

Abstracts

Exposure to anti-infective drugs during pregnancy and the risk of small-for-gestational-age newborns: a case-control study

BJOG 2011;118:1374–1382.

Objective To determine the association between anti-infective exposure during the last two trimesters of pregnancy and the risk of small-for-gestational-age (SGA) newborns.

Methods Unconditional logistic regression models were used to quantify the association between exposure to anti-infective drugs and the risk of SGA.

Main outcome measures A case of SGA was defined as a pregnancy resulting in a baby that weighs below the tenth percentile, adjusted for gestational age and gender, according to the Canadian gender-specific reference curves. A control was defined as a pregnancy resulting in a baby that weighs greater or equal to the tenth percentile, adjusted for gestational age and gender.

Results Exposure to all combined anti-infective drugs was not associated with the risk of SGA (OR 0.97; 95% CI 0.91–1.04). The use of sulfamethoxazole/trimethoprim was associated with SGA (OR 1.61; 95% CI 1.16–2.23), whereas the use of urinary anti-infective drugs decreased the risk (OR 0.80; 95% CI 0.65–0.97).

Conclusions Exposure to sulfamethoxazole/trimethoprim during the last two trimesters of pregnancy was associated with SGA. Further research is needed to address the use of other therapeutic alternatives in the management of infections that predispose infants being born SGA in pregnant women with other risk factors for this condition.

Pulsatile Versus Continuous Administration Of Oxytocin For Induction And Augmentation Of Labor: Two Randomized Controlled Trials

· Publication year: 2011

Source: American Journal of Obstetrics and Gynecology, Available online 7 November 2011

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Objective To determine whether pulsatile oxytocin infusion improves delivery outcome in women requiring induction or augmentation of labor. **Study Design** Two related randomized controlled trials undertaken in two inner-city UK university hospitals (ISRCTN72773405; <http://www.isrctn.org/>). Women were randomized to a pulsatile or continuous infusion protocol. **Primary outcome:** cesarean section rate (induction trial);

operative delivery rate (augmentation trial). **Results** For induction, cesarean section rates were similar in women receiving pulsatile (n=264, 38.3%) versus continuous infusion of oxytocin [n=257; 37.7%; risk ratio: 1.01 (0.81 to 1.26); P=0.903], but associated with increased 'infusion to time of delivery' intervals (p<0.001) in the pulsatile group. For augmentation, pulsatile infusion resulted in higher operative delivery rates (70.1%, n=251) versus continuous infusion (62.7%, n=249; risk ratio: 1.12 (0.99 to 1.27); P=0.077) and increased neonatal morbidity. **Conclusion** For induction, pulsatile infusion of oxytocin is effective, but conferred little clinical benefit. Pulsatile infusion is not recommended for augmentation.

Sonographic Cervical Length, Vaginal Bleeding, and the Risk of Preterm Birth

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Objective To evaluate the contributions of vaginal bleeding and cervical length to the risk of preterm birth. **Study Design** A secondary analysis of a cohort study designed to study predictors of preterm birth. The study included 2988 women with singleton gestations. Women underwent midtrimester transvaginal ultrasound assessment of cervical length and were queried regarding first and second trimester vaginal bleeding. **Results** There was a significant second-order relation between cervical length and preterm birth (p<0.001, p=0.005). Women with vaginal bleeding were at higher risk of preterm birth [OR 1.5 (95% CI 1.3-2.0)]. There was a significant interaction between cervical length and vaginal bleeding (p=0.015). After accounting for cervical length and interaction, the adjusted OR for vaginal bleeding and preterm birth was 4.8 (95% CI 1.89-12.4, p=0.001). **Conclusion** The magnitude of risk of preterm birth associated with sonographic cervical length depends upon a woman's history of first and second trimester vaginal bleeding.

Age and BMI can predict likelihood of developing gestational diabetes new research suggests

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Age and body mass index (BMI) are important risk factors for gestational diabetes mellitus (GDM) particularly amongst South Asian and Black African

women finds new research published today the journal.

