3 (3.3%) patients. One infant who presented at day 71 of life was identified to have biliary atresia, one infant had a urinary tract infection, and one infant had a positive reducing sugar and confirmed to be lactose intolerant. Four patients had ABO incompatibility but were otherwise well.

Conclusion In our study, we found only one baby with conjugated hyperbilirubinaemia who presented late. The remainder of the babies investigated for prolonged jaundice were benign. Majority of the infants (72%) were breastfed, which is a well-recognised cause for prolonged jaundice. As such, the authors propose that in well babies with pigmented stools, performing the prolonged jaundice screen at 21 rather than 14 days could reduce the burden of carrying out unnecessary tests without causing significant detriment to these patients.

PS-058

KEROSENE POISONING IN MALIAN CHILDREN: A 11-YEAR RETROSPECTIVE STUDY

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Background and aims Acute poisoning is a major preventable public health problem among children in developing countries. The aim of this study is to determine the epidemiological features of kerosene poisoning in Malian children.

Methods This is a descriptive retrospective study of kerosene poisoning in children under the age of 6 years, recorded between 2000 and 2010 in the medical records and the consultation registers at 15 hospitals in Mali.

Results There were 98 children poisoned by kerosene in Mali, accounting for 11.1% of all poisoning cases reported in children under the age of 6 years during the period of study. The average age of the patients was 1.8 ± 1.1 years. More than half of the cases (57.1%) were males with a male-female ratio of 1.3. The

median delay in presentation to hospital was 3.6 h. According to the results, the poisoning symptoms were varied, depending on the ingested quantity and the delay before treatment. The average length of stay in hospital was 34 h, with a range of 1 h to 7 days. Among the cases for whom the outcome was known, 5 of them died. For other cases, the outcome was favourable with or without sequelae.

Conclusions The real number of kerosene poisoning in children is probably underestimated, because of the undiagnosed and unreported cases.

PS-059 WITHDRAWN



MODULATION OF L-ARGININE CHANGES NEONATAL T-CELL POLARISATION AND REGULATION

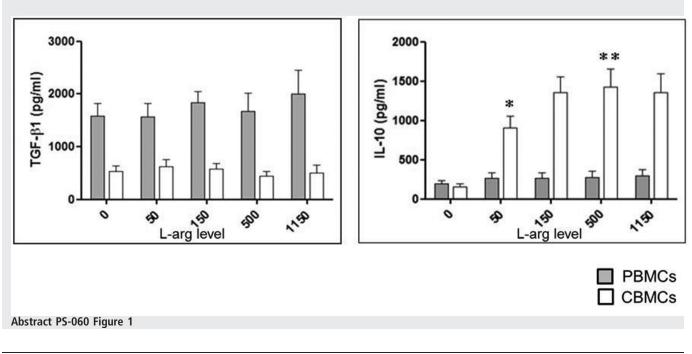
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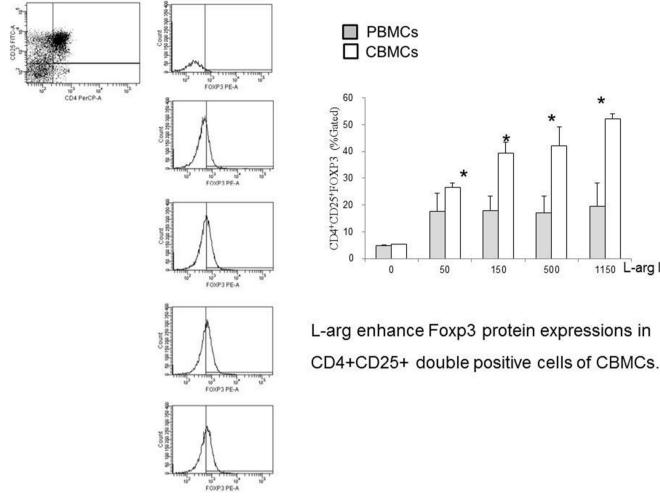
10.1136/archdischild-2014-307384.357

Background and aims A growing number of diseases (trauma, certain cancer, and certain infection) in humans appear to be associated with L-arginine deficiency. In condition of L-arginine depletion, T-cell proliferation is impaired. In mice model, certain Th2 conditions were shown to activate arginase and lead to L-arginine depletion. However, the modulation effects of L-arginine towards T-cells immune polarisation and regulation are not understood.

Methods To investigate the different modulation effects of Larginine on neonatal and adult lymphocyte polarisation, the cytokines produced by cord blood mononuclear cells (CBMC) and adult peripheral blood mononuclear cells (PBMC) at indicated L-arginine were determined.

Results CBMC produced less Th1 but higher Th2 cytokines than PBMC. Both adult and neonate T cells cannot produce IFN- γ efficiently in the absence of L-arginine. But high IL-4 and





Abstract PS-060 Figure 1

low IL-13 were produced by CBMC in L-arginine free condition. About the Th3 cytokines, CBMC produced lower TGF- β but higher IL-10 than PBMC. L-arginine levels had no influence on the TGF-B production (PBMC and CBMC). L-arginine enhanced the IL-10 production of CBMC. CBMC showed higher proportion of CD4+CD25⁺ cells and higher Foxp-3 expressions with L-arginine rich condition.

Conclusions These results suggested that L-arginine modulate neonatal T-cells polarisation may partially through the IL-10 producing Tr1 cells mechanism. Understanding the biological role played by L-arginine deficiency in neonate will lead to the development of dietary strategy aimed at enhancing L-arginine plasma concentrations.

PS-061 MATERNAL FATTY ACID COMPOSITION DURING EARLY PREGNANCY AND ASTHMA AT AGE 7 YEARS IN THE AMSTERDAM BORN CHILDREN AND THEIR **DEVELOPMENT (ABCD) COHORT**

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Background and aims Fetal exposure to polyunsaturated fatty acids (PUFAs) might influence the risk of childhood asthma. Epidemiologic studies suggest decreased risks of asthma after high intake of omega-3 and many women take omega-3 supplements during pregnancy. Few studies have maternal PUFA blood levels.

We examined the relationship between maternal PUFA blood levels during early pregnancy and asthma in the offspring at age 7 years in a population based prospective cohort.

Methods In 2,105 women, we determined maternal PUFA levels in plasma phospholipids drawn at about week 13 of pregnancy. Child asthma at age 7 (n = 154 cases) was based on parental report of physician diagnosis. We categorised PUFA levels and omega-3 to omega-6 ratios in quartiles with the lowest quartile as the reference category in multivariate logistic regression. Risk ratios were adjusted for: gestational age at blood draw; maternal education; western ethnicity; maternal age; parental asthma; and prepregnancy body mass index.

Results Higher omega-3 levels were related to lower asthma risk with a trend across the quartiles (risk ratio for the top quartile = 0.73, 95% CI (0.45-1.17, P trend across quartiles = 0.04) and higher omega-6 levels showed opposite associations but also not statistically significant and with no significant trend. Higher ratios of omega-3 to omega-6 were associated with slightly lower risks of asthma with a trend across quartiles (risk ratio for top quartile = 0.80, 95% CI 0.50-1.27, P trend across quartiles = 0.04).

1150 L-arg level