

Intermittent versus daily montelukast versus placebo in Episodic Asthma - what works? (*Ann Allergy Asthma Immunol* 2011;106: 518-26)

To assess the regimen-related efficacy of montelukast in treating severe intermittent asthma a multicenter, randomized, double-blind, 52-week study was performed in children 6 months to 5 years of age comparing placebo ($n=591$) with two regimens of montelukast 4 mg: (1) daily ($n=589$); or (2) episode-driven ($n=591$) for 12 days beginning with signs/symptoms consistent with imminent cold or breathing problem. Montelukast did not reduce the number of asthma episodes culminating in asthma attack over 1 year in children 6 months to 5 years of age, although numerical improvements occurred in some endpoints.

Fetal Effects of Anticonvulsant Polytherapies: Are there different risks from different drug combinations? (*Arch Neurology* Jun 13, 2011. Epub ahead of print)

To determine the frequency of malformations among infants born to women who had taken lamotrigine or carbamazepine as part of polytherapy during the first trimester of pregnancy a cohort of 6857 pregnant women was enrolled in the North American AED (Antiepileptic Drug) Pregnancy Registry between 1997 and 2010. The risk of malformations was 1.9% among infants exposed to lamotrigine as monotherapy ($n = 1441$). Among the infants exposed to lamotrigine as polytherapy ($n = 505$), the risks were 9.1% for lamotrigine plus valproate sodium and 2.9% for lamotrigine plus any other AEDs. Similarly, the risk of malformations was 2.9% for the infants exposed to carbamazepine monotherapy ($n = 1012$). For the infants exposed to carbamazepine as polytherapy ($n = 365$), the risks were 15.4% for carbamazepine plus valproate and 2.5% for carbamazepine plus any other AEDs. Confounding by factors such as periconceptional vitamin use, cigarette smoking, alcohol use, and chronic maternal diseases did not explain the results. Authors concluded that the risk of malformations among infants exposed to lamotrigine and carbamazepine as polytherapy was higher than the corresponding monotherapies only when the polytherapy includes valproate. These findings suggest that counseling for fetal risks from AED polytherapy should be based on the specific drugs included.

Functional endoscopic sinus surgery in children: what are the predictive factors of outcome? (*Eur Arch Otorhinolaryngol.* 2011 Jun 26. Epub ahead of print)

This study included 87 children who underwent pediatric endoscopic sinus surgery (PESS) for chronic rhinosinusitis (CRS) with nasal allergy ($n=45$), CRS without nasal allergy ($n=36$) and CRS with polyposis ($n=6$) from 2005 to 2010. The overall success rate was 87.7% (CRS with nasal allergy: 87.5%, CRS without nasal allergy: 85.7%, and CRS with polyposis: 93%). Postoperative improvement was significantly correlated with extent of preoperative disease, adenoidectomy and second look operation and not significantly correlated with type of the preoperative disease or previous surgery. The results of PESS are influenced by age group, a younger age group is associated with more adhesions and recurrences.

Which pressure to believe? A comparison of direct arterial with indirect blood pressure measurement techniques in the pediatric intensive care unit (*Pediatr Crit Care Med.* 2011 Jun 9. Epub ahead of print)

Forty children (birth to 17 yrs) admitted to the pediatric intensive care unit with various clinical conditions requiring a radial arterial catheter for continuous arterial blood pressure monitoring were enrolled. Each subject had measurements taken every 6 hrs over a 24-hr period for: direct arterial blood pressure, indirect blood pressure using the Phillips automated oscillometric device, and indirect blood pressure using the sphygmomanometer and Doppler ultrasound. There were no significant differences between the methods of blood pressure measurement when groups were analyzed based on age. When analyzed by age-specific normo-, hypo-, and hypertensive criteria, outside the normotensive range, the automated readings were higher during hypotension and lower during hypertension compared with the arterial and Doppler ultrasound methods. The arterial blood pressure was closer to the gold standard Doppler ultrasound blood pressure in all three blood pressure groups.

Gaurav Gupta
drgaurav@charakclinics.com