The study looked at the link between maternal age, BMI and racial origin with the development of GDM and how they interact with each other.

Data were collected on 585,291 pregnancies in women attending for antenatal care and delivery at 15 maternity units in North West London from 1988-2000. The study included 1,688 women who developed GDM and 172,632 who did not.

Maternal age was divided into the following groups: below 20, 20-24, 25-29, 30-34, 35-39 and above 40 years of age.

Maternal BMI was also divided according to the WHO international classification of BMI as follows: less than 18.5 (underweight), 18.50-24.99 (normal weight), 25.00-29.99 (overweight) and more or equal to 30.00 (obese). Prevalence of GDM was calculated for each maternal age and BMI group.

There was a strong association between GDM development and advancing maternal age which varied by racial group.

Risk of adverse perinatal outcomes with antithyroid treatment during pregnancy: a nationwide population-based study

Risk of adverse perinatal outcomes with antithyroid treatment during pregnancy: a nationwide population-based study. BJOG 2011;118:1365–1373.

Objective To compare, using two large nationwide population-based data sets, the risk of adverse pregnancy outcomes (low birthweight [LBW], preterm birth, small for gestational age [SGA] and congenital anomalies) among pregnant women with hyperthyroidism classified into three groups: receiving propylthiouracil (PTU) treatment during pregnancy, receiving methimazole/carbimazole (MMI) treatment, and no antithyroid treatment during pregnancy.

Sample A total of 2830 mothers with hyperthyroidism and 14 150 age-matched randomly selected mothers without hyperthyroidism were included.

Methods Conditional logistic regression analyses were performed to examine the risk of adverse pregnancy outcomes (LBW, preterm birth, SGA and major congenital anomalies) among these three groups.

Main outcome measures LBW, preterm birth, SGA and major congenital anomalies.

Results Women receiving PTU treatment during pregnancy had a higher risk of giving birth to LBW infants than those not receiving antithyroid treatment

(odds ratio = 1.40; 95% CI 1.00–1.96), after adjusting for maternal education, anaemia, hyperlipidaemia, pregestational diabetes, pregestational hypertension, hyperemesis gravidarum and infant's gender and birth order. However, children of women receiving MMI treatment did not have increased risks of any adverse fetal outcome relative to mothers not receiving antithyroid treatment.

Conclusions Our study finds an increased risk of LBW among babies of mothers with hyperthyroidism receiving PTU treatment during pregnancy relative to untreated mothers with hyperthyroidism.

A long-term prospective study to compare the effects of vaginal and abdominal hysterectomy on micturition and defecation

prospective study to compare the effects of vaginal and abdominal hysterectomy on micturition and defecation. BJOG 2011;118:1511–1517.

Objective : Authors compared micturition and defecation symptoms with the route of hysterectomy over a period of 10 years.

Methods The presence and discomfort experienced as a result of micturition and defecation symptoms were assessed using validated questionnaires before surgery, and at 6 weeks, 6 months, 1 year, 3 years and 10 years after surgery. Statistically significant differences in symptoms between vaginal and abdominal hysterectomy were adjusted for pre-operative differences in uterine descent, uterine size, parity and indication for hysterectomy.

Results Ten years after hysterectomy the response rate was 73%. Preoperatively, no differences were observed in the prevalence of micturition symptoms between patients who underwent vaginal and abdominal hysterectomy. However, 10 years after vaginal hysterectomy, significantly more women had been treated for micturition symptoms (18 versus 8%; $P = 0.02$; adjusted OR 3.8, 95% CI 1.2–11.6). Defecation symptoms also seemed more common after vaginal hysterectomy (58 versus 46%; $P = 0.08$). After adjustment, no statistically significant differences in defecation symptoms were found.

Conclusions Despite the same incidence of micturition symptoms before surgery, patients undergoing vaginal hysterectomy are more likely to seek medical help for micturition symptoms. Defecation symptoms were also more common after vaginal hysterectomy; however, this difference was not statistically significant.