CLIPPINGS

Neonatal circumcision – complications and preventive effect on UTI (*J Ped Urol 2012;8:320*)

To evaluate the preventive effect of neonatal circumcision on urinary tract infection and the incidence of complications following neonatal circumcision, a prospective study was carried out between 2004 and 2008. During this period, there were 3000 neonatal circumcisions. All cases were examined for any complications 1 week later, and occurrence of meatal stenosis was followed up to 15 months of age. In this group, urine analysis and culture was successfully performed four times for 2000 circumcised infants at 1.5, 3, 9 and 15 months. In the control group of 3000 uncircumcised infants, 1000 cases accomplished urine analysis and culture at the same designated intervals. A positive urine culture was observed in none of the circumcised cases and in 20 (2%) uncircumcised cases after obtaining a suprapubic bladder aspiration sample. The latter 20 infants were circumcised and follow-up cultures were negative in 17 cases. The overall complication rate in the circumcised group was 1.6%. The difference in frequency of urinary tract infection between the two groups was statistically significant (P<0.001). Neonatal circumcision has few complications and reduces the incidence of asymptomatic urinary infection. It may be considered as a preventive health measure.

Procalcitonin for predicting acute pyelonephritis in febrile UTI (*Emerg Med J doi:10.1136/emermed-2011-2008*)

Urinary tract infection (UTI) is a common bacterial infection in children that can result in permanent renal damage. This study prospectively assessed the diagnostic performance of procalcitonin (PCT) for predicting acute pyelonephritis among children aged ≤10years with febrile UTI presenting to the pediatric emergency department. The 136 enrolled patients (56 boys and 80 girls; age range 1month to 10 years) were divided into acute pyelonephritis (n=87) and lower UTI (n=49) groups according to ^{99m}Tc-dimercaptosuccinic acid scan results. The cut-off value for maximum diagnostic performance of PCT was 1.3 ng/mL (sensitivity 86.2%; specificity 89.8%). By multivariate regression analysis, only procalcitonin and CRP were retained as significant predictors of acute pyelonephritis. PCT has better sensitivity and specificity than CRP and WBC count for distinguishing between pyelonephritis and lower UTI. However, the cost of the test, and the turnaround time of our labs needs to be kept in mind before implementing this routinely in our setting.

Preterm nursery weight gain better with intermittent darkness (*J Pediatr 2012;140:192*)

The purpose was to evaluate the benefits of cycled light (CL) versus near darkness (ND) on health in preterm infants born at <31 weeks' gestational age. A randomized, interventional study comparing infants receiving (1) CL from birth, (2) CL at 32 weeks post-conceptional age (PCA), and (3) CL at 36 weeks PCA in transition for discharge home. Infants receiving CL at birth and 32 weeks gained weight faster than infants not receiving CL until 36 weeks PCA. There were no differences among the groups in length of hospitalization stay or number of ventilator days, but the power was low for these variables. These findings suggest that CL has significant weight gain benefits over ND, and there are no short-term advantages of ND over cycled light for health in preterm infants.

And now probiotics for treating perennial allergic rhinitis (*Int J Pediatr Otorhinolaryngol. 2012;76:994-1001*)

Supplementary consumption of probiotics may temporarily alter the intestinal microflora of infants and children, thereby preventing and treating allergic disorders. This study compared the clinical efficacy of levocetirizine with that of levocetirizine plus *Lactobacillus johnsonii* EM1 (Lj EM1) for treating perennial allergic rhinitis (PAR) in children. Sixty-three children aged 7-12 years fulfilled the entry criteria for the study and had moderate to severe PAR of at least 1 year duration. The treatment followed a randomized, open-label crossover design: all subjects were randomized to 2 crossover treatment regimens of levocetirizine with Lj EM1 (group 1) or levocetirizine alone (group 2) for 12 weeks; subsequently, treatments were reversed for a further 12 weeks. The effects of the 2 regimens were compared using the Pediatric Rhinoconjunctivitis Quality of Life Questionnaire (PRQLQ) and the total symptom score (TSS) from diary cards. After the first 12 weeks of treatment, both groups had improved TSS at weeks 4, 8, and 12 (P<0.05), and group 1 was more efficacious than group 2 at week 4 (P=0.014), week 8 (P=0.011), and week 12 (P<0.009). During the second 12-week period, group 2 showed continual and progressive improvement, while group 1 did not. The PRQLQ scores were significantly decreased in both groups (P<0.05), but there was no statistically significant difference between the 2 groups (P=0.446). No serious adverse events were recorded in either treatment group. The 24-week, 2-phase, crossover treatment program showed that levocetirizine plus Lj EM1 was more effective for PAR than levocetirizine and that this difference persisted for at least 3 months after discontinuation of Lj EM1.

Gaurav Gupta
drgaurav@charakclinics.com