U Eye examination can predict severity of cerebral malaria (*J Infect Dis. 2015;211:1977*)

Malarial retinopathy has diagnostic and prognostic value in children with P. falciparum cerebral malaria. Α clinicopathological correlation between observed retinal changes during life and the degree of sequestration of parasitized red blood cells was investigated in ocular and cerebral vessels at autopsy in 18 Malawian children who died from clinically defined cerebral malaria. The authors studied the intensity of sequestration and the maturity of sequestered parasites in the retina, in nonretinal ocular tissues, and in the brain. Five children with clinically defined cerebral malaria during life had other causes of death identified at autopsy; no malarial retinopathy and scanty intracerebral sequestration was seen in them. Thirteen children had malarial retinopathy; severity correlated with percentage of microvessels parasitized in the retina, brain, and nonretinal tissues with some neuroectodermal components. In moderate/severe cases of retinopathy (n=8), vascular congestion was more intense, sequestered parasites were more mature, and the quantity of extraerythrocytic hemozoin was higher in comparison to those with mild retinopathy (n=5). These data provide a histopathological basis for the known correlation between degrees of retinopathy and cerebral dysfunction in cerebral malaria. In addition to being a valuable tool for clinical diagnosis, retinal observations give important information about neurovascular pathophysiology of cerebral malaria in children.

Does vitamin D status in early life affect risk of allergies in childhood? (*J Allergy Clin Immunol. 2015:DOI: http:// dx.doi.org/10.1016/j.jaci.2015.04.017*)

The study sought to examine the associations between early-life vitamin D levels and the development of allergy-related outcomes in a racially diverse longitudinal birth cohort. 25hydroxyvitamin D [25(OH)D] levels were measured in stored blood samples from pregnancy, cord blood, and age 2 years. Logistic regression models were used to calculate odds ratios (ORs) for a 5 ng/mL increase in 25(OH)D levels for the following outcomes at age 2 years: eczema, skin prick tests (SPTs), increased allergen-specific IgE level (>0.35 IU/mL) and doctor's diagnosis of asthma (3-6 years). Prenatal 25(OH)D levels were inversely associated with eczema. The association was stronger in white children, although this was not statistically significant. Cord blood 25(OH)D levels were inversely associated with having one or more positive SPT responses and aeroallergen sensitization. Both associations were statistically significant in white children in contrast with black children. 25(OH)D levels measured concurrently with outcome assessment were inversely associated with aeroallergen sensitization only among black children. Prenatal and cord blood 25(OH)D levels were associated with some allergy-related outcomes, with a general pattern indicating that children with higher 25(OH)D levels tend to have fewer allergy-related outcomes.

Do multiple doses of flu vaccine increase local reactions? (*Vaccine. 2015;33:3586*)

In order to assess factors associated with reactogenicity of trivalent inactivated influenza vaccine (IIV3) among young children, data on 1538 vaccinees aged 0-5 years in a previous vaccine effectiveness study were analyzed. The most frequent reaction was redness (19%), followed by induration, swelling, itching, and pain (6-12%); there were no serious adverse events. For some local reactions, multivariate analyses indicated associations of younger age, preschool attendance, presence of siblings and allergy with lower risk, and use of thinner needles with higher risk. Administration of one or more IIV3 vaccines during the previous three seasons was positively associated with each local reaction (adjusted OR 3.6,5.4). For subjects aged e 3 years, prior successive annual vaccinations were associated with substantially increased local reactions, with clear dose-response relationships; for example, a 9.8-fold greater risk of swelling following three successive annual vaccinations before the study season.

Blood in stools of healthy infants – Milk maybe the key! (*J Pediatr Gastroenterol Nutr. 2015;61:69*)

The dietary protein proctocolitis, also known as allergic proctocolitis, is characterized by the presence of mucoid, frothy and bloody stools in an otherwise healthy infant. The aim of this study was to describe a group of children with allergic proctocolitis, diagnosed according to the criterion-standard method, food challenge, to provide clinicians with more information on typical presentation, and an overview on nutritional management strategies and prognosis. The authors collected data on infants with allergic proctocolitis in outpatient clinics. Other conditions that may cause bloody diarrhea were ruled out. Skin prick tests and atopy patch tests were performed for diagnosis, and patients were studied for resolution. For the patients whose rectal bleeding did not recover with oligoantigenic maternal diet in addition to amino acid-based formula, endoscopic evaluation was performed to confirm the diagnosis and to exclude other reasons of rectal bleeding. Sixty patients were diagnosed as having allergic proctocolitis. The mean (SD) age of onset was 1.7 (1.32) months. In all of the patients, symptoms were triggered by milk, 6.6% with milk and egg, 3.3% with milk and chicken, 1.7% with milk and wheat, and 1.7% with milk and potato; 3.3% had multiple food allergy. Thirty-two (53.3%) patients acquired tolerance by age of 1 year, 25% (n=15) by 2 years, 5% (n =3) by 3 years, and in one patient by the age of 4 years.

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