Facilitating histological diagnosis of celiac disease (*J Pediatr Gastroenterol Nutr. 2015;Oct 30.* [*Epub ahead of print*])

The diagnosis of celiac disease (CD) sometimes remain difficult because the histological criteria are not fully met. The aim of this study was to refine histological diagnostic criteria of CD. One hundred seventy-five duodenal bulb (D1) biopsies from 79 children with celiac disease, and 96 duodenal (D2) biopsies of 96 CD patients (58 females; mean age 7 yrs) and 135 normal biopsies obtained from children over a period of 4 years were reviewed. Between 40 and 70 intraepithelial lymphocytes (IEL) per 100 epithelial cells (EC) were seen in 32% of patients were CD, whereas 50% had other diagnoses. Among those with 70 IELs per 100 EC, 53% were CD, and only 6% had other diagnoses. In CD, IELs were significantly located above epithelial cell nuclei compared to other diagnoses. Finally, 6% of CD cases showed isolated increase of IELs in D1 without architectural modification.D1 allowed diagnosis of CD in 21% of cases and IEL >70 per 100 EC correlated strongly with CD. Between 40 and 70 IELs/100 EC, CD was very likely but other diagnoses were suggested to be considered.

Exposure and use of mobile media devices by young children (*Pediatrics. 2015;Nov 2:pii: peds.2015-2151*)

This cross-sectional study included 350 children aged 6 months to 4 years at a pediatric clinic in an urban, low-income, minority community in Philadelphia, United States. Most households had television (97%), tablets (83%) and smartphones (77%). At age of 4 years, half the children had their own television and three-fourths had their own mobile device. Almost all children (96.6%) used mobile devices, and most started using it before age of 1 year. Parents allowed devices to children when doing house chores (70%), to keep them calm (65%), and at bedtime (29%). At age of 2 years, most children used a device daily and spent comparable screen time on television and mobile devices. Most 3- and 4-year-olds used devices without help, and one-third engaged in media multitasking. Content delivery applications such as YouTube and Netflix were popular. Child ownership of device, age at first use, and daily use were not associated with ethnicity or parent education.

Television exposure, toys and fast food (*J Pediatr. 2015;Oct 22:pii: S0022-3476(15)01137-3).*

This study was done to assess the associations between children's exposure to television (TV) networks that aired child-directed advertisements for children's fast food meals with the collection of fast food meal toy premiums and frequency of family visits to those restaurants. One hundred parents of children aged 3-7 years were recruited from a rural pediatrics clinic during 2011. Parents reported the child's TV viewing habits and family visit frequency to the fast food restaurants participating in child-directed TV marketing at the time, and their child's requests for visits to and the collecting of toy premiums from those restaurants. Logistic regression models assessed adjusted associations between a child's TV viewing with more frequent restaurant visits (≥monthly in this population). Thirty-seven percent of parents reported ≥monthly visits to the select fast food restaurants. Among children, 54% requested visits to and 29% collected toys from those restaurants. Greater child commercial TV viewing was significantly associated with more frequent family visits to those fast food restaurants .

Asthma and insulin resistance (*J Asthma. 2015;2:1-24*)

The present study aimed to describe the body mass index, insulin resistance, and levels of adipokines and inflammatory markers in Brazilian asthmatic children and adolescents – and to investigate their possible association with the severity and control of asthma. It was a cross-sectional study involving 92 children in the age group 3-18 years. Lipid profile, glycemia and insulin for homeostasis model assessment (HOMA), adipokines, tumor necrosis factor alpha (TNF-α), C-reactive protein (CRP), total immunoglobulin E (IgE) and specific IgE against aeroallergens were measured. The median age of children studied was 9.6 years; 56.5% participants were males, 58.6% were prepubertal, and 92.4% had atopic asthma. Overweight/obesity (38%) showed an inverse correlation with age and a direct correlation with the leptin concentration. Insulin concentration was independently associated with moderate persistent asthma. HOMA showed a direct correlation with the leptin and total IgE levels and an inverse correlation with the TNF-α levels.

Can dermal bilirubin levels be used to assess jaundice in VLBW infants? (*J Pediatr. 2015 Sep 16. doi: 10.1016/ j.jpeds.2015.08.038*)

To assess the accuracy of transcutaneous bilirubin (TcB) measurements at 5 different body sites in Japanese very low birthweight (VLBW) infants and to determine a cut-off value of TcB to detect total serum/plasma bilirubin levels ≥10 mg/dL, 85 Japanese VLBW infants were enrolled from 5 neonatal intensive care units. A total of 383 blood samples from infants not receiving phototherapy or ≥24 hours postphototherapy were analyzed. TcB was measured at the forehead, sternum, upper back, lower abdomen, and waist within 1 hour of blood collection. TcB significantly correlated with total bilirubin, but the coefficient of determination varied among the sites (forehead: 0.53, sternum: 0.65, upper back: 0.63, lower abdomen: 0.54, waist: 0.74). At a TcB value ≥8, the sensitivity was 100% at the sternum and upper back, 85% at the waist, 84% at the forehead, and 64% at the lower abdomen to detect total bilirubin ≥10 mg/dL. TcB ≥8 on the sternum or upper back was more reliable than that on the forehead, lower abdomen, or waist to detect TB levels ≥10 mg/dL.

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