tective connection between breastfeeding and development of atopy has been suggested in several studies.
OBJECTIVE: Our goal was to investigate the correlation between breastfeeding and atopy.
METHODS: We screened 1525 children aged 2 to 5 years. Information on the outcome variables "ever wheezing," "recurrent wheezing," "diagnosed asthma," "itchy rash," "recurrent rash," and "diagnosed atopic dermatitis" was obtained. Multiple logistic regression analysis was used to estimate the association of outcome variables with the independent variable (breastfeeding) after adjustment for gender and parental history of allergy.
RESULTS: Median duration of exclusive breastfeeding was 1 month (range: 0–2 months). Children who were breastfed exclusively for >3 months had 28% (95% confidence interval [CI]: 0.53%–0.98%) and 29% (95% CI: 0.51%–1.00%) lower likelihood of ever developing wheezing and recurrent wheezing, respectively. Partial breastfeeding seemed to place the children at significantly greater risk for ever and recurrent wheezing when compared with exclusive breastfeeding. There was no significant difference between exclusive breastfeeding versus formula feeding. Of the ever-breastfed children, 15.2% developed itchy rash versus 10.9% of those who never breastfed. Girls had a significant lower odds ratio (OR) for ever wheezing (OR: 0.76 [95% CI: 0.62–0.94]) and "diagnosed asthma" (OR: 0.60 [95% CI: 0.43–0.85]). Of the children studied, 3.7% had a positive parental background for allergy. Parental history of allergy comprised a significant factor that indicated a greater OR for all outcome variables apart from "diagnosed asthma."
CONCLUSIONS: Breastfeeding seems to have a significant protective effect against the development of wheezing and asthma but not toward the development of skin atopy. A prospective randomized, controlled trial with longer follow-up time is required to confirm our findings.

ESSENTIAL FATTY ACID STATUS IN CORD-BLOOD ERYTHROCYTES AND POSSIBLE FETAL PRIMING OF ATOPY

Submitted by Georgia Skouli
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INTRODUCTION: Environmental factors, diet among them, that act during gestation may play an important role in determining subsequent atopy development. Studies conducted on adults and children have suggested that an imbalance of essential fatty acid (EFA) intake may predispose one to atopic diseases. Few data are available on the possible relation between EFAs and fetal priming of atopy.
OBJECTIVE: We sought to investigate the hypothesis that EFAs may play a role in the regulation of the fetal immune response.
METHODS: We collected umbilical cord-blood samples from 236 neonates with a gestational age of >34 weeks. Serum immunoglobulin E (IgE) levels and fatty acid composition of the erythrocyte membrane were determined by enzyme-linked immunosorbent assay and gas chromatography, respectively. Neonates were separated into 2 groups according to IgE value: the infants in group A had IgE levels of >0.35 IU/mL, and those in group B had IgE levels of ≤0.35 IU/mL.
RESULTS: Group A consisted of 30 neonates with increased IgE levels. Analysis of fatty acid composition revealed higher percentages of arachidic acid (20:0) (mean: 0.22 vs 0.19; $P < .05$) and docosahexaenoic acid (22:6*n*-3) (mean: 1.36 vs 1.04; $P < .05$) in the infants in group B.
CONCLUSIONS: Important differences were detected in cord-blood fatty acid composition in neonates with increased IgE levels. These differences suggest that EFAs may play a role in the development of atopy predisposition in utero life.

Cardiology

CLINICAL SIGNIFICANCE OF LINEAR SHADOWS INSIDE CORONARY ARTERIAL LESIONS ON TWO-DIMENSIONAL ECHOCARDIOGRAPHY IN PATIENTS WITH KAWASAKI DISEASE

Submitted by Akiko Hamaoka
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INTRODUCTION: In Kawasaki disease, we have detected linear shadows inside large- or moderate-sized coronary arterial lesions (CALs) on high-resolution two-dimensional echocardiography (2DE).
OBJECTIVE: For this study, we wanted to investigate the origin and clinical significance of these linear shad-

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