

3.6年)。有14例儿童(25%)表现有脂肪重新分布或脂肪营养障碍。7例出现脂肪过度增加(12.5%),2例(3.5%)患儿出现脂肪营养不良,5例(25%)属于混合型。年龄大于11岁的儿童的脂肪重新分布率较高(50%)。就脂肪营养不良而言,71.4%的患儿表现有高甘油三酯血症( $> 130 \text{ mg/dl}$ ) 57%表现有高胆固醇血症( $> 180 \text{ mg/dl}$ )。发现脂肪营养障碍与年龄、ART及HAART疗程、高甘油三酯血症相关(分别为: $P < 0.001$ ,  $0.002$ ,  $0.016$ 及 $P < 0.001$ ),但与性别、家族史、临床或免疫状态及病毒载量间无明显相关性。结论:脂肪营养障碍的发病率为25%(95%CI 14.8~34.6),脂肪组织增生为普遍现象。临床脂肪重新分布与年龄增大、ART、HAART及高甘油三酯血症明显相关。

## J. PEDIATR. 2005 146/5

### 儿科学杂志

#### 1011. Use of asthma guidelines by primary care providers to reduce hospitalizations and emergency department visits in poor, minority, urban children

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Objectives: To determine whether an organized, citywide asthma management program delivered by primary care providers (PCPs) increases adherence to the National Asthma Education and Prevention Program (NAEPP) Asthma Guidelines and whether adherence to the guidelines by PCPs decreases medical services utilization in low-income, minority children. Study design: Analysis of the utilization of medical services for a cohort of 3748 children with asthma who presented for care at one of six primary care urban clinics in Hartford, Connecticut, and who were enrolled in a disease management program (Easy Breathing™) between June 1, 1998 and August 31, 2002. Results: Of the 3748 children with physician confirmed asthma, 48% had persistent disease. Paid claims for inhaled corticosteroids increased 25% ( $P < 0.0001$ ) after enrollment in Easy Breathing. Provider adherence to the NAEPP guidelines for anti-inflammatory therapy increased from 38% to 96%. Easy Breathing children with asthma

experienced a 35% decrease in overall hospitalization rates ( $P < 0.006$ ), a 27% decrease in asthma emergency department (ED) visits ( $P < 0.01$ ), and a 19% decrease in outpatient visits ( $P < 0.0001$ ). Conclusions: An organized, disease management program increased adherence to the NAEPP guidelines for anti-inflammatory use by PCPs in urban clinics. Adherence to this element of the guidelines by PCPs reduced hospitalizations, ED visits, and outpatient visits for children with asthma.

通过初级医疗提供哮喘治疗指导以减少贫困的未成年城市儿童住院治疗及急诊就医率

目的:确定有组织的及全市范围内由初级医疗提供者(PCPs)执行的哮喘管理项目是否有助于增加全国哮喘教育与预防项目(NAEPP)哮喘指导方针的依从性,以及这种依从性是否有助于降低低收入未成年儿童医疗服务设施利用率。研究设计:对在1998年6月1日至2002年8月31日期间于疾病管理项目(Easy Breathing™)登记者及哈特福德、康涅狄格的6个城市初级医疗诊所之一的共3748例哮喘患儿进行队列研究来分析医疗设施的利用率。结果:3748例儿童被内科医师确诊为哮喘,48%有持续症状。在Easy Breathing登记后吸入皮质激素的支出费用增加了25%( $P < 0.0001$ )。PCPs依照NAEPP指导抗炎疗法由38%增加到96%。Easy Breathing™项目登记的哮喘儿童总体住院率下降了35%( $P < 0.006$ ),哮喘急诊就医率降低了27%( $P < 0.01$ ),住院患者的比率降低了19%( $P < 0.0001$ )。结论:一个有组织的疾病管理项目即通过城市诊所的PCPs增加了在抗炎治疗方面对NAEPP指导方针的依从性。依从于该指导原则减少了哮喘患儿的住院率、急诊就医率及门诊就医率。

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#### 1012. Evaluation of an association between gastrointestinal symptoms and cytokine production against common dietary proteins in children with autism spectrum disorders

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Objective: To evaluate an association between cytokine production with common dietary proteins as a marker of non-allergic food hypersensitivity (NFH) and gastrointestinal (GI) symptoms in young children with autism

