healthy infants were randomized (1:1) to receive PCV7 or PCV13 at age 2, 4, 6, and 12 months; NP swabs were collected at 2, 4, 6, 7, 12, 13, 18, and 24 months; blood was drawn at 7 and 13 months. Rates of NP-acquisition and prevalence, and serotype-specific immunoglobulin G concentrations were assessed. The per protocol analysis population included 881 PCV13 and 873 PCV7 recipients. PCV13 significantly reduced NP-acquisition of the additional PCV13-serotypes 1, 6A, 7F and 19A; the cross-reacting serotype 6C; and the common PCV7-serotype 19F. For serotype 3, and the other PCV7-serotypes, there were no significant differences between the vaccine groups. There were too few serotype 5 events to draw inference. The impact on prevalence at pre-defined time points was similar to that observed with NP-acquisition. PCV13 elicited significantly higher IgG responses for PCV13 additional serotypes and serotype 19F, and similar or lower responses for 6/7 PCV7-serotypes. The study clearly shows that in a clinical setting, PCV13 resulted in lower acquisition and prevalence of NP-colonization than PCV7 for 4 additional PCV13 serotypes,

and serotypes 6C and 19F. It was comparable with PCV7 for all other common serotypes. These findings predict vaccine effectiveness through both direct and indirect protection.

 **Get your adolescent to lose weight by sleeping more!** (*Pediatrics.* 2013; 131: e1428)

Short sleep has been associated with adolescent obesity. The authors sought to determine if sleep duration was associated with BMI distribution changes from age 14 to 18. Adolescents were recruited from suburban high schools in Philadelphia when entering ninth grade (n = 1390) and were followed-up every 6 months through 12th grade. Height and weight were self-reported, and BMIs were calculated. Hours of sleep were self-reported. BMI increased from age 14 to 18, with the largest increase observed at the 90th BMI percentile. Each additional hour of sleep was associated with decreases in BMI at all the BMI percentiles. The strength of the association was stronger at the upper tail of the BMI distribution. Increasing sleep from 7.5 to 10.0 hours per day at age 18 predicted a reduction in the proportion of adolescents >25 kg/m² by 4%. More sleep was associated with non uniform changes in BMI distribution from age 14 to 18. Increasing sleep among adolescents, especially those in the upper half of the BMI distribution, may help prevent overweight and obesity.

 **Can maternal diabetes increase the fetal cardiac risk?** (*Int J Cardiol.* 2013 Apr 3. pii: S0167-5273(13)00451-8).

Fetal exposure to maternal diabetes mellitus (DM) is associated with high birth weight, congenital heart malformations, childhood adiposity, diabetes, hypertension and dyslipidemia. The long term cardiovascular consequences of fetal exposure to maternal DM during pregnancy and high birth weight are not known. All individuals born in Sweden 1973-1988 (n=1,551,603) were included in the study. The association between offspring's adult consumption of cardiovascular medication and i) maternal DM during pregnancy and ii) birth weight were analyzed. Follow up time ranged between 17 and 36 years. Offspring exposed to maternal DM in utero had an increased risk of non-malformation cardiovascular disease (NMCVD). However, after also excluding offspring with insulin dependent DM, no increased risk of NMCVD was found. No increased risk of NMCVD was found in offspring born large for gestational age, but an increased risk of NMCVD was found in offspring born small for gestational age. Exposure to maternal DM during pregnancy was not associated with NMCVD in offspring at a maximum of 36 years of follow up. Low birth weight was confirmed to be a risk factor for NMCVD while high birth weight was not.

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