

Can diet during pregnancy affect risk of lifethreatening Respiratory Syncytial Virus infections in children? (Am J Respir Crit Care Med; Feb 2013)

The authors hypothesized that dietary preferences, differing from those of our remote ancestors, would negatively impact children's pulmonary health. For instance, a diet rich in carbohydrates is a signature of recent millennia and typical of low-income populations, heavily burdened by life-threatening RSV disease. A prospective study in a catchment population of 56,560 children<2 years old during the RSV season in Argentina was done. All children with respiratory signs and O₂saturation<93% on admission were included. Among 1,293 children with respiratory infections, 797(61.6%) were infected with RSV. 106 of these had life-threatening disease. Twenty-two hospitalized children died (9 RSV+), 26 died at home due to ARI (14 attributed to RSV); all<12 months. Lifethreatening disease was dose-dependently associated with carbohydrate ingestion during pregnancy [adjusted OR from 3.87 to 6.00]. It is concluded that diets rich in carbohydrates during pregnancy are associated with severe outcomes in lifethreatening and fatal RSV infections.



Division of tongue tie as an outpatient procedure. Technique, efficacy and safety (Int J Pediatr Otorhinolaryngol; Feb 2013)

A retrospective study was undertaken to assess the clinical presentations and the outcome of tongue tie division under local anesthesia.63 infants had tongue tie division in the ENT outpatient clinic under local anaesthesia between May 2010 and June 2011. Preoperative symptoms and parents' feedback were determined using questionnaires based on NICE guidelines. Average age of the procedure was 4.1 weeks. Before the procedure, 66.7% of babies had difficulty in breastfeeding. 11.1% had poor growth. 22.2% had limitation in tongue movement. 27.7% of the mothers had breast problems such as cracking and soreness of the nipples. All the preoperative problems were resolved in 98.4%. 77.1% of parents' comments were positive. They described procedure as quick with minimal distress. 88.9% had no complications following division of tongue tie. Tongue tie division is a simple procedure with minimal complications. It can be undertaken under local anesthesia within first 3 months of life in the outpatient environment. Timely diagnosis, referral and treatment can make a difference in breast-feeding and weight gain.



Ondansetron in pregnancy and risk of adverse fetal outcomes (NEJM; Feb 2013)

Ondansetron is frequently used to treat nausea and vomiting during pregnancy, but the safety of this drug for the fetus has not been well studied. This study investigated the risk of adverse fetal outcomes associated with ondansetron administered during pregnancy. From a historical cohort of 608,385 pregnancies in Denmark, women who were exposed to ondansetron and those who were not exposed were included, in a 1:4 ratio, adjusted for hospitalization for nausea and vomiting during pregnancy and the use of other antiemetics. Receipt of ondansetron was not associated with a significantly increased risk of spontaneous abortion, which occurred in 1.1% of exposed women and 3.7% of unexposed women during gestational weeks 7 to 12, and in 1.0% and 2.1%, respectively, during weeks 13 to 22 (hazard ratio, 0.60; 95% CI, 0.29 to 1.21). Ondansetron also conferred no significantly increased risk of stillbirth, any major birth defect, preterm delivery, delivery of a low-birth-weight infant, or delivery of a small-for-gestational-age infant.



Association of maternal vitamin D status during pregnancy with bone-mineral content in offspring (Lancet; Mar 2013)

Eligible participants were 3960 mother-and-singleton-offspring pairs in which the mother had recorded measurements of 25(OH)D concentration in pregnancy and the offspring had undergone dual-energy x-ray absorptiometry at age 9-10 years. Associations between maternal serum 25(OH)D concentrations and offspring total body less head (TBLH) and spinal BMC were assessed by trimester. Mean offspring age was 9-9 years. 2644 (77%) mothers had sufficient, 1096 (28%) insufficient, and 220 (6%) deficient 25(OH)D concentrations in pregnancy, but TBLH and spinal BMC did not differ between offspring of mothers in the lower two groups versus sufficient 25(OH)D concentration. The authors concluded that there was no association between maternal vitamin D status in pregnancy and offspring BMC in late childhood.



Association between GBS and the Pandemic H1N1 monovalent vaccine (Lancet; Mar 2013)

The authors did a meta-analysis of data from the adverse event monitoring project to ascertain whether influenza A (H1N1) 2009 monovalent inactivated vaccines used in the USA increased the risk of Guillain-Barré syndrome. About 23 million vaccinated people were included in the analysis. The primary analysis entailed calculation of incidence rate ratios and attributable risks of excess cases of Guillain-Barré syndrome per million vaccinations. Influenza A (H1N1) 2009 monovalent inactivated vaccines were associated with a small increased risk of Guillain-Barré syndrome (incidence rate ratio 2.35, 95% CI 1.42-4.01, P=0.0003). This finding translated to about 1.6 excess cases of Guillain-Barré syndrome per million people vaccinated. The modest risk of Guillain-Barré syndrome attributed to vaccination is consistent with previous estimates of the disorder after seasonal influenza vaccination.

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