

Can we discharge children with acute osteomyelitis on oral antibiotics? (*JAMA Pediatr.* 2014;doi:10.1001/jamapediatrics.2014.2822.)

This retrospective cohort study compared the efficacy and adverse outcomes of post-discharge antibiotic therapy administered via the peripherally inserted central catheter (PICC) or the oral route, among 2060 children and adolescents with osteomyelitis from 36 participating children's hospitals. Children treated with antibiotics via the oral route ($n=1005$) did not experience more treatment failures than those treated with antibiotics via the PICC route ($n=1055$). Rates of adverse drug reaction were low (<4% in both groups) but slightly greater in the PICC group. Among the children in the PICC group, 158 (15%) had a PICC complication that required an emergency department visit ($n=96$), a rehospitalization ($n=38$), or both ($n=24$). The authors conclude that given the magnitude and seriousness of PICC complications, clinicians should reconsider the practice of treating otherwise healthy children with acute osteomyelitis with prolonged intravenous antibiotics after hospital discharge when an equally effective oral alternative exists.

Peripheral intravenous cannulation is the predominant method for administration of post-discharge intravenous antibiotics for children in India and similar settings where PICC is not routinely available. Securing repeated intravenous access is challenging for the pediatrician, and traumatic for the child. Use of oral antibiotics in post-discharge situations should help reduce these challenges.

Should we monitor children with Down syndrome for congenital hearing loss? (*J Pediatr.* 2015;166: 168-171.e1.)

A cross-sectional, retrospective chart review of 109 infants with Down syndrome born or referred to the study hospital after birth were followed-up in this study. Twenty-eight infants failed their newborn hearing screen; 27 of them were referred for audiologic evaluation, and 19 completed the evaluation. Fifteen of these 19 infants (79%) had confirmed hearing loss. The prevalence of congenital hearing loss in this sample of neonates with Down syndrome was 15%, and the loss to follow-up rate for infants with positive hearing screens was 32%. Authors suggest that continued monitoring of hearing is needed in children with Down syndrome.

Children with chronic cough: When is watchful waiting appropriate? (*Chest.* 2014;doi:10.1378/chest.14-2155.)

Chronic cough is associated with poor quality of life and may signify a serious underlying disease. Differentiating non-specific cough (when watchful waiting can be safely undertaken) from specific cough (treatment and/or further investigations are beneficial) would be clinically useful. In 326 children, the authors of this study used a dataset from a multi-center study involving children newly referred for chronic cough (median duration 3-4 months) to determine the sensitivity, specificity, predictive values and likelihood ratios (LR) of cough pointers (symptoms, signs

and simple investigations) recommended in guidelines. The pre-test probability of specific cough was 88%. The absence of false positive results meant that most pointers had strongly positive LRs. The most sensitive pointer (wet cough) had a positive LR=26.2. While absence of other individual pointers did not change the pre-test probability much (negative LRH²>1), the absence of all pointers had a strongly negative likelihood (LR=0, 95%CI 0-0.03). Children in the spontaneous-resolution group were significantly more likely to be older, non-indigenous, have dry cough, and with normal chest X-ray. Results of this study suggest that children with chronic dry cough without any cough pointers can be safely managed using the 'watchful waiting approach'.

Predicting subsequent risk of renal involvement in children with Henoch-Schönlein purpura? (*Pediatr Nephrol.* 2014; Dec 28. [Epub ahead of print])

The aim of this analytical cohort study was to evaluate the potential of serum pentraxin 3 (PTX3) values as an early predictor of subsequent renal involvement in patients with Henoch-Schönlein purpura (HSP) with no abnormalities on urinary examination and in renal function tests at disease onset. Sixty children (age range 3-15 years) with HSP and sixty age- and sex-matched healthy controls were followed up for at least 18 months. Clinical findings were recorded for all patients at first examination, and blood samples for routine laboratory parameters and PTX3 value as well as skin biopsy specimens were obtained from each subject. Of the 60 patients with HSP, 29 (48.3%) developed subsequent renal involvement, of whom four underwent kidney biopsy. The mean serum PTX3 level of patients with subsequent renal involvement was significantly higher than those of patients without renal involvement and of the controls ($P=0.004$). Immunofluorescence evaluation of skin biopsy revealed that in addition to immunoglobulin A (IgA) deposition, the IgM deposition was significantly associated with subsequent renal involvement ($P=0.008$). A high PTX3 level and IgM staining in skin biopsies from HSP patients may be harbingers of subsequent renal involvement.

To cut or not to cut early – the Umbilical Cord! (*Pediatrics.* 2014;134:257-64.)

The study included 64 healthy pregnant women who went into spontaneous labour, and delivered vaginally at a hospital in Granada, Spain. Half of the newborns had their umbilical cord cut 10 seconds after delivery, whereas the other half had it cut after 2 minutes. The study showed that delaying the cutting of the umbilical cord in newborns by just 2 minutes lead to a better development of the baby during the first days of life. The findings suggest that the time in cutting the umbilical cord influences the resistance to oxidative stress in newborns. The researchers observed an increase in the antioxidant capacity of mature newborns, as well as moderation of inflammatory effects in the case of induced delivery.

GAURAV GUPTA
drgaurav@charakclinics.com