spectrum disorders (ASD). Study design: Peripheral blood mononuclear cells (PBMCs) were obtained from 109 ASD children with or without GI symptoms (GI [ + ] ASD, N = 75 and GI ( - ) ASD, N = 34], from children with NFH (N = 15), and control subjects (N = 19). Diarrhea and constipation were the major GI symptoms. We measured production of type 1 T-helper cells (Th1), type 2 T-helper cells (Th2), and regulatory cytokines by PBMCs stimulated with whole cow's milk protein (CMP), its major components (casein,  $\beta$ -lactoglobulin, and  $\alpha$ -lactalbumin), gliadin, and soy. Results: PBMCs obtained from GI ( + ) ASD children produced more tumor necrosis factor- $\alpha$  (TNF- $\alpha$ )/interleukin-12 (IL-12) than those obtained from control subjects with CMP,  $\beta$ -lactoglobulin, and  $\alpha$ -lactalbumin, irrespective of objective GI symptoms. They also produced more TNF- $\alpha$  with gliadin, which was more frequently observed in the group with loose stools. PBMCs obtained from GI ( - ) ASD children produced more TNF- $\alpha$ /IL-12 with CMP than those from control subjects, but not with  $\beta$ -lactoglobulin,  $\alpha$ -lactalbumin, or gliadin. Cytokine production with casein and soy were unremarkable. Conclusion: A high prevalence of elevated TNF- $\alpha$ /IL-12 production by GI ( + ) ASD PBMCs with CMP and its major components indicates a role of NFH in GI symptoms observed in children with ASD.

孤独症儿童胃肠道症状与普通食物蛋白刺激所产生的细胞因子产量之间的关系评价

目的:普通食物蛋白刺激产生的细胞因子是非变应性食物超敏反应(NFH)的标志,本文旨在评价小龄自闭症谱群疾病(ASD)儿童的这些细胞因子和胃肠道(GI)症状间的关系。研究设计:从109例有或无GI症状的ASD儿童[GI(+)ASD, n=75和GI(-)ASD, n=34],NFH儿童(n=15)及对照组(n=19)儿童中获得外周血单核细胞(PBMCs)。腹泻和便秘是主要的GI症状。作者测定了通过全乳蛋白质(CMP)、其主要的成分(酪蛋白、 $\beta$ -乳球蛋白及 $\alpha$ -乳蛋白)、麦胶蛋白及大豆对PBMCs的刺激而产生的1型T-辅助细胞(Th1)、2型T-辅助细胞(Th2)、及调节细胞因子的产量。结果:不管有无客观的GI症状,由CMP、 $\beta$ -乳球蛋白及 $\alpha$ -乳蛋白刺激GI(+)ASD儿童PBMCs所产生的肿瘤坏死因子- $\alpha$ (TNF- $\alpha$ )/白介素-12(IL-12)多于对照组。麦胶蛋白刺激后GI(+)ASD组也产生更多的TNF- $\alpha$ ,腹泻组中可以更多地观察到这一现象。由CMP刺激GI(-)ASD儿童的PBMCs产生多于对照组的

TNF- $\alpha$ /IL-12,但使用 $\beta$ -乳球蛋白, $\alpha$ -乳蛋白及麦胶蛋白刺激却没有发现这一现象。酪蛋白和大豆刺激所产生的细胞因子产量的增加不显著。结论:由CMP和它的主要成分刺激GI(+)ASD儿童PBMCs所产生的TNF- $\alpha$ /IL-12高的增加比率表明在ASD儿童中所观察到的GI症状在NFH中所发挥的作用。

### 1013. Improved outcomes of outborn preterm infants if admitted to perinatal centers versus freestanding pediatric hospitals

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Objectives: To examine whether admission hospital type (13 perinatal centers vs 4 freestanding pediatric hospitals) was associated with differences in risk and illness severity adjusted mortality and morbidity among outborn preterm infants. Study design: Records of singleton outborn infants  $\leq$  32 weeks' gestational age (n = 605) admitted to 17 tertiary level neonatal intensive care units participating in the Canadian Neonatal Network for the period 1996 to 1997 were examined. Results: Outborn infants admitted to freestanding pediatric hospitals were at higher risk of death (adjusted odds ratio [AOR], 2.25; 95% confidence interval [CI], 1.20, 4.20), nosocomial infection (AOR, 2.48; 95% CI, 1.64, 3.73), and oxygen dependency at 28 days of age (AOR, 1.77; 95% CI, 1.14, 2.75) when compared with outborn infants admitted to perinatal centers. Conclusions: After adjustment for perinatal risks and admission illness severity, outborn infants had better outcomes if they were admitted to perinatal centers compared with freestanding pediatric hospitals.

与独立的儿科医院比较入住围生中心将改善的早产儿结局

目的:为了验证入院类型(13所围生中心与4所独立的儿科医院比较)是否和已经用危险度和疾病严重程度校正后的早产儿的发病率和死亡率的差异有关。研究设计:查阅 $\leq$ 32周胎龄,从1996~1997年被收入17个三级新生儿重症监护病房的独生婴儿的医疗记录,这些监护室都加入了加拿大新生儿网络。结果:入住独立的儿科医院的出生婴儿与入住围生中心相比有较高的死亡率[校正后的优势比(AOR),2.25,95%CI 1.20~4.20]、院内感染率(AOR 2.48,95%CI 1.64~3.73)及28d时对氧的依赖性(AOR 1.77,95%CI 1.14~